Fourth Annual Naples Patent Experts Conference

Feb. 8 - 9, 2016





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Program Schedule Fourth Annual Naples Patent Law Experts Conference

Monday, Feb. 8, 2016 – Sunset Terrace Room

7:00 a.m.	Registration and Continental Breakfast
8:00 a.m.	WELCOME Matt Wilson, Dean and Professor of Law, Akron Law
	Ryan Vacca, Associate Professor of Law and Director, Center for Intellectual Property Law and Technology, Akron Law
8:15 a.m.	POST-GRANT PROCEEDINGS
	Rob Sterne, Director, Sterne, Kessler, Goldstein & Fox P.L.L.C Scott Kamholz, M.D., Ph.D., Partner, Foley Hoag LLP Michael Tierney, Lead Administrative Patent Judge, PTAB Saurabh Vishnubhakat, Associate Professor, Texas A&M School of Law
9:45 a.m.	BREAK
10:00 a.m.	CLAIM CONSTRUCTION AFTER TEVA Scott Pivnick, Partner, Alston & Bird LLP Ken Adamo, Partner, Kirkland & Ellis LLP R. Polk Wagner, Professor, University of Pennsylvania Law School
11:30 a.m. LUNCH (Gulfbreeze North & South Room)	
12:30 p.m.	THE CHANGING COMPOSITION OF THE FEDERAL CIRCUIT
(Sunset Terrace Room)	Randall Rader, Former Chief Judge of the U.S. Court of Appeals for the Federal Circuit Paul Gugliuzza, Associate Professor, Boston University School of Law Dmitry Karshtedt, Associate Professor, George Washington University Law School
2:00 p.m.	BEST PRACTICES IN PATENT LITIGATION Hon. Faith Hochberg, U.S. District Court for the District of New Jersey (ret.) William Rooklidge, Partner, Gibson Dunn Eric C. Cohen, Counsel, Brinks Gilson & Lione Eley O. Thompson, Partner, Foley & Lardner LLP

3:30 p.m.	BREAK
3:45 p.m.	DESIGN PATENTS: PATENT LAW'S NEW FRONTIER
	Perry Saidman, Principal, Saidman DesignLaw Group, LLC
	Christopher Carani, Shareholder & Partner, McAndrews, Held, &
	Malloy Ltd
	Mark Janis, Robert A. Lucas Chair of Law and Director, Center for IP
	Research, University of Indiana – Bloomington School of Law
	Ben Fernandez, Partner, WilmerHale LLP
5:15 pm	ADJOURNMENT
6:00 –7:00 p.m. (Ocean Lawn)	RECEPTION

Tuesday, Feb. 9, 2016 – Sunset Terrace Room

7:00 a.m.	Registration and Continental Breakfast
8:00 a.m.	WELCOME Ryan Vacca, Associate Professor of Law and Director, Center for Intellectual Property Law and Technology, Akron Law
8:15 a.m.	THE EUROPEAN UNIFIED PATENT COURT Peter Yu, Professor, Texas A&M School of Law Jan Walaski, Managing Partner, Venner Shipley Dr. Thomas Gniadek, Partner, Noerr Richard Ebbink, Partner, Brinkhof
9:45 a.m.	BREAK
10:00 a.m.	NEWLY-ENACTED PATENT REFORM [OR PATENT REFORM: WILL IT EVER COME TO PASS?] Jeffrey Samuels, Professor Emeritus, Akron Law Bob Armitage, Consultant, IP Strategy & Policy Suzanne Michel, Senior Patent Counsel, Google Russ Slifer, Deputy Director, USPTO
11:30 a.m.	LUNCH
11:30 a.m.	SECTION 337 PRACTICE & DEVELOPMENTS Deanna Okun, Partner, Adduci Mastriani & Scaumberg LLP; former Chairman, U.S. International Trade Commission G. Brian Busey, Partner, Morrison Foerster LLP Anne Goalwin, Supervisory Attorney, Office of Unfair Import Investigations, U.S. International Trade Commission
1:00 p.m.	ADJOURNMENT



POST-GRANT PROCEEDINGS

Rob Sterne, Director, Sterne, Kessler, Goldstein & Fox P.L.L.C Scott Kamholz, M.D., Ph.D., Partner, Foley Hoag LLP Michael Tierney, Lead Administrative Patent Judge, PTAB Saurabh Vishnubhakat, Associate Professor, Texas A&M School of Law

AIA Trial Practice Tips — An Insider's Perspective

By Scott E. Kamholz, Partner, Foley Hoag LLP

During my service as an Administrative Patent Judge I handled over 120 *inter partes* and covered business method reviews. I have distilled the following observations from my experience conducting every phase of these proceedings. This article is meant to offer refinements to the reader's general understanding of PTAB trials, not to provide a comprehensive review of all important issues. Although most of my comments arise in the context of *inter partes* review (IPR), they apply unless otherwise noted to all other forms of AIA trials, including post-grant review (PGR), covered business method (CBM) review, and derivations (DER).

My colleagues at Foley Hoag and I maintain the PTAB Blog at <u>www.ptab-</u> <u>blog.com</u>. We update it regularly, usually several times a week, with practice tips, case notes, and commentary.

1. The Petitioner's case doesn't just start with the Petition—it ends with it.

Lawyers generally do not like to lay out their entire case at the outset of litigation. They like to hold back some arguments to see how their adversary responds. Yet a PTAB trial proceeding is one place where doing anything less than a full reveal could prove fatal.

The Petition is the *one and only* shot the Petitioner has at making the case for unpatentability. The fast-paced, multi-stage see-saw procedure that the PTAB uses for IPR sometimes obscures this basic fact. But the Petitioner who fails to appreciate it may face dire consequences for not laying out its full case in the Petition. Hence the central quirk of PTAB litigation: the Petitioner's case doesn't begin with the Petition: rather, it ends with the Petition.

Patent Owner calls the shots

Petitioners often view the Petition as an opening salvo in what they expect will be a back-and-forth process. In reality, the Petitioner loses control of the proceeding after the Petition is filed. Once trial is instituted, the Patent Owner calls the shots. The Patent Owner decides what new witness testimony to introduce and thereby limits the scope of the Petitioner's discovery. The Patent Owner decides what issues to raise in the Response and thereby limits the scope of the Petitioner's Reply. A Patent Owner who is able to identify a material gap in the Petition evidence is in a good position to win the IPR, no matter how thoroughly or persuasively the Petitioner can present the missing evidence in the Reply. This is because the Board usually will disregard a Reply that presents new evidence essential to the Petitioner's case (more on that below). So the Petitioner who accidentally (or intentionally) delays developing an issue risks having the Reply ignored or discarded. A Patent Owner win at the final written decision is particularly disastrous for the Petitioner, due to the estoppel that attaches to all grounds that the Petitioner raised or reasonably could have raised during the review.

Anticipate weaknesses

For these reasons the Petitioner must seize and exploit its one opportunity to shape the proceeding. That means identifying and decisively dealing with every possible issue right up front in the Petition. Shore up weaknesses in the prior art with expert testimony. Address the rationale to combine references with a compelling story in which the expert weaves together strands of knowledge existing at the time of invention. View the Petition not so much as a piece of advocacy as an opportunity to draft the opinion you'd like to see the Board adopt in its final written decision. Crafting the Petition with that goal in mind is the surest path to success.

Avoid challenge depth mismatch

Yet with only sixty pages in which to present a thorough treatment of every issue, the Petitioner must balance depth of analysis against the number of challenges. The fear of estoppel often drives Petitioners to present many challenges with a shallow analysis that is supported by a perfunctory expert declaration rehashing the Petition. The Board often institutes on only a handful of such challenges, with the result that the Patent Owner can devote its sixty pages of Response to a much deeper analysis of many fewer issues. That deep analysis can expose gaps in the Petition evidence and trap the Petitioner in the Death Valley between the reasonable likelihood it demonstrated and the preponderance of evidence it seeks.¹ Petitioners should take this potential mismatch into account when weighing the risk of estoppel over the risk of losing the IPR outright.

2. If you can't deliver a knockout with the preliminary response, devote the time to the full Response.

Patent Owners are free to raise any argument they wish in the Preliminary Response. Merits arguments tend not to fare as well at the institution stage, however, as do threshold arguments such as standing and effects of prior proceedings. This happens because the institution stage is not a full review of the merits of the petitioner's case. Rather, it is an evaluation of whether the petitioner has satisfied the "reasonable likelihood" standard. That standard is not difficult to satisfy, provided the Petitioner addresses all claim limitations (and rationale to combine in an obviousness challenge) with evidence that is credible on its face. The Patent Owner's task then becomes

¹ In PGR and CBM, the standard for institution is somewhat higher and requires a showing that at least one challenged claim more likely than not is unpatentable, if the Petitioner's challenge were to go unrebutted.

breaking down that evidence or overcoming its credibility. This task is best achieved with new testimonial evidence, typically expert testimony. But new testimonial evidence is exactly the sort of evidence that is not permitted in the preliminary response. 37 C.F.R. § 42.107(c). So what's a Patent Owner to do?

Knockout arguments

Consider the facts carefully to determine whether there is a bar to the petition or some defect that makes the petition deniable. Bars lurk sometimes in unlikely places, such as permissive counterclaims for patent infringement,² cases dismissed without prejudice,³ and intervening reexaminations.⁴

Real-party-in-interest and privity challenges can succeed in getting a petition denied as well, but only if there is evidence either identifying (1) an entity that should have been, but was not, named in the petition as a real-party-in-interest, or (2) an entity that is a privy of the petitioner and was served with a complaint for infringement of the challenged patent.⁵ Patent Owners can seek—and sometimes will receive—pre-institution additional discovery to ferret out a concealed real-party-in-interest, if they can show the existing of some evidence that casts significant doubt on the RPI identification in the petition.⁶

Merits arguments

³ E.g., *Histologics, LLC v. CDX Diagnositics, Inc. and Shared Medical Resources, LLC,* IPR2014-00779, Paper 6 (Sep. 12, 2014); Apple Inc. v. Rensselaer Polytechnic Instit. And Dynamic Advances, LLC, IPR2014-00319, Paper 12 (June 12, 2014).

⁴ E.g., BioDelivery Sciences Int'l, Inc. v. MonoSol Rx, LLC, IPR2013-00315, Paper 33 (Nov. 13, 2013).

⁵ Petitioner bears the burden of demonstrating a reasonable likelihood of its prevailing, but the Board in practice imposes a burden of production on the Patent Owner to show evidence of RPI nondisclosure or a privity-based bar. *E.g., Brinkmann Corp. v. A&J Manuf., LLC,* IPR2015-00056, Paper 10 (Mar. 23, 2015).

⁶ E.g., Zerto, Inc. v. EMC Corp., IPR2014-01254, Paper 15 (Nov. 25, 2014). Additional discovery concerning real-party-in-interest is also obtainable after institution. *E.g.*, John's Lone Star Distrib., Inc. v. Thermolife Int'l, LLC, IPR2014-01201, Paper 29 (May 13, 2015)

² E.g., St. Jude Med., Cardiology Div., Inc. v. Volcano Corp., IPR2013-00258, 2013 WL 5947710 (expanded panel decision denying institution under 35 U.S.C. § 315(b)) (appeal dismissed, St. Jude Med., Cardiology Div., Inc. v. Volcano Corp., 749 F.3d 1373 (Fed. Cir. 2014))

Merits-based arguments *can* succeed, but normally only when they persuade the Board that no construction of the evidence the Petitioner has put forward has a reasonable chance of demonstrating unpatentability. For this to work, the Patent Owner should show that the Petitioner has failed to address a limitation in each challenged claim or has failed to address the rationale to combine references in the case of an obviousness challenge. Such an opportunity may arise in particular when the Petitioner has made an obviousness challenge that is not supported with expert testimony that pulls the cited prior-art references together with a rationale to combine.

Prepare for the main event

But unless the Patent Owner can bring to bear one of these "knockout" arguments, the preliminary response is unlikely to prevent institution of the review. The Patent Owner cannot marshal its strongest evidence (new testimony, usually), and the preliminary response might serve only to telegraph the Patent Owner's defense. Yet, the Patent Owner still might wish to file a preliminary response, because the enormous benefit of avoiding trial justifies the long odds. The Patent Owner might also wish to signal to the Board where its arguments are headed, in the interest of influencing which of the Petitioner's challenges are instituted.

On the balance, however, if the Patent Owner's honest assessment is that institution is likely, then the six months between the filing of the Petition and the Board's decision on institution are probably best spent preparing the Patent Owner's full defense.

New direct testimony won't help, but a deposition might

There has been much discussion about whether Patent Owners should be permitted to submit new testimonial evidence with the preliminary response. Patent Owners may, in theory, already do this with prior Board authorization. The issue is whether it should be allowed without prior authorization. The Board's principal stated concern with such a blanket rule is that it would place further burdens on the Board in meeting the statutory deadline to reach institution decisions within three months.

On its face, allowing new testimony by Patent Owners seems to bring balance to the institution decision, because nearly all petitions are accompanied by testimonial evidence. But I expect that uncompelled direct testimony would rarely, if ever, be used by the Board to deny institution or even to limit the issues for trial. Why? Because direct testimony is untested. In theory any statement of fact or opinion expressed in direct testimony could be undermined in cross-examination. So although the Board is comfortable deciding whether the Petitioner's expert direct testimony provides sufficient evidence to institute a trial, that decision is necessarily a preliminary one, and the weight the Board ultimately accords the Petitioner witness's testimony is not decided until after the Patent Owner has had an opportunity to test that evidence in cross-examination. But an institution decision in favor of the Patent Owner is a final decision that deprives the Petitioner of the relief requested. The Board will not deny the Petitioner relief solely on the basis of the untested direct testimony of a Patent Owner witness, because the Petitioner could, in theory, demolish that evidence in cross-examination. So why not allow cross-examination of the Patent Owner's preliminary response witness in a preinstitution reply? That simply would compress the trial into the preliminary phase and aggravate further the burden on the Board to issue institution decisions within three months.

It is conceivable, however, that the Patent Owner might convince the Board to authorize a limited deposition of the Petitioner's witness in the preliminary stage. The Board might do this if it were persuaded, say, that the Petitioner's case is largely dependent upon a single factual assertion that appears creditable on its face but that is likely to be negated in cross-examination. In such a situation, the Patent Owner could argue that an entire trial might be avoided by permitting a brief cross-examination focused on that one particular fact issue. The Patent Owner then would be authorized to submit with the preliminary response new testimonial evidence in the form of the Petitioner witness's deposition testimony.

3. Don't read too much into the Decision to Institute.

The Board's decision to institute is nothing more than a notice of what issues it has decided remain open for trial. Issues typically will include claim construction and prior art challenges. The Board always is careful to note that the claim construction is preliminary and based on the record as it exists at the time of institution, and that no unpatentability determinations have been made.

You can expect ever less claim construction in institution decisions as the Board streamlines operations to conserve judicial resources. The point here is that a decision to institute trial should not be regarded as a preliminary version of the final decision. Examples abound of instituted reviews that concluded in a judgment of no unpatentability.⁷

A word on rehearings: unless the Board truly has "misapprehended or overlooked" a matter,⁸ a rehearing request achieves little. As one of the few APJ's to have written a decision granting a rehearing request from an IPR institution decision,⁹ I

⁷ Compare, e.g., Amneal Pharmaceuticals, LLC v. Supernus Pharmaceuticals, Inc., IPR2013-00368, Paper 8 (institution decision, Dec. 17, 2013) with id., Paper 94 (final decision, Dec. 9, 2014).

⁸ 37 C.F.R. § 42.71(d)

⁹ Veeam Software Corp. v. Symantec Corp., IPR2013-00142, Paper 17 (Sept. 20, 2013).

can say that the Board takes rehearing requests seriously and does not shy away from acknowledging mistakes. "Mistakes," however, do not include decisions that apply the proper law to the proper facts in a way unsatisfactory to a party, nor do they include decisions that give no consideration to unexcused late-filed evidence.

4. Pay close attention to deadlines.

The statute and regulations governing IPR set out various deadlines, and the scheduling order that accompanies an institution decision sets out several more. The only deadline that cannot be extended under any circumstances is that requiring that a decision on institution be made within three months of the preliminary response.¹⁰ The requirement that the Board issue a final decision within twelve months of institution¹¹ is effectively non-extendable absent a showing of good cause why it should be extended up to six months.¹²

But although all other deadlines are set by regulation or by order of the Board and are therefore adjustable, do not count on being able to change them without articulating a very good reason. Deadlines during discovery are designed primarily for fairness to the parties, and adjustments will not be granted if the Board feels that a party would gain an unfair advantage. The Board will not permit adjustments to the schedule that imperil its ability to meet the statutory deadline by which it must issue a final decision. For example, if the hearing has been set for nine months after institution (as is typical), the Board is extremely unlikely to delay it, because the APJ's and paralegals tasked to write, edit, and review the final decision normally take the full remaining three months to do so.

Pay close attention to interlocking deadlines, such as those governing depositions. For example, a notice of deposition must be filed at least ten business days before the deposition,¹³ but the deposition should be completed more than one week before the filing date of any paper in which the deposition testimony is to be used.¹⁴ This latter deadline, though not mandatory, is highly advisable, to ensure timely transcription and to allow the witness to review and sign the transcript unless some

¹⁰ 35 U.S.C. § 314(b).

¹¹ 35 U.S.C. § 316(a)(11)

¹² Id.

¹³ 37 C.F.R. § 42.53(d)(4).

¹⁴ Id. § 42.53(d)(2).

other arrangement has been made.¹⁵ Failure to meet these deadlines in the absence of unreasonable behavior by the opponent may cost a party the opportunity to conduct cross-examination.¹⁶

5. Patent Owner's Response

The central message about the Petition applies also to the Patent Owner's Response: the Response is the Patent Owner's one and only chance to put on its full case. Anything omitted or held back cannot later be brought into the case. The Patent Owner must make every argument, and submit every piece of evidence it wants considered, in the Response, because the Patent Owner does not have the right to file any substantive paper after the Response.¹⁷ The basic thrust of the Response should be toward showing the Petitioner's failure to carry its burden, both by revealing critical gaps in the Petitioner's evidence and by diluting the Petitioner's evidence for unpatentability to a level below a preponderance.

Don't ditch the preliminary response arguments

In far too many cases I saw promising arguments raised in the preliminary response that were discarded from the Patent Owner's Response. True, the arguments were insufficient to avoid institution, but that was the case usually because they were not supported by sufficient evidence. Often times they simply *could not* be supported with evidence, due to the rule against new testimonial evidence with preliminary responses. I suppose Patent Owners wrongly interpreted the decision to institute as an adjudication of those arguments, as opposed to an initial assessment of the sufficiency of the Petitioner's case. Do not misunderstand the Board's decision to institute.

Claim construction

If the Patent Owner's arguments depend on a claim construction that differs from the Petitioner's construction or from the Board's preliminary construction, the focus should be on making a case for its own claim construction, as opposed to shoe-horning its arguments into the Board's preliminary construction or trying to disprove the preliminary construction. Remember that the Board always makes clear that the

¹⁵ Id. § 42.53(f)(5).

¹⁶ E.g., A.C. Dispensing Equipment, Inc. v. Prince Castle LLC, IPR2014-00511, Paper 17 (Oct. 15, 2014).

¹⁷ By "the right," I mean that the Patent Owner can file subsequent substantive papers only if the Petitioner's actions warrant them. For example, the Patent Owner may submit a motion for observations on cross-examination only if the Petitioner has put forward reply testimony.

preliminary construction has been determined on the record as it exists at institution. The Board will fully reconsider the claim construction once the record is complete. The Patent Owner's efforts should be directed, then, to presenting sufficient evidence to strip the Petitioner's construction of a preponderance thereof.

In a similar vein: I noticed a tendency among some Patent Owners to direct arguments in the Response against the Board's determinations in the institution decision. Remember that the Petitioner is the adversary, so direct arguments against it, not against the Board. Even where the Board has made a preliminary determination that does not mirror the Petitioner's, it still probably will have some basis in the Petitioner's arguments, and it should be attacked as such. Consider whether the APJ's will be fully receptive to an argument that is framed as an attack on the tribunal's prior decision.

Show nexus

The single most common problem I observed in Patent Owner responses was the failure to address nexus when presenting secondary consideration evidence.¹⁸ The Patent Owner deals with nexus either by showing that (*a*) the scope of the challenged claim is coextensive with the embodiment relied upon, if which case nexus is presumed, or (*b*) a feature of the claim which differentiates the claimed invention from the prior art is responsible for the effects underlying the secondary consideration evidence. I observed many Patent Owners mention the law of nexus but not make any kind of showing that would allow the Board to find the existence of a nexus and give the secondary evidence the fullest possible weight. Nexus is a highly fact-intensive issue, and the degree to which the Patent Owner ties the secondary consideration evidence to the claimed subject matter with specificity translates directly into the weight given that evidence. I suggest that Patent Owners regard the nexus requirement as an opportunity to tell the story of how the claimed invention has had a significant impact or unexpected effect, rather than as a hurdle to be surmounted or bypassed.

Expert witnesses

Patent Owners use expert witnesses for one basic purpose: to undermine the Petitioner's case for unpatentability. Expert witnesses can do this in two ways: by refuting the Petitioner's evidence and by introducing new evidence that dilutes the Petitioner's evidence for unpatentability to less than a preponderance. In my experience, Patent Owners do too little of the former. Although witnesses for Patent Owners often *gainsay* Petitioner witnesses, especially as to the meaning of a piece of prior art in the eyes of one of ordinary skill, too often Patent Owner witnesses fail to

¹⁸ E.g., Baxter Healthcare Corp. v. Millenium Biologix, LLC, IPR2013-00582 (PTAB March 18, 2015) (Paper 48).

explain *why* the Petitioner witness's analysis is incorrect. It is not necessarily unreasonable for two experts to disagree on the interpretation of a reference, and the Board often will be forced to look elsewhere in the evidence to reach a disposition if the experts appear simply to be reaching different conclusions without explaining why the opponent's conclusion is in error. A better approach is to have the witness show, with specific examples, that an opponent's witness has based a conclusion on incorrect facts or unwarranted assumptions. The Board then is armed with a reason to credit one witness's interpretation over the other's.

6. The PTAB's Subpoena Power

The PTAB's tight trial schedule allows no room for protracted discovery fights. That usually doesn't matter, because parties rarely seek more than routine crossexamination of the opponent's witnesses. And even when they seek other evidence, such as when investigating a real-party-in-interest issue, the evidence sought usually is in the control of a party to the proceeding.

But when essential evidence is in the control of a third party, a subpoena may be necessary to obtain access to it. It's not necessarily that the third party refuses to cooperate; many companies' policies require a subpoena or some other court order to produce documents or witnesses.

Subpoenas at the PTAB come into play typically in a few scenarios:

1. A party cannot voluntarily produce a witness on whose declaration it relied.

This might occur when:

- a. the witness is no longer under the other party's control due to a change in employment, or
- b. the witness's declaration was lifted from another proceeding without consent and re-filed in the present proceeding.

2. A party questions the publication status of a document prepared by a third party.

This occurs typically when the Patent Owner argues that the Petitioner failed to prove that a document qualifies as a printed publication (as required by 35 U.S.C. § 311(b)), and the Petitioner seeks to obtain evidence of publication from the entity responsible for the document.

3. The Patent Owner questions whether a third party should have been identified as a real party-in-interest.

The PTAB does not issue subpoenas directly. Rather, it authorizes a party to obtain a subpoena from the relevant district court pursuant to 35 U.S.C. § 24.

Parties should take special care to craft a winning motion for subpoena the first time, due to the short deadlines and importance of the evidence sought. A successful motion for authorization to obtain a subpoena requires the movant to (1) establish that it is entitled to the evidence, and (2) show that it's tried other ways of obtaining the evidence. Part (1) is satisfied automatically if the evidence falls within routine discovery, because parties are required to produce or provide access to this type of evidence. Entitlement also may be shown by way of a motion for additional discovery. Satisfying part (2) may be as simple as asking the third party for the discovery before resorting to a subpoena.

A number of PTAB decisions in subpoena motions are instructive:

Mitsubishi Plastics, Inc. v. Celgard, LLC, IPR2014-00524 (Paper 44) (Apr. 13, 2015): Patent Owner's witness refused to submit voluntarily to cross-examination <u>after leaving</u> <u>Patent Owner's employment</u>. Petitioner sought to compel discovery, which Patent Owner did not oppose. The Board granted the Petitioner's motion to compel the witness's cross-examination and authorized the Petitioner to obtain a subpoena from the United States District Court.

Farmwald v. Parkervision, Inc., IPR2014-00946 (Paper 36) (June 9, 2015): Patent Owner sought discovery from a third party it suspected was an <u>unnamed real party-in-interest</u>. The Board authorized the Patent Owner to file a motion to obtain a subpoena. The Board subsequently denied the motion in a sealed order.

Marvell Semiconductor, Inc. v. Intellectual Ventures I LLC, IPR2014-00552 (Paper 29) (Feb. 11, 2015): The Patent Owner sought to compel discovery from a third party (an earlier owner of the patent) in support of an effort to <u>disqualify a prior-art reference</u> under the CREATE Act (35 U.S.C. § 103(c)). The Patent Owner also sought to compel the cross-examination of the listed inventors on the patent. The Petitioner did not oppose the request but did seek to limit the scope of the discovery requests. Once the parties had agreed on a form and scope of subpoena, the Board authorized the Patent Owner to obtain the subpoenas from the District Court.

Alternative Legal Solutions, Inc. v. Employment Law Compliance, Inc., IPR2014-00562 (Paper 22) (Dec. 23, 2014): The Patent Owner sought to compel the production of documents and testimony from several third party individuals. The employer of the third party individuals refused to make them available without subpoenas. The Board authorized the Patent Owner to file a motion to compel discovery and to obtain subpoenas. On consideration of that motion, however, the Board determined that the information sought amounted to additional discovery, that the Patent Owner <u>had not</u> <u>met the burden for additional discovery</u>, i.e., showing that the discovery sought was "in the interest of justice" (37 C.F.R. § 42.51(b)(2)), and denied the motion to compel. Smart Modular Techs. Inc. v. Netlist, Inc., IPR2014-01372 (Paper 24) (July 7, 2015): The Patent Owner filed with its Response a deposition transcript from a <u>witness in a</u> <u>different IPR</u>. The Petitioner objected to this evidence, and the Patent Owner sought to respond to the objection with supplemental evidence in the form of compelled testimony from the witness. The Board denied the Patent Owner's request on the basis that the need to resolve admissibility issues with the witness's testimony was foreseeable by the Patent Owner and should have been addressed before filing the Patent Owner Response.

IBM v. Intellectual Ventures I LLC, IPR2014-01385 (Paper 26) (May 27, 2015): Both the Petitioner and the Patent Owner sought to compel discovery from an employee of a third-party (Oracle Corp.) regarding the <u>publication status</u> of a document the Petitioner had relied on in its unpatentability challenges. The Board granted both requests, taking care to note Oracle's right to seek limits on the scope of compelled testimony of its employee.

Toshiba Corp. v. Optical Devices, LLC, IPR2014-01445 (Paper 14) (May 8, 2015): Petitioner sought authorization to compel testimony and document production from a third-party witness regarding the publication status of a document the Petitioner had relied upon on in its unpatentability challenges. The Board denied the request because the Petitioner had not ascertained <u>whether the witness in question could provide</u> <u>relevant testimony</u> and documents, nor whether the witness would do so voluntarily.

Chicago Mercantile Ex'g, Inc. v. 5th Market, Inc., CBM2015-00061 (Paper 24) (Nov. 17, 2015): The Patent Owner objected to one of the documents the Petitioner had relied on in its unpatentability challenges on the basis that the Petitioner had not shown that the document was publicly accessible. The Petitioner responded to the objection by serving the declaration of a third-party witness from another proceeding regarding the public accessibility of the document. Petitioner then sought to compel test testimony of this witness, who was not available voluntarily. Patent Owner did not oppose this request and, indeed, proposed to expand the cross-examination beyond the scope of the witness's declaration. The Board authorized the subpoena but denied Patent Owner's proposal to expand the scope, ruling the expansion a request for additional discovery that Patent Owner had not shown was necessary in the interest of justice.

7. Motion to Amend: Nothing (much) has changed

Patent Owners have found Motions to Amend so troublesome partly because the Board's interpretation of the burden of proof appears to upturn settled expectations. In particular, the Board in the *Idle Free* case replaced the traditional presumption of

patentability¹⁹ with a burden on the Patent Owner to prove patentability.²⁰ As the Board has explained, it is appropriate to place the burden of proof on the Patent Owner because amendment in IPR is an adjudicative process, not an examination process in which the neutral deciding official conducts an independent investigation into patentability.²¹ The Federal Circuit has endorsed this view, at least as of the writing of this paper.²² Nevertheless, the Board has found all but a handful of proposed amended claims not proved to be patentable.

The Board recently has reiterated its view that the burden of persuasion lies with the Patent Owner but, at the same time, has "clarified" that the burden as articulated in *Idle Free* does not require the Patent Owner to prove a negative, i.e., that there is no prior art rendering the claims unpatentable. Instead, the Patent Owner's burden extends to showing patentability over the prior art of record in the IPR, in the original prosecution, and in any other Office proceeding involving the patent, as well as material prior art that the Patent Owner makes of record in light of the Motion to Amend, pursuant to the duty of candor.²³

The Motion to Amend comes into play only when the claims sought to be substituted have been found unpatentable, so the Patent Owner's arguments in support of patentability should focus on the limitations added to distinguish over the prior art in play. Because the new limitations themselves are likely to exist in the prior art, it is the unobviousness of the combination with the old limitations, i.e., of the proposed claim as a whole, that should take center stage in the argument. Use expert witness testimony to

¹⁹ 35 U.S.C. § 102 ("A person *shall* be entitled to a patent *unless...*") (emphasis added); *see In re Warner*, 379 F.2d 1011, 1016 (noting that this language "clearly places a burden of proof on the Patent Office").

²⁰ The Board reaches this view because amendment is accomplished by way of a motion, and the Board's regulations require that the moving party carry the burden of proof. *Idle Free Systems, Inc. v. Bergstrom, Inc.*, IPR2012-00027 (PTAB June 11, 2013) (Paper 26) (informative) (citing 35 U.S.C. § 116(a)(9) ("allowing the patent owner to *move* to amend"); 37 C.F.R. § 42.20(c) ("The moving party has the burden of proof to establish that it is entitled to the requested relief.")).

²¹ *Idle Free*, IPR2012-00027, Paper 26 at 6.

²² Microsoft Corp. v. Proxyconn, Inc., 115 USPQ2d 1198, 1209 (Fed. Cir. 2015).

²³ *MasterImage 3D, Inc. v. RealD Inc.*, IPR2015-00040 (PTAB July 15, 2015) (Paper 42) (informative). The duty of candor is set out at 37 C.F.R. § 42.11. *Id.* at 3.

help tell the patentability story. Wherever possible, have the expert identify objective, documentary evidence that underlies the expert's conclusions.²⁴

8. Keep the Petitioner's Reply within bounds

It may seem counterintuitive, but the Patent Owner controls the scope of the Petitioner's Reply. That is, the Patent Owner decides what arguments to make and evidence to introduce in the Response, and the Petitioner is limited strictly to refuting those arguments and evidence in the Reply, and *nothing else*.²⁵ The Board may refuse to consider arguments and evidence not directed at refuting Response arguments and evidence,²⁶ and may disregard the entire Reply, even if only a part of it violates the rule.²⁷

What do I mean in saying that the Reply must "refute" the Response and nothing more? It means that the Petitioner may show error in the Patent Owner's arguments or evidence, but that the Petitioner may not fill gaps in its case-in-chief. As discussed above, the Petitioner's entire case must be set forth in the Petition. The Reply is not a second bite at the apple to fix a mistake or patch a hole in the Petition.²⁸ The Reply may be used to impeach the Patent Owner's witness through cross-examination or to introduce new declaration evidence to counter the Patent Owner's argument or evidence.

9. Observations on cross-examination can be a late game-changer

Often overlooked due to its late timing and limited scope, the Motion for Observations provides a mechanism for introducing dispositive evidence when there's little further the opponent can do about it. The parties are authorized to submit motions for observations on cross-examination testimony of the opponent's reply

²⁴ 37 C.F.R. § 42.65(a) ("Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.").

²⁵ 37 C.F.R. § 42.23(b) ("A reply may only respond to arguments raised in the corresponding opposition or patent owner response.").

²⁶ E.g., Baxter Healthcare, IPR2013-00582, Paper 32 (Oct. 13, 2014).

²⁷ Office Patent Trial Practice Guide, 77 Fed. Reg. 77 Fed.Reg. 48,756, 48,767 (Aug. 14, 2012) ("[A] reply that raises a new issue or belatedly presents evidence will not be considered and may be returned. The Board will not attempt to sort proper from improper portions of the reply.").

²⁸ E.g., Corning Inc. v. DSM IP Assets B.V., IPR2013-00052 (PTAB May 1, 2014) (Paper 88, 9–16).

witnesses. Reply witness direct testimony typically is proffered with the Petitioner's Reply in support of the Petition and with the Patent Owner's Reply in support of the Motion to Amend. Cross-examination of the witnesses on their Reply testimony necessarily occurs after the parties have filed their final merits briefs. The Motion for Observations affords a limited opportunity to call the Board's attention to the relevance of selected reply witness deposition testimony excerpts to arguments or evidence elsewhere in the record. The Motion may not contain any argument, just citations to the cross-examination testimony and a brief description of the relevance. The Oral Hearing (more on that later) may be used to present argument relating to the testimony cited in the Motion for Observations.

A few reminders:

- Don't argue the evidence in the motion. Save the argument for the hearing.²⁹
- Don't present observations on the deposition of your own witness, at least not without the Board's leave.³⁰
- Don't present observations on deposition testimony taken before your last substantive paper or in the context of another proceeding against a different Petitioner.³¹

10. Motion to Exclude

The Board rarely grants motions to exclude evidence for several reasons. First, the opponent's objections to the evidence usually go more to the weight to be accorded the evidence, not admissibility. Second, the fact finders—administrative patent judges—are technically proficient legal professionals. They are fully capable of sorting relevant evidence from irrelevant evidence and have no lay jury to shield from prejudice or confusion. Third, if the Board is going to decide the overall case against the moving party, it usually can find a way to do so without relying upon the objected-to evidence. Fourth, the remedy—exclusion— is harsh and requires a showing by the moving party of entitlement to it. For these reasons, most APJ's are predisposed to dismiss or deny motions to exclude. They would rather dodge the contested evidence than engage in

²⁹ E.g., *Medtronic, Inc. v. NuVasive, Inc.*, IPR2013-00506 (Paper 37, Oct. 15, 2014) (dismissing motion for observations that included argument).

³⁰ E.g., Seagate Tech. v. Enova Tech. Corp., IPR2014-01178 (Paper 45, Oct. 28, 2015) (granting motion to expunge unauthorized observations on cross-examination of patent owner's own witness).

³¹ E.g., Square, Inc. v. Protegrity Corp., CBM2014-00182 (Paper 56, Nov. 5, 2015).

the delicate fact-intensive inquiry required to decide a motion to exclude.³² Only in the rare circumstance that material evidence is inadmissible under the Federal Rules of Evidence should a motion to exclude be entertained seriously.

11.The Hearing really does matter

After spending some time handling ex parte appeals, which unbeknownst to the attorneys largely are decided before they are heard, I was surprised to find myself often going into a trial hearing without a clear idea of which party would win. For me, and I think for most of my colleagues, the trial hearing was the first moment in the case in which the parties could gather together all the strands of accumulated evidence and synthesize them into a tight, unitary, coherent story. Some evidence, such as deposition testimony of reply witnesses, will not have been the subject of any argument prior to the hearing. Other evidence, seemingly trivial at first, may have gained importance in view of later-developing evidence. The hearing really is the first opportunity for the Board to examine the entire body of evidence, both macroscopically and microscopically. Take it seriously, and select an attorney well-accustomed to oral argument to present it. Also send an experienced IT person who knows the record well and can call up any page of it in an instant to address a question from the panel. The panel members will know the record cold and will begin peppering both sides with questions and requests for evidentiary citations, including some that might not have been the focus of the parties' briefing.³³ Be prepared to discuss even the deepest, darkest corner of the record in complete detail.

12. Closing thoughts

PTAB trial proceedings are, if not in their infancy, still in toddler-hood, and are likely to undergo refinements as the body of cases and experience accumulates and as the Federal Circuit provides guidance through judicial review. I hope and expect the observations here to provide helpful insights to navigate PTAB trials, even as they evolve.

³² And because the decision on a motion to exclude forms part of the final written decision, APJ's normally receive no additional production credit for writing one.

³³ E.g., Amneal, IPR2013-00368, Paper 92 (Oral hearing transcript) at 48:19–21 *et seq.* (requesting pinpoint citations of evidence on a particular point).



CLAIM CONSTRUCTION AFTER TEVA

Scott Pivnick, Partner, Alston & Bird LLP Ken Adamo, Partner, Kirkland & Ellis LLP R. Polk Wagner, Professor, University of Pennsylvania Law School



THE CHANGING COMPOSITION OF THE FEDERAL CIRCUIT

Randall Rader, Former Chief Judge of the U.S. Court of Appeals for the Federal Circuit Paul Gugliuzza, Associate Professor, Boston University School of Law Dmitry Karshtedt, Associate Professor, George Washington University Law School

SAVING THE FEDERAL CIRCUIT

Paul R. Gugliuzza^{*}

INTRODUCTION

Is it time to abolish the Federal Circuit's exclusive jurisdiction over patent cases? In the thought-provoking speech at the center of this symposium, Judge Diane Wood says yes.¹ The Federal Circuit's exclusive jurisdiction, she argues, provides too much legal uniformity, which harms the patent system.² But rather than eliminating the court altogether, Judge Wood proposes to save the Federal Circuit by letting appellants in patent cases choose the forum, allowing them to appeal either to the Federal Circuit or to the regional circuit encompassing the district court.³

Judge Wood is in good company arguing that the Federal Circuit's exclusive jurisdiction should be eliminated. In their pioneering article, *Rethinking Patent Law's Uniformity Principle*, Professors Craig Nard and John Duffy proposed to replace the court's exclusive jurisdiction with a model of "polycentric decision making" under which two or three courts would hear patent appeals, permitting inter-court dialogue and enhancing the possibility for self-correction.⁴ Judge Wood's colleague on the Seventh Circuit, Judge Richard Posner, also has recently said that he "[doesn't] think the Federal Circuit has

^{*} Copyright © 2014 Paul R. Gugliuzza. Associate Professor, Boston University School of Law. For comments, thanks to Jonas Anderson, Jack Beermann, Jonathan Darrow, Stacey Dogan, Wendy Gordon, Tim Holbrook, Megan La Belle, Mark Lemley, Mike Meurer, Michael Morley, Rachel Rebouché, David Schwartz, David Walker, and students and faculty at the Boston University School of Law IP Workshop. Thanks also to the *Chicago-Kent Journal of Intellectual Property* for the opportunity to respond to Judge Wood's remarks.

¹ Hon. Diane P. Wood, *Is It Time to Abolish the Federal Circuit's Exclusive Jurisdiction in Patent Cases?*, 13 CHI.-KENT J. INTELL. PROP. 1 (2013).

 $[\]frac{2}{3}$ Id. at 4–5.

³ *Id.* at 9-10.

⁴ Craig A. Nard & John F. Duffy, *Rethinking Patent Law's Uniformity Principle*, 101 Nw. U. L. REV. 1619, 1664 (2007).

been a success" and that he would "return patent appellate responsibility to the regional circuits, where it was before 1982."⁵

Abolishing the Federal Circuit's exclusive jurisdiction may well improve patent law. The Federal Circuit's patent doctrine has been criticized as "isolated and sterile" and "disconnected from the technological communities affected by patent law."⁶ Exclusive jurisdiction may also make the court too responsive to the desires of the patent bar.⁷ However, two premises underlie Judge Wood's claim that the legal uniformity provided by exclusive Federal Circuit jurisdiction harms the patent system, and in this paper I seek to highlight—and question those premises.

The first premise is that the Federal Circuit actually provides legal uniformity. Judge Wood suggests that, due to the Federal Circuit's exclusive jurisdiction, patent doctrine is insufficiently "percolated," meaning that it lacks mechanisms through which case law can be critiqued, reexamined, tested, and corrected, and issues worthy of Supreme Court review can be flagged.⁸ Yet percolating forces do exist in the patent system. For example, in the Federal Circuit, dissents critiquing existing doctrine are frequent and often lead to en banc proceedings reexamining and sometimes correcting the doctrine at issue. In addition, the Supreme Court, federal district courts, Congress, the Solicitor

⁵ David Haas et al., *An Interview with Seventh Circuit Judge Richard Posner: Part I*, LAW360 (Nov. 13, 2013), http://www.law360.com/ip/articles/485352/an-interview-with-7th-circ-judge-richard-posner-part-1. For another critique of exclusive Federal Circuit jurisdiction, see JAMES BESSEN & MICHAEL J. MEURER, PATENT FAILURE: HOW JUDGES, BUREAUCRATS, AND LAWYERS PUT INNOVATORS AT RISK 230 (2008) (arguing that the Federal Circuit's "poor response to new technologies," particularly in the fields of software and biotechnology, "suggests that a single, centralized appeals court is not an effective institutional arrangement").

⁶ Nard & Duffy, *supra* note 4, at 1620–21.

⁷ See Paul R. Gugliuzza, *The Federal Circuit as a Federal Court*, 54 WM. & MARY L. REV. 1791, 1854–56 (2013). *See generally* LAWRENCE BAUM, JUDGES AND THEIR AUDIENCES 97–99 (2006) (suggesting that judges who serve on specialized courts "are likely to orient themselves toward the legal fields on which they concentrate and toward the lawyers in those fields").

⁸ Wood, *supra* note 1, at 4. For a summary of the perceived benefits of doctrinal percolation, see Samuel Estreicher & John E. Sexton, *A Managerial Theory of the Supreme Court's Responsibilities: An Empirical Study*, 59 N.Y.U. L. REV. 681, 699 n.68 (1984) ("The percolation process has four principal benefits: (1) it encourages the courts of appeals to examine and criticize each other's decisions ...; (2) it often provides the Supreme Court with a number of independent analyses of legal issues ...; (3) it permits the courts of appeals to experiment with different legal rules, which can provide the Supreme Court with concrete information about the consequences of various options; and (4) it can allow the circuit courts to resolve conflicts by themselves, without Supreme Court intervention."). For a contrary view about the normative desirability of percolation, see Paul M. Bator, *What Is Wrong with the Supreme Court?*, 51 U. PITT. L. REV. 673, 689–91 (1990).

General, and the Patent and Trademark Office, among others, all provide, through various channels, diverse and influential perspectives that prevent patent law from becoming stale.⁹

The second premise underlying Judge Wood's argument is that a lack of dialogue among the federal appellate courts *causes* problems in patent law. Problematic Federal Circuit doctrine, however, should not be blamed solely on a lack of dialogue among peer-level courts. For one, as I have just mentioned, there are substitutes for that dialogue in the current institutional design. Moreover, several Federal Circuit doctrines that have been overturned by the Supreme Court or criticized by scholars and judges seem heavily influenced by the charges Congress gave the Federal Circuit upon its creation: to provide uniformity and expertise in patent matters and to strengthen patent rights.¹⁰ For example, de novo appellate review of patent claim construction arguably illustrates a court seeking, perhaps overzealously, to pursue uniformity and to provide its expert input on the most important question in any patent case.

Thus, normative proposals about the structure of the Federal Circuit should not focus entirely on introducing percolation; they should also consider ways to reduce the influence of the policies for which the Federal Circuit was created.¹¹ Importantly, there may be ways to reduce that influence while also saving the Federal Circuit's exclusive jurisdiction over patent cases. For example, the President could appoint to the court more individuals who have some knowledge of patent law but also have experience in many other areas of law. The jurisprudence of the first-ever former district judge appointed to the Federal Circuit, Judge Kathleen O'Malley, suggests that judges with such wide-ranging experience might be inclined to oppose doctrines that blindly pursue patent-specific policy objectives at the cost of broader goals, such as litigation efficiency and maintaining the consistency of patent law with other areas of federal law.

I. PERCOLATION IN PATENT LAW

Although patent law under the Federal Circuit is more uniform than if patent cases were decided by twelve different regional circuits, there are forces in the patent system that resemble the percolation Judge Wood hopes would occur in a pluralistic regime.¹² Judges at all levels of the federal judiciary, as

⁹ See infra Part I.

¹⁰ See infra Part II.

¹¹ See infra Part III.

¹² For recent commentary challenging the assumption that patent law under the Federal Circuit is uniform, see Rochelle C. Dreyfuss, *Percolation, Uniformity, and Coherent Adjudication: The Federal Circuit Experience*, 66 SMU L. REV. 505, 519 (2013), and Ted Sichelman, *Myths of (Un)certainty at the Federal Circuit*, 43 LOY. L.A. L. REV. 1161, 1165–71 (2010).

well as organizations within the executive branch, "elaborat[e] ... competing viewpoints" on important questions of patent law; those competing viewpoints "present the Supreme Court," which is paying increased attention to patent cases, "with a clearer picture of the [legal] landscape"; and courts—particularly the Federal Circuit—make "[m]istakes" that have the potential to "teach valuable lessons."¹³

A theory in the law and economics literature posits that the common law evolved toward an efficient set of rules because disputes involving inefficient rules settled less often than disputes involving efficient rules.¹⁴ As a result, inefficient rules would be overturned more frequently in litigation.¹⁵ Drawing on that theory, one danger of having appellate patent jurisdiction centralized in the Federal Circuit is that the prior-panel rule (under which three-judge appellate panels are bound to follow precedential decisions of prior three-judge panels) discourages litigants from challenging inefficient rules. For example, Professors Nard and Duffy quote Judge Randall Rader, who recently resigned as chief judge of the Federal Circuit, as stating that the court has "retarded the pace of common law development in some important ways."¹⁶ They also quote Judge Rader's immediate predecessor as chief judge, Judge Paul Michel, as stating that the court "keep[s] replicating ... old results based on ... old precedents" because litigants simply "echo" what the court has written in prior opinions.¹⁷

Yet the prior-panel rule does not keep Federal Circuit doctrine set in stone. In fact, exclusive appellate jurisdiction might *hasten* the evolution of patent law as compared to a regime in which patent appeals were dispersed among the regional circuits. The Federal Circuit decides over two hundred patent cases per year on the merits and issues over one hundred precedential patent opinions annually.¹⁸ In fact, Judge Rader, in the speech quoted by Professors Nard and Duffy, compared the Federal Circuit's large docket of patent cases to the small dockets of copyright and trademark cases decided by

¹³ Wood, *supra* note 1, at 4-5.

¹⁴ See Paul H. Rubin, Why Is the Common Law Efficient?, 6 J. LEGAL STUD. 51, 61 (1977).

¹⁵ See id.

¹⁶ Nard & Duffy, *supra* note 4, at 1622 (quoting Judge Randall R. Rader, *The United States Court of Appeals for the Federal Circuit: The Promise and Perils of a Court of Limited Jurisdiction*, 5 MARQ. INTELL. PROP. L. REV. 1, 4 (2001)).

 ¹⁷ Id. (quoting Judge Paul R. Michel, Keynote Presentation, Berkeley Center for Law & Technology Conference on Patent System Reform (Mar. 1, 2002)).
 ¹⁸ See Jason Rantanen, Federal Circuit Dispositions, Part I, PATENTLY-O (Feb. 14,

¹⁸ See Jason Rantanen, Federal Circuit Dispositions, Part I, PATENTLY-O (Feb. 14, 2011), http://patentlyo.com/patent/2011/02/federal-circuit-dispositions-part-i.html (providing data from 2010). Unfortunately, in 2011, the Federal Circuit stopped compiling this useful caseload data. See Jason Rantanen, Federal Circuit Statistics—FY 2011, PATENTLY-O (Oct. 26, 2011), http://www.patentlyo.com/patent/2011/10/federal-circuit-statistics-fy-2011.html.

each regional circuit and concluded that the Federal Circuit had in some ways "dramatically accelerated the pace of common law development."¹⁹

Examples of rapid reexamination and fluctuation in Federal Circuit patent doctrine abound. In the past six years alone, the court has convened en banc to reconsider fundamental questions including: the standard of review for claim construction,²⁰ the patent eligibility of business methods²¹ and computer software,²² and the standard for inequitable conduct before the Patent and Trademark Office,²³ among many others.²⁴

In fact, it might be that judges who specialize in a particular area of law, such as the judges of the Federal Circuit, are better positioned to evolve that area of law than generalist judges on multiple courts would be. Specialized judges might be more attentive to important issues in the field and more likely to notice an issue that is ripe for reconsideration. The Federal Circuit facilitates this close attention by circulating all precedential opinions to the entire court for review, comment, and potential sua sponte en banc action before issuance.²⁵ Moreover, centralization of patent appeals in the Federal Circuit makes it easier for amici to track and alert the judges to cases worthy of en banc review. A study by Colleen Chien provides evidence of the important role amici play in spurring the Federal Circuit to reexamine particular issues, reporting that the court grants twelve percent of en banc petitions accompanied by amicus briefs, compared to less than two percent of petitions without amicus briefing.²⁶ Such

¹⁹ Rader, *supra* note 16, at 4 (emphasis added).

²⁰ Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp., 744 F.3d 1272 (Fed. Cir. 2014) (en banc). ²¹ In re Bilski, 545 F.3d 943 (Fed. Cir. 2008) (en banc), *aff*^{*}d, 130 S. Ct. 3218 (2010).

²² CLS Bank Int'l v. Alice Corp., 717 F.3d 1269 (Fed. Cir.) (en banc), aff'd, No. 13-298, 2014 WL 2765283 (U.S. 2014).

²³ Therasense, Inc. v. Becton, Dickinson & Co., 649 F.3d 1276 (Fed. Cir. 2011) (en

banc). ²⁴ See Robert Bosch, LLC v. Pylon Mfg. Corp., 719 F.3d 1305 (Fed. Cir. 2013) (en Inc. v. Limelight Networks, Inc., 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (standard for inducing patent infringement), rev'd, 134 S. Ct. 2111 (2014); TiVo Inc. v. EchoStar Corp., 646 F.3d 869 (Fed. Cir. 2011) (en banc) (standard for infringement by products redesigned after a finding of infringement); Princo Corp. v. ITC, 616 F.3d 1318, 1328 (Fed. Cir. 2010) (en banc) (standard for patent misuse): Ariad Pharms., Inc. v. Eli Lilly & Co., 598 F.3d 1336 (Fed. Cir. 2010) (en banc) (whether the written description requirement is an independent element of patentability); Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665 (Fed. Cir. 2008) (en banc) (standard for infringing a design patent).

U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, INTERNAL OPERATING PROCEDURE No. 10-5 (July 7, 2010).

Colleen V. Chien, Patent Amicus Briefs: What the Courts' Friends Can Teach Us About the Patent System, 1 U.C. IRVINE L. REV. 397, 424 (2011). Professor Chien also reports that six percent of Federal Circuit petitions for rehearing en banc are accompanied by amicus briefs. Id. at 426.

close attention to one area of law by both judges and amici seems much less likely to occur in the regional circuits.

In addition, many if not most of the Federal Circuit's recent en banc rehearings were presaged by panel dissents or concurrences, or dissents from the denial of rehearing en banc in other cases raising the same issue.²⁷ These separate opinions provide a forum for the court's judges to criticize their colleagues' decisions and to propose alternative analyses of relevant legal issues—two of the key functions of "percolation" as envisioned by Judge Wood.²⁸ Several Federal Circuit judges, for example, expressed dissatisfaction with de novo appellate review of claim construction before the court granted rehearing on that issue in March 2013.²⁹

Sometimes the court's precedential case law itself provides percolation, with different panels articulating different viewpoints. For instance, before the court's en banc decision in *Philips v. AWH Corp.*,³⁰ different panels of the court adopted different views about the best sources to use in determining the meaning of patent claims. Many opinions gave primacy to the patent's specification and

²⁷ See, e.g., CLS Bank Int'l v. Alice Corp., 685 F.3d 1341, 1356 (Fed. Cir.) (Prost, J., dissenting), vacated, 484 F. App'x 559 (Fed. Cir. 2012); Therasense, Inc. v. Becton, Dickinson & Co., 593 F.3d 1289, 1312 (Fed. Cir.) (Linn, J., dissenting), vacated, 374 Fed. App'x. 35 (Fed. Cir. 2010); TiVo Inc. v. EchoStar Corp., No. 2009-1374, slip op. at 15 (Fed. Cir. Mar. 4, 2010) (Rader, J., dissenting), vacated, 376 F. App'x 21 (Fed. Cir. 2010); Ariad Pharms., Inc. v. Eli Lilly & Co., 560 F.3d 1366, 1380 (Fed. Cir.) (Linn, J., concurring), vacated, 595 F.3d 1329 (Fed. Cir. 2009); Princo Corp. v. ITC, 563 F.3d 1301, 1321 (Fed. Cir.) (Bryson, J., concurring in the result in part and dissenting in part), vacated, 583 F.3d 1380 (Fed. Cir. 2009); Egyptian Goddess, Inc. v. Swisa, Inc., 498 F.3d 1354, 1359 (Fed. Cir.) (Dyk, J., dissenting), vacated, 256 F. App'x 357 (Fed. Cir. 2007).

²⁸ See supra note 8 and accompanying text.

²⁹ See Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1373 (Fed. Cir. 2011) (Moore, J., dissenting from denial of rehearing en banc); *id.* at 1373 (O'Malley, J., dissenting from denial of rehearing en banc); Amgen Inc. v. Hoechst Marion Roussel, Inc., 469 F.3d 1039, 1040 (Fed. Cir. 2006) (Michel, C.J., dissenting from denial of rehearing en banc); *id.* at 1044 (Rader, J., dissenting from denial of rehearing en banc); Phillips v. AWH Corp., 415 F.3d 1303, 1330 (Fed. Cir. 2005) (en banc) (Mayer, J., dissenting); *see also* Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp., 500 F. App'x 951 (Fed. Cir. 2013) (granting petition for rehearing en banc).

³⁰ 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

prosecution history,³¹ but others emphasized dictionaries, encyclopedias, and treatises as "particularly useful resources."³²

Congress, too, plays a role in percolating patent law. For example, in the lead up to the America Invents Act of 2011,³³ members of Congress proposed bills to reform Federal Circuit law on issues including damages, venue, and willful infringement (which can entitle a patent holder to treble damages).³⁴ While Congress was weighing those proposals, the Federal Circuit in an en banc decision changed its law on willful infringement³⁵ and issued panel decisions that increased appellate scrutiny of plaintiffs' choice of venue³⁶ and of damages awards made by juries.³⁷ After the Federal Circuit's decisions, Congress abandoned those reform proposals.³⁸ Thus, as Jonas Anderson has observed, Congress can stimulate the evolution of patent law by acting as a "catalyst," identifying problematic areas of Federal Circuit doctrine and encouraging the court to make a change.³⁹

Despite the Federal Circuit's exclusive jurisdiction, the current system is also capable of identifying for the Supreme Court the patent cases it should review, another key benefit of "percolation" according to Judge Wood.⁴⁰ En banc decisions and opinions by Federal Circuit judges dissenting from the denial of rehearing en banc provide useful signals to the Court, as do panel dissents,

³³ America Invents Act, Pub. L. No. 112-29, 125 Stat. 284 (2011).

³⁴ Gugliuzza, *supra* note 7, at 1827–28.

³⁵ *In re* Seagate Tech., LLC, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc) (overruling case law requiring a patent holder to seek the advice of counsel to avoid a finding of willful infringement).

³⁶ See, e.g., In re TS Tech USA Corp., 551 F.3d 1315, 1321–22 (Fed. Cir. 2008); see also Paul R. Gugliuzza, *The New Federal Circuit Mandamus*, 45 IND. L. REV. 381–90 (2012) (discussing several Federal Circuit venue decisions that followed *TS Tech*).

³⁷ See, e.g., Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301, 1335 (Fed. Cir. 2009).

³⁸ Gugliuzza, *supra* note 7, at 1827–28.

³⁹ Jonas Anderson, *Congress as a Catalyst of Patent Reform at the Federal Circuit*, 63 AM. U. L. REV. 961, 966–67 (2014).

⁴⁰ Wood, *supra* note 1, at 4-5.

³¹ See id. at 1319.

³² *E.g.*, Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1202 (Fed. Cir. 2002). The court in *Philips* rejected the *Texas Digital* line of cases, reaffirming the primacy of the specification in determining claim meaning. *Philips*, 415 F.3d at 1321. For academic commentary documenting a "distinct split in methodological approach" among Federal Circuit judges on the question of claim construction, see R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105, 1170 (2004), and R. Polk Wagner & Lee Petherbridge, *Did* Phillips *Change Anything? Empirical Analysis of the Federal Circuit's Claim Construction Jurisprudence, in* INTELLECTUAL PROPERTY AND THE COMMON LAW 123–50 (Shyamkrishna Balganesh ed., 2013) (updating the original study, with similar results).

which are quite frequent on the Federal Circuit. An early study showed that Federal Circuit judges dissented more often than judges in four out of five regional circuits used as a control.⁴¹ A more recent study showed that the rate of dissent has dramatically increased since 2005, with dissents being filed in roughly 25% of precedential patent decisions and only about 60% of precedential patent opinions achieving unanimity.⁴²

In addition, the Solicitor General provides influential advice to the Supreme Court about which patent cases warrant review. Professor Duffy has shown that, from the 1994 Term through the 2007 Term, the Supreme Court followed the Solicitor General's recommendation to grant or deny certiorari in seventeen of the nineteen patent cases (89.5%) in which the Court called for the Solicitor General's views.⁴³ This trend has continued from the 2008 Term though the 2012 Term (which concluded in June 2013), with the Court following the Solicitor General's recommendation in eight out of nine cases (88.9%).⁴⁴

Beyond assisting the Court with case selection, when the Solicitor General recommends granting a petition in a patent case, the Solicitor General is almost by definition disagreeing with the substance of the doctrine articulated by the Federal Circuit. The Supreme Court, for its part, seems inclined to give substantial weight to the Solicitor General's views on the merits, adopting those views in the vast majority of recent patent cases in which the Solicitor General

⁴¹ Christopher A. Cotropia, *Determining Uniformity Within the Federal Circuit by Measuring Dissent and En Banc Review*, 43 LOY. L.A. L. REV. 801, 815–18 (2010). Professor Cotropia found that dissents were filed in 3.51% of Federal Circuit decisions, compared with dissent rates in the regional circuits that ranged from 1.14% to 4.56%. *Id.* at 815. When limited to patent cases, the Federal Circuit's dissent rate increased to 9.28%. *Id.* at 816.

⁴² Jason Rantanen & Lee Petherbridge, *Disuniformity* 12–13 (Univ. of Iowa Legal Studies Research Paper No. 13-42, 2013), *available at* http://ssrn.com/abstract=2351993. Professors Rantanen and Petherbridge hypothesize several potential explanations for the increase in dissents, including an influx of new judges on the Federal Circuit and an increasing number of Supreme Court patent decisions that are capable of multiple interpretations, enhance lower court discretion, or both. *See id.* at 18–32.

⁴³ See John F. Duffy, *The Federal Circuit in the Shadow of the Solicitor General*, 78 GEO. WASH. L. REV. 518, 531 (2010).

⁴⁴ See infra Appendix. The Supreme Court is also aided in selecting patent issues for review by amicus briefs filed at the certiorari stage. Professor Chien's study found that, from 2000 to 2009, the Court granted certiorari on forty-five percent of patent petitions accompanied by amicus briefs, compared to two percent of patent petitions filed without amicus briefs. Chien, *supra* note 26, at 424. Chien also reports that thirty-one percent of patent petitions were accompanied by amicus briefs. *Id*.

has challenged a rule adopted by the Federal Circuit.⁴⁵ Thus, the Solicitor General provides an influential competing perspective on matters of patent law.

Moreover, the Solicitor General does not act alone when formulating the position of the United States. Rather, the Solicitor General mediates the views of various federal agencies with relevant expertise, including not just the Patent and Trademark Office (PTO), but also the Department of Justice (particularly the antitrust division), the Federal Trade Commission, and, in appropriate cases, organizations such as the National Institutes of Health, the Centers for Disease Control, and the White House Office of Science and Technology Policy.⁴⁶ In fact, on the issue of the patent eligibility of isolated DNA sequences, which was recently before the Supreme Court in the *Myriad* case,⁴⁷ divergent viewpoints had actually emerged from within the executive branch. The PTO had long held that isolated sequences of DNA were eligible for patenting,⁴⁸ but the brief filed by the Solicitor General urged the Court to hold that isolated but otherwise unmodified DNA was not patent eligible.⁴⁹

A Supreme Court reversal of the Federal Circuit, which occurs in about seventy percent of the patent cases heard by the Court,⁵⁰ also percolates patent law.⁵¹ Not only does the Supreme Court's decision itself revise the law, the decision can trigger additional percolation in the lower courts, the PTO, and the International Trade Commission (which has the power to prohibit importation of products that infringe U.S. patents).⁵² Additional percolation is particularly

⁴⁵ See Arti K. Rai, Competing with the "Patent Court," 13 CHI.-KENT. J. INTELL. PROP. 386, 390 (2014) (noting that, from 1996 through June 2013, "of the fourteen cases in which the executive branch disagreed with the Federal Circuit, the executive branch's position prevailed in all but two"); Paul R. Gugliuzza, Book Review, *IP Injury and the Institutions of Patent Law*, 98 IOWA L. REV. 747, 766–67, 770 (citing cases and additional sources).

⁴⁶ See Arti K. Rai, Essay, Patent Validity Across the Executive Branch: Ex Ante Foundations for Policy Development, 61 DUKE L.J. 1237, 1240–41 (2012); see also Rai, supra note 45, at 390.

⁴⁷ Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107 (2013) (*Myriad*).

⁴⁸ See PTO Utility Examination Guidelines, 66 Fed. Reg. 1092, 1093 (Jan. 5, 2001).

⁴⁹ See Brief for the United States as Amicus Curiae at 10, *Myriad*, 133 S. Ct. 2107. The Court ultimately sided with the Solicitor General. *Myriad*, 133 S. Ct. at 2117.

⁵⁰ See Paul R. Gugliuzza, Patent Law Federalism, 2014 WISC. L. REV. 11, 40-41.

⁵¹ For an extended treatment of the Supreme Court's role in percolating patent doctrine, see John M. Golden, *The Supreme Court as "Prime Percolator": A Prescription for Appellate Review of Questions in Patent Law*, 56 UCLA L. REV. 657 (2009).

⁵² On the powers of the Commission, see 19 U.S.C. § 1337 (2012).

likely if the Court, as it has regularly done in recent patent cases, adopts a flexible legal standard that will require case-by-case elaboration.⁵³

The Supreme Court currently performs its percolating role frequently, as patent law is now one of the most robust areas of the Court's docket. The issues the Court has considered or is currently considering, like the issues addressed by the Federal Circuit en banc, involve fundamental matters of patent doctrine, such as patentable subject matter (repeatedly),⁵⁴ nonobviousness,⁵⁵ claim construction,⁵⁶ and infringement,⁵⁷ as well as important issues in patent litigation, such as declaratory-judgment standing,⁵⁸ the burden of proof for infringement,⁵⁹ and remedies for patent holders.⁶⁰ Also, as this article was going to press, the Court decided two cases implicating the high-profile issue of "patent litigation abuse."⁶¹ Specifically, the Court ruled that the Federal Circuit made it too difficult for prevailing parties in patent litigation to recover their attorneys' fees⁶² and that the Federal Circuit applied a standard of appellate review that did not sufficiently defer to district court decisions to award or deny fees.⁶³

Federal district courts also percolate patent law. Speaking off the bench, several district judges have questioned the Federal Circuit's standards of review and proclivity for reversal, particularly with respect to claim construction orders.⁶⁴ Although one might think that, while on the bench, district judges would mostly try to avoid appellate reversal, some judges have actually rebelled

⁵³ On the Supreme Court's tendency to push for greater flexibility in patent law and the "legal uncertainty" that results, see Kelly Casey Mullally, *Legal (Un)certainty, Legal Process, and Patent Law*, 43 LOY. L.A. L. REV. 1109, 1133–34 (2010).

⁵⁴ Alice Corp. v. CLS Bank Int'l, No. 13-298, 2014 WL 2765283 (U.S. 2014); *Myriad*, 133 S. Ct. 2107; Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289 (2012); Bilski v. Kappos, 130 S. Ct. 3218 (2010).

⁵⁵ KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 (2007).

⁵⁶ Nautilus, Inc. v. Biosig Instruments, Inc., 134 S. Ct. 2120 (2014); Teva Pharms. USA, Inc. v. Sandoz, Inc., No. 13-854 (U.S. 2014).

⁵⁷ Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722 (2002); Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111 (2014).

⁵⁸ MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2007).

⁵⁹ Medtronic, Inc. v. Mirowski Family Ventures, LLC, 134 S. Ct. 843 (2014); Microsoft Corp. v. i4i Ltd. P'ship, 131 S. Ct. 2238 (2011).

⁶⁰ eBay, Inc. v. MercExchange, L.L.C. 547 U.S. 388 (2006).

⁶¹ The issue of patent litigation abuse is so hot that the President mentioned it in this year's State of the Union address. *See* President Barack Obama, State of the Union Address (Jan. 28, 2014) (calling on Congress to "pass a patent reform bill that allows our businesses to stay focused on innovation, not costly, needless litigation").

⁶² Octane Fitness, LLC v. Icon Health & Fitness, Inc., 134 S. Ct. 1749 (2014).

⁶³ Highmark Inc. v. Allcare Mgmt. Sys., Inc., 134 S. Ct. 1744 (2014).

⁶⁴ See, e.g., The Honorable Kathleen M. O'Malley et. al., A Panel Discussion: Claim Construction from the Perspective of the District Judge, 54 CASE W. Res. L. Rev. 671 (2004).

against Federal Circuit doctrines that they perceive as inconsistent with Supreme Court case law. 65

The Federal Circuit has actually facilitated district court percolation by giving those courts leeway to experiment with procedure in patent cases. For example, although the Federal Circuit (in a decision affirmed by the Supreme Court) held that the critical question of claim construction must be decided by the judge, not the jury,⁶⁶ the Federal Circuit did not impose any requirements about when or how that construction must take place. Accordingly, claim construction can be (and has been) performed in various ways: at a separate hearing, with summary judgment, during discovery, after discovery, and even at or after trial in the course of formulating jury instructions.⁶⁷ Although most courts now conduct separate hearings during fact discovery and prior to expert discovery, that practice emerged from district court experimentation, not from Federal Circuit fiat.⁶⁸

Moreover, district courts are experimenting with local procedural rules to govern patent cases,⁶⁹ an experiment that the Federal Circuit facilitates by granting appellate deference to district courts' interpretation and application of

⁶⁵ See, e.g., Macronix Int'l Co. v. Spansion Inc., No. 3:13-cv-679, 2014 WL 934505, at *5 (E.D. Va. Mar. 10, 2014) (refusing to follow Federal Circuit case law that "exempted" patent infringement cases from the pleading standards adopted by the Supreme Court in Bell Atlantic Corp. v. Twombly, 550 U.S. 544 (2007), and Ashcroft v. Iqbal, 556 U.S. 662 (2009)); Warrior Sports, Inc. v. Dickinson Wright, P.L.L.C., 666 F. Supp. 2d 749, 751–52 (E.D. Mich. 2009) (noting that the Supreme Court has made it clear that "there is no 'single, precise, all-embracing' test for jurisdiction over federal issues embedded in state-law claims" but objecting that "the Federal Circuit appears to impose precisely such an all-embracing test, effectively aggregating ever greater swaths of state-law claims into its jurisdictional sweep" (citations omitted)), vacated and remanded, 631 F.3d 1367 (Fed. Cir. 2011). State judges, too, have sometimes criticized or ignored Federal Circuit law. See, e.g., Minton v. Gunn 355 S.W.3d 634, 655 (Tex. 2011) (Guzman, J., dissenting) ("This Court should not be quick to follow Federal Circuit case law that fails to follow the test set forth by the Supreme Court."); see also Gugliuzza, supra note 7, at 1817 nn.133-34 (providing additional examples). Opportunities for critique of the Federal Circuit by state judges and regional circuit judges might increase now that the Supreme Court has rejected a line of Federal Circuit cases that extended exclusive federal district court and Federal Circuit jurisdiction to practically all cases raising issues of patent infringement, validity, or enforceability. See Gunn v. Minton, 133 S. Ct. 1059 (2013).

⁶⁶ Markman v. Westview Instruments, Inc., 52 F.3d 967 (Fed. Cir. 1995) (en banc), *aff*³*d*, 517 U.S. 370 (1996).

⁶⁷ PETER S. MENELL ET AL., PATENT CASE MANAGEMENT JUDICIAL GUIDE 5-4 to 5-5 (2d ed. 2012).

⁶⁸ See id. at 5-5.

⁶⁹ See Xuan-Thao Nguyen, Dynamic Federalism and Patent Law Reform, 85 IND. L.J. 449, 473–74 (2010).

those local rules.⁷⁰ The Patent Pilot Program created by Congress in 2011 will introduce further heterogeneity in patent adjudication as some patent cases in some districts will be heard by judges who have volunteered to hear extra patent cases while others will not.⁷¹

That said, procedural heterogeneity at the district court level is not the sort of direct experimentation with substantive patent doctrine that Judge Wood laments is missing under the Federal Circuit. When the Federal Circuit adopts a rule of law, that rule governs the entire country (and proceedings at the PTO), no matter if a few Federal Circuit judges (and even some rebellious district judges) disagree. The oft-praised "laboratories of experimentation,"⁷² in which judges and policymakers can observe the empirical consequences of different legal rules, do not emerge, to the possible detriment of patent policy.⁷³

But one should not overstate the experimentation that would be possible within the federal system if multiple courts of appeals heard patent cases. For one, even if different courts adopted different rules of patent law, the PTO would, as a practical matter, be forced to choose a national rule to govern proceedings before the agency. The national rules chosen by the PTO would be highly influential because only two percent of patents (at most) are ever litigated,⁷⁴ so few patents would actually be adjudicated under the potentially differing laws of the various circuits. The PTO's role in articulating and applying national legal standards for patent validity is already growing because of new review procedures created by the America Invents Act,⁷⁵ and the agency's views would become even more significant under a model in which multiple courts were capable of disagreeing.

⁷⁰ See Genentech, Inc. v. Amgen, Inc., 289 F.3d 761, 774 (Fed. Cir. 2002).

⁷¹ See Pilot Program in Certain District Courts, Pub. L. No. 111-349, 124 Stat. 3674 (2011).

⁷² See New State Ice Co. v. Liebmann, 285 U.S. 262, 311 (1932) (Brandeis, J., dissenting).

 ⁷³ For an argument that empirical progress in patent policy depends on greater legal diversity, see Lisa Larrimore Ouellette, *Patent Experimentalism*, 101 VA. L. REV. (forthcoming 2015) (manuscript at 13–16), *available at* http://ssrn.com/abstract=2294774.
 ⁷⁴ See Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. REV.

 ⁷⁴ See Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 Nw. U. L. REV.
 1495, 1501 (2001).
 ⁷⁵ America Invents Act, Pub. L. No. 112-29, § 6(a), (d), 125 Stat. 284, 299–311

⁷⁵ America Invents Act, Pub. L. No. 112-29, § 6(a), (d), 125 Stat. 284, 299–311 (2011) (codified as amended in scattered sections of 35 U.S.C.). *See generally* ROBERT P. MERGES & JOHN F. DUFFY, PATENT LAW AND POLICY: CASES AND MATERIALS 1046–52 (6th ed. 2013) (describing the PTO's new post-grant review and inter partes review procedures); Melissa F. Wasserman, *The Changing Guard of Patent Law:* Chevron *Deference for the PTO*, 54 WM. & MARY L. REV. 1959, 1977–78 (2013) (arguing that "application of administrative law principles to the new and modified postgrant review proceedings triggers *Chevron* deference for the PTO's interpretation of ambiguous terms of the Patent Act announced during these proceedings").

Alternatively, one might suggest that, even if multiple courts of appeals heard appeals in patent litigation, the PTO should simply be bound by the Federal Circuit's case law. (Judge Wood's proposal does not address the issue of choice-of-law at the PTO.) This arrangement, too, would limit experimentation. For example, suppose that the Ninth Circuit held that computer software was patent eligible, but the Federal Circuit held that it was not. In that scenario, the PTO would not issue software patents, so the circuit split would not create much experimentation. Conversely, suppose that the Federal Circuit permitted software patents but the Ninth Circuit did not. In that instance, it seems inefficient for the PTO to permit applicants to obtain patents that will be categorically invalidated in litigation in a particular circuit.

Furthermore, even if different rules of patent law could be successfully operationalized in different circuits, the benefits of experimentation would still be limited by the difficulty of measuring the impact of different legal rules in different geographic areas. Patents are only one of many influences on technological innovation. Moreover, because of permissive venue rules, patent lawsuits can be filed practically anywhere in the United States, regardless of where the underlying technology was developed.⁷⁶ It would therefore seem extremely difficult to determine that a particular circuit sees more technological innovation *because of* a particular legal rule in force within that circuit.⁷⁷

Finally, unless the pluralistic model of appellate jurisdiction *randomly* assigned cases to different circuits, it would be improper to label the model a true "experiment" because certain litigants would self-select into certain circuits. Patent holders in particular would do everything possible to litigate their cases in the circuit with the least rigorous standards for patent validity because, under federal preclusion doctrine, an invalidity judgment in one case renders the patent invalid everywhere and for all time.⁷⁸ Professors Nard and Duffy's polycentric proposal provides for random assignment of appellate jurisdiction,⁷⁹ but Judge

⁷⁶ See Jeanne C. Fromer, Patentography, 85 N.Y.U. L. REV. 1444, 1453–55 (2010).

⁷⁷ See Ouellette, *supra* note 73, at 11–13 (discussing the difficulty of attributing different levels of innovation in different jurisdictions to those jurisdictions' varied innovation policies).

⁷⁸ See Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found., 402 U.S. 313, 330–50 (1971). See generally Alex Kozinski & Daniel Mandell, *It's* Blonder-Tongue All Over Again, 13 CHI.-KENT. J. INTELL. PROP. 379 (2014).

⁹ Nard & Duffy, *supra* note 4, at 1668.

Wood's proposal invokes randomization only when both parties appeal and cannot agree on a circuit.⁸⁰

It might well be that the percolators I have identified, such as Federal Circuit judges, Supreme Court justices, federal district judges, and members of Congress, are not the *ideal* percolators of patent law. Most of the Federal Circuit's judges share relatively homogenous backgrounds in patent law or international trade, perhaps limiting their sensitivity to broader concerns of social policy.⁸¹ Supreme Court justices, although perhaps more attuned to broader policy concerns, have been said to know little about patent law⁸² and have sometimes resisted engaging the factual and policy complexities that patent cases present.⁸³ Opinions by district judges (like dissenting or concurring opinions by Federal Circuit judges) have no precedential effect and therefore have limited real-world impact. And allowing individual members of Congress to catalyze changes in patent law by simply proposing legislation has the

⁸² See Golden, *supra* note 51, at 688–90.

⁸⁰ Wood, *supra* note 1, at 9. For a general argument in favor of randomized case allocation among courts with overlapping jurisdiction, see Ori Aronson, *Forum by Coin Flip: A Random Allocation Model for Jurisdictional Overlap*, 45 SETON HALL L. REV. (forthcoming 2015) (manuscript at 5), *available* at http://ssrn.com/abstract=2426134, which notes that randomization would "enable comparison, experimentation, and learning between forums dealing with similar questions" and would "make[] it more difficult for sophisticated parties to plan, prepare, and strategize in order to reach sympathetic courts."

⁸¹ Of the court's eleven active judges, four had significant experience in patent law before joining the bench (Judges Newman, Lourie, Moore, and Chen) and two had significant experience in international trade law (Judges Reyna and Wallach). *See Judges*, U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT, http://www.cafc.uscourts.gov/judges/ (last visited Apr. 23, 2014). In addition, Judge O'Malley had substantial experience hearing patent cases as a district judge and Judges Dyk and Taranto litigated patent cases before their appointments. *See id.; see also infra* notes 156–60 and accompanying text (discussing Judge Taranto's practice background).

⁸³ For example, in *Myriad*, Justice Scalia refused to join portions of the Court's opinion providing background facts on genetics and "some portions of the rest of the opinion going into fine details of molecular biology," noting, "I am unable to affirm those details on my own knowledge or even my own belief." 133 S. Ct. 2107, 2120 (2013) (Scalia, J., concurring in part and concurring in the judgment). Also, the five-justice majority in *Bilski v. Kappos* applied several textualist canons of statutory construction, including the canon that "words will be interpreted as taking their ordinary, contemporary, common meaning," to conclude that a business method could be a patent eligible "process" under § 101 of the Patent Act. 130 S. Ct. 3218, 3226, 3229 (2010). Four other justices correctly noted that the majority's textualism was "a deeply flawed approach to a statute that relies on complex terms of art developed against a particular historical background." *Id.* at 3238 (Stevens, J., joined by Ginsburg, Breyer, and Sotomayor, JJ., concurring in the judgment). For an argument that textualism is a tool for avoiding complex policy issues, see RICHARD A. POSNER, REFLECTIONS ON JUDGING 178–219 (2013).

potential to undermine law's democratic legitimacy. Still, the current model does provide opportunities for divergent viewpoints to emerge and for doctrine to be reconsidered and changed over time. Despite the Federal Circuit's exclusive jurisdiction, patent law *is* percolated. The fundamental problem seems to be that the current system simply leads to the wrong outcome too often.

II. POLICY OBJECTIVES AND THE FEDERAL CIRCUIT

Why do misguided doctrines of patent law emerge? Judge Wood suggests that a lack of percolation is the cause.⁸⁴ However, the policies the Federal Circuit was created to pursue also seem to play a role. The Federal Circuit was created primarily to generate uniformity in patent law, provide expertise in patent cases, and, although not as widely acknowledged in the public discourse, expand the scope and strength of patent protection.⁸⁵ Those policy objectives have shaped several important Federal Circuit decisions, particularly those in which the court has arguably gotten the law wrong.⁸⁶

Uniformity. The overriding publicly stated reason to create the Federal Circuit was to provide uniformity in patent law.⁸⁷ The court's judges, speaking and writing off the bench, have characterized uniformity as a critical "mission"

⁸⁴ See Wood, supra note 1, at 4–5.

⁸⁵ For a historical summary of the Federal Circuit's creation, see Paul R. Gugliuzza, *Rethinking Federal Circuit Jurisdiction*, 100 GEO. L.J. 1437, 1453–58 (2012).

⁸⁶ The court's emphasis on the policies justifying its creation would likely not surprise scholars of institutional design, who have theorized that "[p]olicy-oriented missions are more likely to develop in courts with a high level of specialization." LAWRENCE BAUM, SPECIALIZING THE COURTS 39 (2012).

⁸⁷ H.R. REP. No. 97-312, at 22–23 (1981) (noting that the "central purpose" of the Federal Courts Improvement Act, which created the Federal Circuit, was "to reduce the widespread lack of uniformity and uncertainty of legal doctrine that exist in the administration of patent law"); *see also* Timothy R. Holbrook, *The Supreme Court's Complicity in Federal Circuit Formalism*, 20 SANTA CLARA COMPUTER & HIGH TECH. L.J. 1, 1 (2003) (discussing "the court's Congressional mandate to promote uniformity and certainty in patent law").

or "charge" of the Federal Circuit.⁸⁸ Even the Supreme Court has sometimes mentioned uniformity as an important policy goal in the patent field, although the Court's statements on this issue are themselves not particularly uniform.⁸⁹

On the bench, the judges of the Federal Circuit have relied on uniformity concerns to justify several doctrines of procedure and jurisdiction that are inconsistent with well-established federal law. For example, the standards of review of the Administrative Procedure Act (APA) provide the ground rules for

⁸⁸ E.g., Judge Richard Linn, U.S. Court of Appeals for the Federal Circuit, The Changing Landscape of Patent Law at the USPTO, the Supreme Court and the Federal Circuit, Address at PatCon 3: The Annual Patent Conference (Apr. 12, 2013), *available at* http://www.youtube.com/watch?v=n8BgC6qXWqo (12:30) (stating that the Federal Circuit's "mission" was to "bring uniformity and regularity to the law of patents"); Judge Pauline Newman, *After Twenty-Five Years*, 17 FED. CIR. B.J. 12, 123 (2008) (noting that the Federal Circuit's "charge, the expectation and hope of its creators, was that uniform national law, administered by judges who understand the law and its purposes, would help to revitalize industrial innovation through a strengthened economic incentive"). *See generally* George C. Beighley, Jr., *The Court of Appeals for the Federal Circuit: Has It Fulfilled Congressional Expectations?*, 21 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 671, 699–705 (2011) (various Federal Circuit judges citing uniformity as a "congressional expectation").

⁸⁹ Compare Markman v. Westview Instruments, Inc., 517 U.S. 370, 390 (1996) ("[W]e see the importance of uniformity in the treatment of a given patent as an independent reason to allocate all issues of [claim] construction to the court."), and Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 162–63 (1989) (holding preempted a Florida statute that granted patent-like protection to boat hull designs that were not patentable under federal law, noting that "nationwide uniformity in patent law ... [was] frustrated by the Florida scheme"), with Holmes Grp., Inc. v. Vornado Air Circulation Sys., Inc., 535 U.S. 826, 832 (2002) (rejecting the argument that "Congress's goal of promoting the uniformity of patent law" justified permitting patent law counterclaims to establish exclusive federal jurisdiction (internal quotation marks omitted)), and Fla. Prepaid Postsecondary Educ. Expense Bd. v. Coll. Sav. Bank, 527 U.S. 627, 645 (1999) (rejecting the argument that "[t]he need for uniformity in the construction of patent law" justified Congress's abrogation of state sovereign immunity from federal patent infringement suits).

In previous work, I have distinguished two different dimensions of uniformity: legal uniformity, which "reflects the notion that the law governing patent rights should be articulated and applied consistently throughout the entire country," and adjudicative uniformity, which "reflects the notions that the claims of a particular patent should be construed similarly from one case to another and that courts should not reach inconsistent validity findings regarding the same patent." Gugliuzza, *supra* note 50, at 21. The Supreme Court's statement in *Markman* reflects notions of adjudicative uniformity, while the statements in *Bonito Boats, Holmes Group*, and *Florida Prepaid* reflect notions of legal uniformity. Although those distinctions are important in conducting a normative assessment of how power over the patent system should be allocated between the state and federal governments, *see id.* at 35–61, the distinctions are less important in this paper's descriptive account of Federal Circuit decisionmaking because the court itself does not usually distinguish between the two different types of uniformity.

judicial review of federal agency fact-finding,⁹⁰ but in *In re Zurko*, the Federal Circuit held that the APA did not apply when the court was reviewing fact-finding by the PTO.⁹¹ Instead, the court applied the standard of review normally applied by appellate courts reviewing fact-finding by trial judges.⁹² In adopting this unusual rule, the Federal Circuit cited the aim of achieving "consistency" in its "review of the patentability decisions of the agency and the district courts in infringement litigation."⁹³ The Supreme Court reversed, holding that the APA applies to judicial review of the PTO, just like any other agency.⁹⁴

Also, the Federal Circuit had held, counter to the well-pleaded complaint rule that applies to practically all federal lawsuits, that a patent law counterclaim could cause a case to "arise under" patent law and therefore fall within the Federal Circuit's exclusive jurisdiction.⁹⁵ In support of this holding, the court emphasized "[t]he broad theme" of the Federal Courts Improvement Act,⁹⁶ which created the Federal Circuit: "increasing nationwide uniformity in certain fields of national law."⁹⁷ The court asserted that "[d]irecting appeals involving compulsory counterclaims for patent infringement to the twelve regional circuits could frustrate Congress' desire to foster uniformity."⁹⁸ The Supreme Court again overturned the Federal Circuit and brought patent law in line with other areas of federal law, holding that a federal patent issue must appear in the plaintiff's complaint to create federal jurisdiction.⁹⁹

Similarly, in support of its holding that federal courts have exclusive jurisdiction over state law claims for legal malpractice against patent attorneys, the Federal Circuit cited "the experience, solicitude, and hope of uniformity that a federal forum offers."¹⁰⁰ The Federal Circuit's rule, however, was inconsistent with recent Supreme Court case law, which made clear that for federal jurisdiction to exist over a state law claim, there must be a dispute about

⁹⁰ See 5 U.S.C. § 706(2) (2012).

⁹¹ *In re* Zurko, 142 F.3d 1447, 1449 (Fed. Cir. 1998) (en banc).

⁹² See id.

⁹³ *Id.* at 1458.

⁹⁴ Dickinson v. Zurko, 527 U.S. 150, 152 (1999).

⁹⁵ Aerojet-Gen. Corp. v. Mach. Tool Works, Oerlikon-Buehrle Ltd., 895 F.2d 736, 742 (Fed. Cir. 1990) (en banc).

⁹⁶ Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25.

⁹⁷ Aerojet, 895 F.2d at 744.

⁹⁸ Id.

⁹⁹ Holmes Grp., Inc. v. Vornado Air Circulation Sys., 535 U.S. 826, 830 (2002). The Supreme Court's decision in *Holmes Group* was, in turn, abrogated by the America Invents Act, Pub. L. No. 112-29, § 19(a), 125 Stat. 284, 331 (2011) (codified as amended at 28 U.S.C. § 1338(a)), which extended exclusive federal jurisdiction to cases in which the only patent issue appears in a counterclaim.

¹⁰⁰ Air Measurement Techs., Inc. v. Akin Gump Strauss Hauer & Feld, L.L.P., 504 F.3d 1262, 1272 (Fed. Cir. 2007) (quoting Grable & Sons Metal Prods., Inc. v. Darue Eng'g & Mfg., 545 U.S. 308, 312 (2005)).

the "validity, construction or effect of [federal] law."¹⁰¹ According to the Court, the "mere need to apply federal law," as is the case in the vast majority of patent malpractice cases, was not sufficient.¹⁰² Yet again, the Supreme Court overturned the Federal Circuit's rule.¹⁰³

The policy of uniformity has also influenced the Federal Circuit's decision to review de novo district court claim construction, a doctrine that has been widely criticized as inefficient because of the factual determinations claim construction requires and the inherent indeterminacy of the language of patent claims.¹⁰⁴ In the Federal Circuit's en banc decision in *Cybor Corp. v. FAS Technologies, Inc.*, the court emphasized that its "role in providing national uniformity to the construction of a patent claim ... would be impeded if [it] were bound to give deference to a trial judge's asserted factual determinations incident to claim construction."¹⁰⁵ And the court's recent decision reaffirming de novo review was based largely on the rationale that "plenary review of claim construction ... provid[es] national uniformity, consistency, and finality to the meaning and scope of patent claims."¹⁰⁶

At this point, it is worth pausing to identify a paradox in the Federal Circuit's treatment of the policy of uniformity. As I have shown, the court's judges have mentioned that policy in numerous opinions that have been overturned by the Supreme Court, have been criticized by judges and scholars, or both. Yet for all of the Federal Circuit's expressed concern about uniformity, the court's judges still take the "percolating" actions I identified in the first part of this paper: they convene en banc frequently, they regularly dissent, and, recently, they have issued deeply divided decisions that have practically *required* the Supreme Court to intervene to make a definitive statement of the

¹⁰¹ *Grable*, 545 U.S. at 313 (quoting Shulthis v. McDougal, 225 U.S. 561 (1912)) (internal quotation marks omitted).

¹⁰² Id.

¹⁰³ Gunn v. Minton, 133 S. Ct. 1059, 1068 (2013).

¹⁰⁴ See Gugliuzza, supra note 7, at 1833 n.220 (collecting commentary criticizing de novo review).

¹⁰⁵ 138 F.3d 1448, 1455 (Fed. Cir. 1998) (en banc).

¹⁰⁶ Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp., 744 F.3d 1272, 1277 (Fed. Cir. 2014) (en banc).

law.¹⁰⁷ As Chief Justice Roberts observed during a recent oral argument in a patent case: "the Federal Circuit was established to bring about uniformity in patent law, but [the court's judges] seem to have a great deal of disagreement among themselves."¹⁰⁸

Why the inconsistency between the court's words and its actions? Any answer is inevitably speculative, but I will offer some tentative thoughts. First, there is the elementary legal realist point that the stated policy of uniformity is not the actual motivator for the court's decisions. As I have noted in prior work, many of the decisions that cite uniformity also expand the Federal Circuit's power over the patent system, which in turn arguably enhances the prestige of the court and its esteem within the patent bar.¹⁰⁹ Uniformity, then, might simply be a justification for pursuing those underlying aims. Alternatively, the court's judges simply may not see the disconnect between the text of their opinions praising uniformity and their actions undercutting it. In any case, the salient point for present purposes is descriptive: the patent system currently has percolation precisely because it does *not* have the uniformity that the Federal Circuit often lauds.

As a concluding example of how uniformity concerns shape Federal Circuit doctrine, consider the Federal Circuit opinions in *Highmark Inc. v. Allcare Management Systems, Inc.*, the case in which Chief Justice Roberts made his quip about uniformity. Under the Federal Circuit case law in effect at the time, a prevailing defendant in a patent case could recover attorneys' fees only if the plaintiff filed its lawsuit in "subjective bad faith" and the lawsuit was

¹⁰⁷ See, for example, CLS Bank Int'l v. Alice Corp., 717 F.3d 1269, 1273 (Fed. Cir.) (en banc), *aff'd*, No. 13-298, 2014 WL 2765283 (U.S. 2014), which presented a question about the patent eligibility of a claimed invention in computer software. As to two of the three categories of patent claims presented, the court divided five-to-five on whether the claims satisfied the patentable subject matter requirement of § 101 of the Patent Act. *Id.* As to the final category of claims, a majority of the court's judges voted to affirm the district court's judgment of invalidity, but the court issued no majority opinion. *Id.; see also* Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 701 F.3d 1351 (Fed. Cir. 2012) (seven-to-five decision denying rehearing en banc on an issue related to shifting attorneys' fees), *vacated and remanded*, 134 S. Ct. 1744 (2014); Akamai Techs., Inc. v. Limelight Networks, Inc., 692 F.3d 1301 (Fed. Cir. 2012) (en banc) (six-to-five decision on induced infringement), *rev'd*, 134 S. Ct. 2111 (2014).

¹⁰⁸ Transcript of Oral Argument at 26, Highmark Inc. v. Allcare Health Mgmt. Sys., Inc., 134 S. Ct. 1744 (2014) (No. 12-1163).

¹⁰⁹ Gugliuzza, *supra* note 7, at 1798, 1858.

"objectively baseless."¹¹⁰ The content and application of the standard for awarding attorneys' fees is a significant issue because some commentators view fee shifting as an effective tool to deter and punish "abusive" patent lawsuits.¹¹¹ In Highmark, the issue was the appropriate standard of review for a district court's ruling on objective baselessness.¹¹² The Federal Circuit panel applied a de novo standard.¹¹³ In a concurrence issued with the denial of rehearing en banc, Judge Dyk (author of the panel opinion) defended de novo review, stating that it "assures uniformity in the treatment of patent litigation, insofar as reasonableness is the governing issue."114 Dissenting from the denial of rehearing en banc, Judge Moore took a different view of how de novo review would affect uniformity, stating: "When we convert factual issues, or mixed questions of law and fact, into legal ones for our de novo review, we undermine the uniformity and predictability goals this court was designed to advance."115 These dueling statements highlight the importance of uniformity in judicial decisionmaking on the most important legal issues facing the patent system today. Accordingly, in searching for causes of problems in patent law, we should consider not only a lack of percolation but also the influence of the policies the Federal Circuit was created to pursue.

Expertise. Another prominent reason for the Federal Circuit's creation was that the court would provide "expertise in highly specialized and technical areas," such as patent law.¹¹⁶ The objective of providing expertise also shapes Federal Circuit doctrine. For example, in *Highmark*, Judge Dyk defended de novo review of objective baselessness because "[t]he Federal Circuit brings to the table useful expertise."¹¹⁷ "Our court," he reasoned, "sees far more patent

¹¹⁰ Brooks Furniture Mfg., Inc. v. Dutailier Int'l, Inc., 393 F.3d 1378, 1381 (Fed. Cir. 2005). The power to award attorneys' fees derives from 35 U.S.C. § 285, which provides that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." The Supreme Court recently overturned the two-element test of *Brooks Furniture* in *Octane Fitness, LLC v. Icon Health & Fitness, Inc.*, 134 S. Ct. 1749, 1756 (2014) (holding that "an 'exceptional' case is simply one that stands out from others with respect to the substantive strength of a party's litigating position (considering both the governing law and the facts of the case) or the unreasonable manner in which the case was litigated").

¹¹¹ See Letter from Intellectual Property Law Professors to Members of the U.S. Congress in Support of Patent Reform Litigation 3 (Nov. 25, 2013), available at http://www.patentlyo.com/media/2014/02/professorsletterontrolls.pdf.

¹¹² See Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 687 F.3d 1300, 1308–10 (Fed. Cir. 2012), vacated and remanded, 134 S. Ct. 1744 (2014).

¹¹³ *Id.* at 1309.

¹¹⁴ Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 701 F.3d 1351, 1356 (Fed. Cir. 2012) (Dyk, J., concurring in the denial of rehearing en banc).

¹¹⁵ *Id.* at 1362 (Moore, J., dissenting from the denial of rehearing en banc).

¹¹⁶ S. REP. No. 97-275, at 6 (1981).

¹¹⁷ *Highmark*, 701 F.3d at 1356 (Dyk, J., concurring in the denial of rehearing en banc).

cases than any district court, and is well positioned to recognize those 'exceptional' cases in which a litigant could not, under the law, have had a reasonable expectation of success."¹¹⁸

Judge Dyk's explicit appeal to expertise is somewhat unusual, as the court's opinions mention expertise less frequently than the policy of uniformity.¹¹⁹ My prior work has shown, however, that the Federal Circuit, as it did by embracing de novo review in Highmark, has developed many legal doctrines that exclude other institutions from shaping patent doctrine and adjudicating the facts of patent cases.¹²⁰ These doctrines bolster the Federal Circuit's position as the expert patent institution, to the exclusion of other institutions that might bring useful expertise to bear on patent law and patent disputes. For example, in the field of administrative law, the court has limited both the fact-finding and lawmaking power of the PTO, an institution that possesses substantial patent expertise.¹²¹ Also, the court has refused to give Chevron or Skidmore deference to the decisions of the International Trade Commission on patent validity, enforceability, or infringement,122 even though the Commission's administrative law judges are experienced patent adjudicators.¹²³ Finally, the Federal Circuit's affinity for de novo appellate review of district court rulings on matters such as claim construction, attorneys' fees, and willful infringement¹²⁴ displaces trial court authority to definitively resolve both factual and legal issues in patent cases. The court's searching appellate review can be a poor use of judicial resources, particularly on fact-

¹¹⁸ Id.

¹¹⁹ Interestingly, *other courts* have mentioned the Federal Circuit's expertise in patent law to justify questionable Federal Circuit doctrines. *See, e.g.*, Byrne v. Wood, Herron & Evans, LLP, 676 F.3d 1024, 1041 (Fed. Cir. 2012) (O'Malley, J., dissenting from the denial of rehearing en banc) (noting that other courts' decisions following Federal Circuit case law sometimes "reflect the deference other courts give to the Federal Circuit on patent law issues based on our unique appellate jurisdiction" but that "in many instances, [the decisions]...us[e] our experience in patent matters as a facile way to explain away circuit case law that is inconsistent with applicable, governing standards").

¹²⁰ See Gugliuzza, supra note 7.

¹²¹ See id. at 1820–23.

¹²² Sapna Kumar, *Expert Court, Expert Agency*, 44 U.C. DAVIS L. REV. 1547, 1568 n.112 (2011).

¹²³ David L. Schwartz, *Courting Specialization: An Empirical Study of Claim Construction Comparing Patent Litigation Before Federal District Courts and the International Trade Commission*, 50 WM. & MARY L. REV. 1699, 1702–03 (2009).

¹²⁴ Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., 682 F.3d 1003, 1006–07 (Fed. Cir. 2012).

driven questions.¹²⁵ More to the point, the Federal Circuit's exclusion of other institutions from influencing the patent system is consistent with a judicial objective to offer the court's expertise on as many matters of patent law as is possible.

Expanding and Strengthening Patent Protection. Many of the Federal Circuit's supporters also hoped that the court would expand the scope of patent protection and strengthen patent rights.¹²⁶ In the Federal Circuit's very first decision, the court embraced a relatively lenient standard of patentability by adopting the precedent of the Court of Customs and Patent Appeals (CCPA), rather than starting anew with both CCPA and regional circuit decisions providing persuasive authority.¹²⁷ Several analyses have concluded that courts invalidate patents less frequently now than before Congress created the Federal Circuit.¹²⁸ Indeed, the judges of the Federal Circuit have boasted that their court has "strengthened the patent system"¹²⁹ and have warned against allowing changes in the court's personnel and in patent doctrine to "undermine or weaken the patent system."¹³⁰

¹²⁶ See Adam B. Jaffe & Josh Lerner, Innovation and Its Discontents: How Our Broken Patent System Is Endangering Innovation and Progress, and What To Do About It 10 (2004).

¹²⁵ See Highmark, Inc. v. Allcare Health Mgmt. Sys., Inc., 687 F.3d 1300, 1319–20 (Fed. Cir. 2012) (Mayer, J., dissenting in part) ("The fact that we have been vested with exclusive appellate jurisdiction in patent cases does not . . . grant us license to invade the fact-finding province of the trial courts. As a result of [our] appellate overreaching, litigation before the district court has become a mere dress rehearsal for the command performance here. Encouraging relitigation of factual disputes on appeal . . . vitiates the critically important fact-finding role of the district courts.") (citations omitted), *vacated and remanded*, 134 S. Ct. 1744 (2014).

¹²⁷ South Corp. v. United States, 690 F.2d 1368, 1369 (Fed. Cir. 1982) (en banc); *see* Jeffrey A. Lefstin, *The Constitution of Patent Law: The Court of Customs and Patent Appeals and the Shape of the Federal Circuit's Jurisprudence*, 43 LOY. L.A. L. REV. 843, 869 (2010) (noting that, after *South Corp.*, any regional circuit precedents that conflicted with CCPA precedents were "discarded without ceremony or consideration"); *see also* BAUM, *supra* note 86, at 183 (noting that the choice to adopt CCPA case law "favored a lenient standard of patentability"). Before the Federal Circuit was created, the CCPA had exclusive jurisdiction over appeals from proceedings at the PTO. Appeals in patent litigation before the district courts were heard by the regional circuits.

¹²⁸ See, e.g., WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 348 (2003); John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 AIPLA Q.J. 185, 251 (1998); Matthew D. Henry & John L. Turner, *The Court of Appeals for the Federal Circuit's Impact on Patent Litigation*, 35 J. LEGAL STUD. 85, 114 (2006); Glynn S. Lunney, Jr., *Patent Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution*, 11 SUP. CT. ECON. REV. 1, 15–16 (2004).

¹²⁹ E.g., Beighley, *supra* note 88, at 729 (quoting Judge Rader).

¹³⁰ Linn, *supra* note 88, at 37:00.

Several of the Federal Circuit's most significant doctrines are consistent with an objective to broaden and strengthen patent rights. For example, under a long line of Federal Circuit decisions, a party asserting that a claimed invention was obvious based on a combination of existing technology had to identify a specific "teaching, suggestion, or motivation" to combine those prior art references.¹³¹ This so-called TSM test placed an onerous burden on a party challenging validity, and, in 2007, the Supreme Court abrogated the Federal Circuit's test, adopting a more flexible standard, which acknowledges that market demands and common sense might also make a claimed invention obvious.¹³² In addition, the Federal Circuit had embraced a broad conception of the types of inventions eligible for patenting under § 101 of the Patent Act, including business methods and human gene sequences. The Supreme Court, however, appears to view the Federal Circuit's patent-eligibility criteria as too broad, reversing recent decisions that held isolated human DNA and certain methods of medical diagnosis to be patent eligible.¹³³

The Federal Circuit has not only embraced doctrines that would make it easier to uphold the validity of a patent, the court has also issued decisions tilting the litigation process in favor of patent holders in important ways. For example, the court adopted a presumption that a patent holder who established infringement was entitled to an injunction against future infringement.¹³⁴ The Supreme Court rejected that presumption, holding that the usual equitable test for an injunction applies in patent cases.¹³⁵ Also, the Federal Circuit had disincentivized patent licensees from filing declaratory judgment suits challenging the patent's validity, requiring that licensees first breach the license agreement, exposing themselves to claims for damages.¹³⁶ Again the Supreme Court overturned that rule, holding that a licensee in good standing could file suit if, generally speaking, there was a realistic threat of suit if the licensee did not pay royalties.¹³⁷

To be clear, I do not mean to suggest that the Federal Circuit invariably acts to strengthen patent rights. Empirical evidence suggests that although the

¹³¹ See, e.g., Al-Site Corp. v. VSI Int'l, Inc., 174 F.3d 1308, 1323–24 (Fed. Cir. 1999).

¹³² See KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398, 418–19 (2007).

¹³³ See Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2111 (2013) (isolated DNA); Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1298 (2012) (method for determining safety and efficacy of drug dosage levels).

¹³⁴ See, e.g., Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1247 (Fed. Cir. 1989).

¹³⁵ eBay Inc. v. MercExchange, L.L.C., 547 U.S. 388, 391–92 (2006).

¹³⁶ Gen-Probe Inc. v. Vysis, Inc., 359 F.3d 1376, 1381 (Fed. Cir. 2004).

¹³⁷ MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118, 127 (2007). More recently, the Supreme Court overturned a Federal Circuit decision that placed the burden of proving non-infringement on the potential infringer who had filed a declaratory judgment action. Medtronic, Inc. v. Mirowski Family Ventures, LLC, 134 S. Ct. 843, 846 (2014). The Court instead held that the burden should be on the patent holder, just as it would be in a coercive suit for infringement. *Id.*

Federal Circuit has made it easier to uphold validity as compared to the regional circuits before it, it has not made it easier for patent holders to prove infringement.¹³⁸ Indeed, Kimberly Moore has shown that most Federal Circuit decisions on the often-dispositive issue of claim construction favor the accused infringer, not the patent holder.¹³⁹ Moreover, the Federal Circuit has begun to heavily scrutinize large jury verdicts in favor of patent holders.¹⁴⁰

Thus, rather than characterizing the court as single-mindedly "propatent," one might rely on the court's tendencies on validity and infringement to tell a more nuanced story about capture. High rates of patent validity, combined with infringement outcomes that unduly favor neither patent holders nor accused infringers, are arguably the outcomes that *patent lawyers* would most prefer: such a regime would, in general, encourage companies to actively obtain patents (because they will mostly be ruled valid) and encourage both plaintiffs and defendants to vigorously litigate infringement disputes (because both parties will have a reasonable chance of prevailing). Indeed, recent evidence suggests that the increase in the rate of patent validity shortly after the Federal Circuit was created coincided with a surge in patenting and patent litigation.¹⁴¹ Moreover, although the rate of patent infringement dropped beginning in 1990, the amount of patent litigation has continued to grow.¹⁴² Thus, rather than simply

No. 2]

¹³⁸ See Henry & Turner, supra note 128, at 114.

¹³⁹ Kimberly A. Moore, Markman Eight Years Later: Is Claim Construction More Predictable?, 9 LEWIS & CLARK L. REV. 231, 241 (2005) (reporting that, from 1996 through 2003, Federal Circuit claim constructions, which the court conducts de novo, favored the accused infringer fifty-eight percent of the time). Of course, there may be some selection effects in that losing patent holders are particularly likely to press weak appeals due to the preclusive effects of an adverse judgment. See supra note 78 and accompanying text.

¹⁴⁰ See J. Jonas Anderson, Patent Dialogue, 92 N.C. L. REV. 1049, 1085 (2014) (describing the Federal Circuit's "shift towards a more aggressive supervisory role in damages jurisprudence").

¹⁴¹ See Matthew D. Henry & John L. Turner, Across Five Eras: Patent Enforcement in the United States 1929-2006 23 (June 4, 2013) (unpublished manuscript), available at http://ssrn.com/abstract=2274383. 142 Id.

characterizing the Federal Circuit as "pro-patent," it might be more accurate to characterize the court as "pro-patent *lawyer*."¹⁴³

III. SAVING THE FEDERAL CIRCUIT

Modern patent law has its problems. The Federal Circuit may have pushed doctrine too far in favor of patent holders and may be too solicitous of the patent bar. By excluding other institutions from shaping patent law, the court maintains its "expert" status but weakens other institutions, such as the PTO and the International Trade Commission, which could beneficially shape patent law. And, in the service of uniformity, the Federal Circuit has adopted procedural and jurisdictional rules at odds with long-standing Supreme Court doctrine. Judge Wood diagnoses patent law's problems as stemming from insufficient percolation; I have suggested that the policy objectives that animated the creation of the Federal Circuit also play a role. Can institutional reform help mitigate the distorting effect of those policies?

Perhaps. In the most extreme reform possibility (which Judge Wood does not endorse), patent appeals would be heard only by the twelve regional circuits.¹⁴⁴ In that regime, one might still see references to uniformity in appellate patent decisions, as uniformity is thought to be beneficial in most areas of the law.¹⁴⁵ But there would be no national policy of providing substantive appellate expertise, and any inclination to strengthen patent rights would also likely disappear.¹⁴⁶

It is less clear how proposals such as Judge Wood's, which save the Federal Circuit but abolish its exclusive jurisdiction, would impact the weight given by courts to objectives such as uniformity and expertise. On one hand, appeals in patent litigation would no longer be centralized in an expert court capable of providing uniformity, which would likely reduce the salience of arguments that appeal to the policies of uniformity and expertise. On the other

¹⁴³ For an interesting analysis of how the labor market for patent professionals is shaped by the increasing number of patents and patent lawsuits, see John M. Golden, *Proliferating Patents and Patent Law's "Cost Disease*," 51 HOUS. L. REV. 455, 476–89 (2013), which observes that "as the numbers of patent applications, patents and resultant clearance questions, licensing negotiations, or lawsuits increase, the system's demands on a relatively scarce supply of people with appropriate scientific, technological, or legal backgrounds increase," "impos[ing] a sort of 'diversion of labor' cost on the economy, pulling skilled labor away from economic sectors with greater opportunities for growth in productivity."

¹⁴⁴ For a proposal along these lines, see Cecil D. Quillen, Jr., *Rethinking Federal Circuit Jurisdiction—A Short Comment*, 100 GEO. L.J. ONLINE 23, 24 (2012).

¹⁴⁵ For a challenge to this conventional view, see Amanda Frost, *Overvaluing Uniformity*, 94 VA. L. REV. 1567 (2008).

¹⁴⁶ In fact, the court's abolition might be interpreted by the regional circuits as a message to *weaken* patents, a policy that in the long run could cause its own problems.

hand, the salience of those arguments would not be completely eliminated because the expert Federal Circuit would continue to exist. Indeed, Judge Wood herself contemplates that, under her proposal, "the Federal Circuit would still play a leading role in shaping patent law."¹⁴⁷ Other appellate courts hearing patent cases might then simply defer to Federal Circuit law, which has already been (and might continue to be) distorted by considerations of uniformity and expertise.¹⁴⁸ Further, if the Federal Circuit were to continue to have exclusive jurisdiction over PTO appeals (Judge Wood does not address this issue in her speech), other appellate courts deciding patent cases might interpret that structure as continued evidence of a national policy of patent law uniformity. Thus, to ensure that Judge Wood's proposal actually introduces heterogeneity into patent law, the proposal would have to clearly instruct the regional circuits not to defer to Federal Circuit precedent.¹⁴⁹

But there may be ways to reduce the pull of the Federal Circuit's policy objectives that are both less drastic than abolishing the court's exclusive jurisdiction and more realistic because they require no action by Congress.¹⁵⁰ For example, the President might seek to appoint judges who have some experience in patent law but who also have a range of experience in other areas. This

¹⁴⁷ Wood, *supra* note 1, at 10.

¹⁴⁸ It is already somewhat commonplace for courts—even peer-level federal appellate courts-to defer to the Federal Circuit on matters related to patent law. See, e.g., USPPS, Ltd. v. Avery Dennison Corp., 647 F.3d 274, 281-82 (5th Cir. 2011) (following Federal Circuit jurisdictional law that was in tension with a prior decision of the Fifth Circuit, noting that "[o]ur decision is guided by . . . the strong federal interest in the removal [of] non-uniformity in the patent law" (second alteration in original, internal quotation marks omitted)); Schinzing v. Mid-States Stainless, Inc., 415 F.3d 807, 811 (8th Cir. 2005) ("adopt[ing] the Federal Circuit's precedent on substantive issues of patent law"); see also Byrne v. Wood, Herron & Evans, LLP, 676 F.3d 1024, 1040 (Fed. Cir. 2012) (O'Malley, J., dissenting from denial of rehearing en banc) (noting "the deference other courts give to the Federal Circuit on patent law issues based on our unique appellate jurisdiction"). Remarkably, in a recent Supreme Court argument, Chief Justice Roberts asked whether the Supreme Court might "give some deference to" a decision of the Federal Circuit, given that the court "was set up to develop patent law in a uniform way." Transcript of Oral Argument at 9, Octane Fitness, LLC v. Icon Health & Fitness, Inc., 134 S. Ct. 1749 (2014) (No. 12-1184).

¹⁴⁹ Rochelle Dreyfuss, in her contribution to this symposium, makes a similar point, noting that for Judge Wood's proposal "[t]o improve [the] quality [of patent law], the regional circuits would have to *refrain* from following Federal Circuit precedent in cases of national importance." Rochelle C. Dreyfuss, *Abolishing Exclusive Jurisdiction in the Federal Circuit: A Response to Judge Wood*, 13 CHI.-KENT J. INTELL. PROP. 327, 344 (2014).

¹⁵⁰On whether Judge Wood's proposal to abolish the Federal Circuit's exclusive jurisdiction is politically feasible, see Rai, *supra* note 45, at 387, which notes that "[c]onsiderations of political economy are not on Judge Wood's side."

broader experience might make those judges hesitant to rely on patent-specific policy objectives to justify a decision in tension with broader legal principles.

There is evidence that a generalist judge with significant knowledge of patent law can be a good steward of the patent system. The most "generalist" judge currently on the Federal Circuit is Judge Kathleen O'Malley, who was appointed in 2010 after sixteen years as a district judge in the Northern District of Ohio. Judge O'Malley was the first-ever district judge appointed to the Federal Circuit, and in her short time on the bench, she has taken strong positions against some of the Federal Circuit doctrines I have identified as connected to the court's foundational policy objectives. For example, she wrote several opinions questioning the Federal Circuit's expansive approach to exclusive federal jurisdiction over state-law claims,¹⁵¹ and her position was vindicated by the Supreme Court in Gunn v. Minton.¹⁵² She also wrote an opinion arguing that the Federal Circuit should revisit its rule that claim construction is reviewed de novo on appeal,¹⁵³ as well as the dissent in the recent en banc case in which the court reaffirmed the de novo standard.¹⁵⁴ Judge O'Malley's position might again be vindicated, as the Supreme Court has recently agreed to decide the appropriate standard of review for claim construction.155

Judge Richard Taranto, another recent appointee, may also turn out to be a commendable example of a generalist judge with significant knowledge of patent law. Judge Taranto's law practice focused on appellate litigation, and, although he argued several significant patent cases before the Supreme Court¹⁵⁶ and the Federal Circuit,¹⁵⁷ he also argued Supreme Court cases on issues of

¹⁵¹ See Minkin v. Gibbons, P.C., 680 F.3d 1341, 1353 (Fed. Cir. 2012) (O'Malley, J., concurring); Memorylink Corp. v. Motorola, Inc., 676 F.3d 1051, 1051 (Fed. Cir. 2012) (O'Malley, J., dissenting from denial of rehearing en banc); Landmark Screens, LLC v. Morgan, Lewis, & Bockius, LLP, 676 F.3d 1354, 1366–67 (Fed. Cir. 2012) (O'Malley, J., concurring); USPPS, Ltd. v. Avery Dennison Corp., 676 F.3d 1341, 1350 (O'Malley, J., concurring), *vacated and remanded*, 133 S. Ct. 1794 (2013); *Byrne*, 676 F.3d at 1027 (O'Malley, J., dissenting from denial of rehearing en banc); Byrne v. Wood, Herron & Evans, LLP, 450 F. App'x 956, 960–61 (Fed. Cir. 2011) (authoring majority opinion that followed but questioned Federal Circuit precedent), *vacated and remanded*, 133 S. Ct. 1454 (2013).

¹⁵² 133 S. Ct. 1059 (2013).

¹⁵³ Retractable Techs., Inc. v. Becton, Dickinson & Co., 659 F.3d 1369, 1373 (Fed. Cir. 2011) (O'Malley, J., dissenting from denial of rehearing en banc).

¹⁵⁴ Lighting Ballast Control LLC v. Philips Elecs. N. Am. Corp., 744 F.3d 1272, 1296 (Fed. Cir. 2014) (en banc) (O'Malley, J., dissenting).

¹⁵⁵ Teva Pharms. USA, Inc. v. Sandoz, Inc., No. 13-854 (U.S. 2014).

¹⁵⁶ Warner-Jenkinson Co. v. Hilton Davis Chemical Co., 520 U.S. 17 (1997).

¹⁵⁷ *E.g.*, Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs., Inc., 670 F.3d 1171 (Fed. Cir. 2012); Hynix Semiconductor Inc. v. Rambus Inc., 645 F.3d 1336 (Fed. Cir. 2011); Litton Systems, Inc. v. Honeywell Inc., 238 F.3d 1376 (Fed. Cir. 2001).

antitrust law,¹⁵⁸ copyright law,¹⁵⁹ and trade dress law,¹⁶⁰ and he spent three years in the Office of the Solicitor General. Thus, Judge Taranto might also be poised to temper the influences of the Federal Circuit's foundational policy objectives on the court's case law.

CONCLUSION

Perhaps the most noteworthy aspect of Judge Wood's speech is her evident enthusiasm for hearing patent cases.¹⁶¹ She makes clear that, contrary to the conventional wisdom, some judges relish the challenge of a patent dispute. Yet many regional circuit judges will never hear a patent case.¹⁶² Thirty years ago, when patent law was viewed as a specialized, esoteric area of law, removing patent appeals from the judicial mainstream might not have been a major concern for public policy. But patent law is far more visible and important today, and it is unfortunate that some of our most accomplished federal judges, such as Judge Wood, have practically no say in the development of patent doctrine. That may, in fact, be the *best* reason for abolishing the Federal Circuit's exclusive jurisdiction over patent appeals.

¹⁵⁸ Verizon Communc'ns Inc. v. Law Offices of Curtis V. Trinko, LLP, 540 U.S. 398 (2004).

¹⁵⁹ Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913 (2005).

¹⁶⁰ Two Pesos, Inc. v. Taco Cabana, Inc., 505 U.S. 763 (1992).

 ¹⁶¹ See Wood, supra note 1, at 10 ("Speaking personally, I would welcome the reintegration of intellectual property law in the regional circuits.").
 ¹⁶² A few regional circuit judges have recently presided over patent cases at the trial

¹⁶² A few regional circuit judges have recently presided over patent cases at the trial level. *See, e.g.*, Vederi, LLC v. Google, Inc., No. 2:10-cv-07747, 2012 WL 4511424 (C.D. Cal. Sept. 26, 2012) (Kozinski, C.J., sitting by designation), *vacated and remanded*, 744 F.3d 1376 (Fed. Cir. 2014); Apple, Inc. v. Motorola, Inc., 869 F. Supp. 2d 901 (N.D. Ill. 2012) (Posner, J., sitting by designation), *aff'd in part, rev'd in part, vacated in part, and remanded*, Nos. 2012-1548, 2012-1549, 2014 WL 1646435 (Fed. Cir. Apr. 25, 2014). Regional circuit judges have also occasionally sat by designation on the Federal Circuit, but that last occurred in 2009. U.S. COURT OF APPEALS FOR THE FEDERAL CIRCUIT VISITING JUDGES, *available at* http://cafc.uscourts.gov/images/stories/judicial-reports/vjchartforwebsite2006-2013.pdf (last visited July 8, 2014).

APPENDIX

Patent Cases Involving Supreme Court Orders Calling for the Views of the Solicitor General Issued in October Terms 2008 through 2013^{*}

Case	Term Order Issued	SG Cert. Recommendation	Cert. Decision
Bd. of Trustees of Leland Stanford Jr. Univ. v. Roche Molecular Sys., Inc.	2009	Grant	Granted
Applera Corp. v. Enzo Biochem, Inc.	2010	Deny	Denied
Caraco Pharm. Labs., Ltd. v. Novo Nordisk A/S	2010	Grant	Granted
Saint-Gobain Ceramics & Plastics, Inc. v. Siemens Med. Solutions USA, Inc,	2011	Deny	Denied
Bowman v. Monsanto Co.	2011	Deny	Granted
GlaxoSmithKline v. Classen Immunotherapies, Inc.	2011	Deny	Denied
Retractable Techs., Inc. v. Becton, Dickinson & Co.	2011	Deny	Denied
Sony Computer Entm't Am. LLC v. 1st Media, LLC	2012	Deny	Denied
Akamai Techs., Inc. v. Limelight Networks, Inc.	2012	Grant	Granted
Maersk Drilling USA, Inc. v. Transocean Offshore Deepwater Drilling	2013	Not filed	Dismissed Due to Settlement
Commil USA, LLC v. Cisco Sys., Inc.	2013	Not yet filed	

^{*} This list is current through July 8, 2014.

Causal Responsibility and Patent Infringement

Dmitry Karshtedt

Abstract

It is not uncommon for multiple parties in the stream of commerce—manufacturers, distributors, end users—to be involved in the infringement of a single patent. Yet the courts have struggled mightily with such scenarios. Attempts to deal with them—particularly when plaintiffs have asserted so-called method patents, which cover specific "steps," or actions—have produced results that defy commonsense notions of legal responsibility. In method patent cases, the patentee must clear much higher legal hurdles to prevail against a manufacturer who designed and supplied an infringing device than against an end user who simply bought that device and operated it as intended. The manufacturer can lose only upon proof of fault, while the user is subject to strict liability—a result that seems to be completely backwards because the manufacturer is clearly the more responsible party. Even greater difficulties arise when the manufacturer performs some steps of a method patent and the user performs the others. One such case, *Akamai v. Limelight*, has now been in litigation for ten years, and no satisfactory solution of this so-called "divided infringement" problem is in sight.

The Article explains that these problems persist because patent law formalistically clings to what the Article terms the "performer/non-performer distinction." The Article then contends they can be solved by reading the Patent Act in view of the principle of causal responsibility, which pervades the law and rests on a firm philosophical foundation. Simply put, this principle holds that one is responsible for the actions of others that one has caused, leading to the legal effect of imputing the act of the "causee" (in patent cases, often the end) to the causer (e.g., the manufacturer). The Article draws on the innocent instrumentality doctrine in criminal law, and several doctrines in tort law, to elucidate this principle and demonstrate its consistency with the Patent Act. The Article then shows that relying on causal responsibility leads to three practical, and sensible, results. First, doing so would lower the mens rea hurdles needed to establish the liability of manufacturers who supply devices configured in such a way that their intended use results in the performance of steps of some method patent. Second, it would provide a path for resolving, in a readily defensible way, the vexing problem of divided infringement exemplified by *Akamai*. Third, the proposed approach might help to shift the burden of ensuring compliance with existing patents from end users to manufacturers, which is as it should be.

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I. Introduction

Cases in which more than one party is involved in infringing a patent embody one the most vexing areas of patent law. These multi-party problems become particularly salient when plaintiffs assert so-called method patents, which cover specific "steps," or actions.¹ In the stream of commerce, manufacturers, distributors, and end uses might all participate, to varying degrees, in the infringement of such patents.² The manufacturer might design a product whose operation entails performing the claimed steps, the distributor might sell it, and the end user might actually operate the product. *Lucent v. Gateway*, a case involving a patent covering the functionality of scheduling appointments using a graphical interface, illustrates this problem.³ The infringing steps took place when a Microsoft Outlook user clicked on a time slot in the calendar window and typed in a title—say, "Breakfast meeting."⁴ But performance of these steps was made possible by Microsoft, a software manufacturer that designed Outlook and introduced it into the stream of commerce.

One would think that establishing liability of these various participants would reflect their relative contributions to the infringement. But this is not what happens because courts focus in a highly formalistic way on physical performance of the relevant acts. Indeed, the law is much tougher on those who perform the steps covered by the method patent—end users, than on those who design the device that enables the infringement—manufacturers. To win a case against Microsoft, Lucent had to prove that someone in the appropriate position at Microsoft knew of the patent covering the Outlook appointment-scheduling functionality and intended to infringe it.⁵ In contrast, to win against individual users of Outlook, Lucent would have to show only that the user performed the claimed steps—in other words, the user is strictly liable.⁶ This is so despite the fact that it is Microsoft would be more readily expected than the users to find the patents at issue and to negotiate licenses with the patent owner. This is so, indeed, in spite of the recognition that the manufacturer in such cases is "truly responsible"⁷ for the infringement. In view of these considerations, the law in this area seems to be completely backwards.

Patent law struggles even more with the scenario that is closely related to that in *Lucent*— where performance of claimed steps is divided between multiple parties, such as manufacturers

¹ See, e.g., Dmitry Karshtedt, *Damages for Indirect Patent Infringement*, 91 WASH. U. L. REV. 911, 923-24 n.53 (2014) (discussing method claims). Section II.A, *infra*, explains method claims in detail.

² See generally Roger D. Blair & Thomas F. Cotter, An Economic Analysis of Seller and User Liability in Intellectual Property Law, 68 U. CIN. L. REV. 1 (1999).

³ 580 F.3d 1301 (Fed. Cir. 2009).

⁴ *Id.* at 1317-20.

⁵ *Id.* at 1320-24.

⁶ See, e.g., In re Seagate Tech., LLC, 497 F.3d 1360, 1368 (Fed. Cir. 2007) (en banc).

⁷ Mark A. Lemley, *Inducing Patent Infringement*, 39 U.C. DAVIS L. REV. 225, 228 (2005); Jason Rantanen, *An Objective View of Fault in Patent Infringement*, 60 AM. U. L. REV. 1575, 1591 (2011).

and end users. The prolonged *Akamai v. Limelight* litigation is an example.⁸ The patent claims at issue in *Akamai* are directed to a method of speeding up delivery of website content (say, videos of game highlights by ESPN.com) by distributing the content to servers other than those that belong to the content provider.⁹ While the accused infringer, Limelight, distributes the content to the various servers and performs other steps in the process, the website owners designate the content—so Limelight knows which videos to send to other servers.¹⁰ Although website owners are Limelight's customers, who designate the content according to its instructions, courts initially agreed with Limelight that it could not be liable as a matter of law because it did not itself perform the designating step of the patent.¹¹

Courts have now issued six appellate opinions in *Akamai*—one by the Supreme Court¹² and five by the Court of Appeals for the Federal Circuit (Federal Circuit), the court charged with exclusive appellate jurisdiction over patent cases.¹³ But in spite of all this judicial effort, controversy over divided infringement is unlikely to die down. This is because a recent opinion that aimed to lay down the law in this area, by the Federal Circuit sitting en banc, is problematic. The court relied on the tort law principle of vicarious liability to impute the customers' content-designating actions to Limelight,¹⁴ reversing its earlier position that imputation could lie only if the user was the defendant's agent or was contractually obligated to perform the steps.¹⁵ In the same breath, however, the Federal Circuit admitted that "vicarious liability is not a perfect analog."¹⁶ That is an understatement: the Section of the *Restatement (Third) of Torts* invoked by the court deals with "liability [that] is imputed based on the tortious conduct, the relevance of vicarious liability principles to this so-called "divided infringement" problem is dubious.¹⁸ The Federal Circuit, which reached this result unanimously, clearly believed that it seemed wrong to let Limelight off the hook on the facts of the case¹⁹—and in so doing, responded to numerous

⁸ For the latest opinions, see 797 F.3d 1020 (Fed. Cir.) (en banc), *remanding to* 805 F.3d 1368 (Fed. Cir. 2015).

⁹ *Id.* at 1023-24.

 $^{^{10}}$ *Id*.

¹¹ See id. at 1024.

¹² Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111, 2118-20 (2014), *rev'g*, 692 F.3d 1301, 1311-14 (Fed. Cir. 2012) (en banc).

¹³ The first appellate opinion in this case, superseded by the 2012 en banc opinion, is reported at 629 F.3d 1311 (Fed. Cir. 2010). The remaining opinions, so far, are cited in the various footnotes in this and the previous paragraph. ¹⁴ *Id.* at 1022.

¹⁵ Akamai Techs., Inc. v. Limelight Networks, Inc., 786 F.3d 899 (Fed. Cir.), *superseded by* 797 F.3d 1020 (Fed. Cir. 2015) (en banc).

¹⁶ *Id.* at 1022 n.2.

¹⁷ RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT LIAB. § 13 (2000). *But cf.* ROBERT STEVENS, TORTS AND RIGHTS 244, 254, 259-67 (discussing the action-attribution theory of vicarious liability in the employer-employee context).

¹⁸ There are more fundamental reasons why the Federal Circuit's vicarious liability approach is questionable in these circumstances. *See infra* Part II.D for further discussion.

¹⁹ Note the odd wording of the court's holding: "We conclude, *on the facts of this case*, that liability *under* § 271(a) can also be found when an alleged infringer conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance." 797 F.3d at 1023. Normally, the facts do not (or should not) drive the legal rule chosen.

critiques of the now-abandoned agency-or-contract regime.²⁰ But the court's route to liability in *Akamai* is unsatisfying. The vicarious liability approach is problematic as a matter of basic tort doctrine, provides limited guidance for future cases, and creates the possibility of another reversal by the Supreme Court.

The Article explains that the problems in these cases arise because patent law formalistically clings to what I term the "performer/non-performer distinction." Consider again the case involving Microsoft Outlook. The computer user who operates Outlook to schedule appointments, performing the steps covered by a patented method, is considered a "direct infringer."²¹ In contrast, Microsoft, which designed the software but did not operate it (i.e., did not actually perform the method), is charged as an "indirect infringer."²² Based on these formal classifications, holding the manufacturer liable presents significant mens rea hurdles, requiring the plaintiff to prove that the defendant knew of the asserted patent, and more.²³ In contrast, the end user is—oddly enough—subject to strict liability.²⁴ And where, as in Akamai, there are two different performers (or, more precisely, the defendant manufacturer is both a performer and a non-performer because it carries out only some steps of the patent claim), the whole system breaks down. The Federal Circuit first held that Limelight could not be liable at all,²⁵ then decided to put Limelight into the indirect infringer box to hold it liable,²⁶ and then, after a Supreme Court reversal²⁷ and a panel opinion finding no liability,²⁸ reversed itself once again and found Limelight liable as a direct infringer instead.²⁹ And this latest installment of the Akamai saga might not be the end of the story.³⁰

There is a better approach for dealing with multi-party infringement cases like *Lucent* and *Akamai*. This Article argues that the problems these cases exemplify can be solved by reading the infringement section of the Patent Act in view of the principle of causal responsibility, which pervades the law³¹ and rests on a firm philosophical foundation.³² Simply put, this principle holds that one is responsible for the actions of others that one has caused, leading to the legal effect of imputing the act of the "causee" (in patent cases, often the end user) to the causer (e.g., the

²⁰ *Akamai*, 786 F.3d at 917-18 (Moore, J., dissenting) (collecting criticisms and further explaining while the decision to adopt agency-or-contract limitation to imputing users' acts to the manufacturer was misguided).

²¹ Lucent, Inc. v. Gateway, Inc., 580 F.3d 1301, 1317-20 (Fed. Cir. 2009).

²² Id. at 1308-09, 132-24.

²³ See infra Section II.C.

²⁴ See supra note 6.

²⁵ Akamai, 629 F.3d 1311, superseded by 692 F.3d 1301.

²⁶ Akamai, 692 F.3d 1301.

²⁷ Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111 (2014).

²⁸ Akamai, 786 F.3d 899.

²⁹ Akamai, 797 F.3d 1020.

³⁰ As of this writing, Limelight announced its intent to file a petition for a writ of certiorari with the Supreme Court, again. *See* BUSINESSWIRE, *Limelight Networks Announces Intent to File Appeal to the Supreme Court of the United States*, http://www.businesswire.com/news/home/20151123005225/en/Limelight-Networks-Announces-Intent-File-Appeal-Supreme (Nov. 23, 2015).

³¹ See infra Part IV.

³² See infra Part III.

manufacturer). The effect of causal responsibility in action is captured by Paul Robinson, a criminal law scholar, who characterized a statute that relies on it as "declin[ing] to distinguish human from non-human causal links."³³ Robinson's insight suggests the line between "direct" and "indirect" violators does not always depend on who physically performs some prohibited act, for one can be a direct violator by acting through the instrumentality of another.³⁴ Robinson explains: "An actor who does not personally satisfy an objective element, such as conduct, but who directly causes the required element by other means should be treated as if he satisfied the element himself."³⁵ A paradigmatic example in which a performer's actions are imputed to a non-performer under the principle of causal responsibility occurs when the performer acts under compulsion from the non-performer.³⁶ But, as this Article amply illustrates, the application of this principle is not limited to these duress scenarios.³⁷

The formal performer/non-performer distinction, whereby the performer gets placed into the direct violator box and the non-performer, into the indirect violator box, thus breaks down in cases relying on the causal responsibility principle. If the premise that a human intermediary in some cases is used like a tool is accepted, then logically, no "indirect liability" theory, or scienter in addition to the mens rea for the underlying offense, should be required.³⁸ Nor would reliance on vicarious liability be necessary. We do not, after all, impose extra scienter (or other) hurdles to convict a defendant who uses a hammer as opposed to bare hands to perform some nefarious deed.³⁹ The Article draws upon the innocent agency doctrine in criminal law,⁴⁰ as well as on various tort law doctrines,⁴¹ to explicate the principle of causal responsibility. Moreover, it briefly notes possible instantiations of this principle in areas of intellectual property law other than

³³ Paul H. Robinson, Imputed Criminal Liability, 93 YALE L.J. 609, 632 (1984).

³⁴ See infra Section III.B.

³⁵ Robinson, *supra* note 33, at 631.

³⁶ See, e.g., State v. Dowell, 11 S.E. 525 (N.C. 1890); People v. Hernandez, 18 Cal. App. 3d 651 (1971).

³⁷ See, e.g., Bailey v. Commonwealth, 329 S.E.2d 37, 40 (Va. 1985). See generally Part IV.

³⁸ *Cf.* STEVENS, *supra* note 17, at 253 ("Where the tort alleged does not require a particular state of knowledge or dishonesty, it is not necessary to allege that the procurer knows that the actions carried out amount to a tort); *see also* Riley v. State, 60 P.3d 204, 220 (Alaska App. 2002) ("The standard interpretation of the phrase 'intent to promote or facilitate the commission of the offense' is that it requires proof of the accomplice's intent to promote or facilitate another person's *conduct* that constitutes the *actus reus* of the offense. With regard to the results of that conduct, the government must prove that the accomplice had whatever culpable mental state is required for the underlying crime.") (emphasis in the original).

³⁹ *Cf.* Hayes v. Town of Hyde Park, 27 N.E. 515 (Mass. 1891) ("Human causes stand no differently from any others, merely as such.") (Holmes. J.). This principle can also be found in the Model Penal Code: "A person is legally accountable for the conduct of another person when: (a) *acting with the kind of culpability that is sufficient for the commission of the offense*, he causes an innocent or irresponsible person to engage in such conduct." MODEL PENAL CODE § 2.06(2)(a) (emphasis added). Unfortunately, however, numerous criminal law cases have departed from this principle. *See* Baruch Weiss, *What Were They Thinking?: The Mental States of the Aider and Abettor and the Causer Under Federal Law*, 70 FORDHAM L. REV. 1341, 1436-60 (2002).

⁴⁰ See Sanford H. Kadish, Complicity, Cause and Blame: A Study in the Interpretation of Doctrine, 73 CALIF. L. REV. 323, 328 (1985) (explaining this doctrine); see also PAUL V. DAVIES, ACCESSORY LIABILITY, 181-82 (2015); infra Section III.B. The article justifies reliance on criminal law examples, in particular, at infra Section IV.A.
⁴¹ See infra Section III.D.

patents.⁴² Throughout, the Article makes clear that the causal responsibility principle is logically applicable to both intentional and non-intentional offenses.⁴³

Applying the causal responsibility principle leads to three practical, and sensible, results. First, doing so would, in many cases, lower the mens rea hurdles⁴⁴ needed to establish the liability of manufacturers who supply passive end users with devices configured in such a way that the devices' intended use results in the infringement of some method patent.⁴⁵ Second, it would provide a path for resolving in a readily justifiable way the vexing problem of divided infringement exemplified by the *Akamai* case.⁴⁶ Third, the proposed approach may even help shift the burden of ensuring compliance with existing patents from end users to manufacturers, which is as it should be.⁴⁷ Significantly, this Article contends that the principle of causal responsibility can be deployed without amending the Patent Act or reversing any Supreme Court precedent interpreting 35 U.S.C. § 271, the patent infringement section.⁴⁸ Although patent law forgot that it exists, causal imputation is a widely accepted, flexible, and trans-substantive doctrinal tool that courts have relied on time and again to deal with cases in which more than one party is involved in the invasion of a right. In contrast, patent law's adoption of a rigid performer/non-performer distinction represents the sort of "patent-exceptionalist"⁴⁹ and overly formal⁵⁰ approaches that have been roundly criticized and increasingly rejected.⁵¹

The proposed framework relies heavily on the concept of causing the acts of others, and much of the Article is devoted to unpacking it and to examining when the deployment of the causal

⁴² See infra Section V.B.

⁴³ *Cf.* Audrey Rogers, *Accomplice Liability for Unintentional Crimes: Remaining Within the Constraints of Intent*, 31 LOY. L.A. L. REV. 1351, 1385 (1998) ("Allowing accomplice liability for unintentional crimes does not . . . involve an extension of accomplice doctrine, but merely merits a refocusing of its intent requirements away from the results produced by the principal and toward the conduct producing the result."). For a classic example of causal responsibility in a criminal negligence case (styled as accomplice liability, however), see State v. McVay, 132 A. 436 (R.I. 1926).

⁴⁴ I am referring here to the knowledge-of-the-patent requirement and the defense of good-faith belief of noninfringement. *See infra* Part II.C; *see also supra* note 23 and accompanying text.

⁴⁵ See infra Section V.A. To be clear, there is a kind of a mens rea inherent in the concept of causation—specific intent that the causee perform the accts in question. See Kadish, supra note 40, at 396 ("Actions, like results, can be caused, but only by acts intended to cause them. An element of intention (intending the other to act in a specified way) is essential if one person is to be said to 'cause' another to act but not when he is said to cause some event to happen. This is not an independent legal requirement of a certain state of mind in the accused person, but part of the meaning of 'causing' in the sense of providing a reason for the non-voluntary act of another.") ((quoting H.L.A. HART & TONY HONORÉ, CAUSATION IN THE LAW 327-28 (1959)) (alterations omitted); see also STEVENS, supra note 17, at 254 ("If actions are to be attributed to the defendant, it is necessary that he intended those acts to occur.").

⁴⁶ See infra Section V.C.

⁴⁷ See infra Part VI; see also infra note 300 and accompanying text.

⁴⁸ See infra Sections V.A. & V.C, and Part VI. If the view that causal responsibility is consistent with the Patent Act is not correct, the Article's alternative argument is that the Patent Act should be amended to codify the principle of causal responsibility, so that patent law would be consistent with the rest of the law.

⁴⁹ See, e.g., Peter Lee, The Supreme Assimilation of Patent Law, 114 MICH. L. REV. (forthcoming 2016).

⁵⁰ See, e.g., John R. Thomas, Formalism at the Federal Circuit, 52 AM. U. L. REV. 771, 774 (2003).

⁵¹ The Supreme Court has signaled a move away from patent exceptionalism in other contexts. *See* Teva Pharms. USA, Inc. v. Sandoz, Inc., 135 S. Ct. 831 (2015) (fact findings in the claim construction context); Octane Fitness LLC v. ICON Health & Fitness, Inc., 134 S. Ct. 1749 (2014) (exceptional case determinations); MedImmune, Inc. v. Genentech, Inc., 549 U.S. 118 (2007) (declaratory judgment standing).

responsibility principle might be appropriate in patent cases. As the Article makes clear, causation claims would fail when the device provided by the manufacturer has noninfringing uses,⁵² when the user is active rather than passive or innocent, and in many other circumstances where the nonperforming (or partially performing) entity accused of infringement is not in control.⁵³ But this Article argues that accused infringers in many significant patent cases might not plausibly make out such defenses, exposing them to liability in a broader range of circumstances than now. This result comports with commonsense notions of legal responsibility and with the intuition that, as between the manufacturer and a passive user, the former is in a much better position to deal with the infringement.⁵⁴ In laying down the modern law of products liability—which implicitly adopts the causal responsibility principle—Justice Roger Traynor stated "there is greater reason to impose liability on the manufacturer" than on a party "who is but a conduit of a product that he is not himself able to test."⁵⁵ Patent law would do well to listen to Justice Traynor.

The remainder of the Article proceeds as follows. Part II provides background on the relevant principles of patent law, discusses the history of patent infringement liability of parties who have not themselves performed infringing acts, and critiques the state of the law in this area. Part III sets forth theoretical underpinnings of the trans-substantive concept of causing the acts of others and distinguishes it from other causation concepts, such as but-for causation. Using examples from criminal law and tort law, Part IV demonstrates how the notions of causal responsibility work in practice. Part V applies this framework to patent law, addressing the problems of both indirect and divided infringement. This Part further evaluates the performer/non-performer distinctions courts follow in patent cases, and addresses how courts deal with similar problems in other areas of intellectual property law. Part VI considers and answers important objections and reinforces the conclusion that the proposed approach makes good policy sense.

⁵² Indeed, the Article explains that providing an article having substantial noninfringing users is more like traditional aiding and abetting, and that the mens rea hurdles that are presently in place are consistent with requirements needed to establish such liability in other areas of law. *See infra* Section IV.C; *see also* STEVENS, *supra* note 17, at 254 (discussing the difference between "procuring" and facilitating" and disparity in the levels of mens rea required to establish liability for these different types of activities). The distinction between causing and aiding-and-abetting in patent cases is hopelessly confused, which perhaps explains the difficulties with the current state of the law. *Cf.* Charles W. Adams, *Indirect Infringement from a Tort Law Perspective*, 42 U. RICH. L. REV. 635, 639-43 (2008) (distinguishing inducement and aiding and abetting).

⁵³ See infra Part IV and Sections V.A. & V.C, and Part VI. *Cf.* Douglas Husak, *Does Criminal Liability Require an Act?*, *in* PHILOSOPHY AND THE CRIMINAL LAW: PRINCIPLE AND CRITIQUE 60 (R.A. Duff ed. 1998) (arguing that in criminal liability is predicated not on the act requirement, but on the control requirement).

⁵⁴ See supra note 7 and accompanying text.

⁵⁵ Escola v. Coca-Cola Bottling Co. of Fresno, 150 P.2d 436, 444 (Cal. 1944) (Traynor, J., concurring). This language from a products liability case, to be sure, refers to retailers, though it applies equally to innocent users whose acts injure third parties; in many patent cases, the "conduit" of the infringement is the passive user. *Cf.* Louis Robertson, *Implied Warranties of Non-Infringement*, 44 MICH. L. REV. 933, 936 (1946) ("Where the manufacturer is commonly selling a particular product, it is reasonable to assume that he has looked into the question of infringement of outstanding patents. Certainly an occasional buyer is justified in relying on the manufacturer's judgment.").

II. Multi-Party Patent Infringement

A. The Relevant Patent Law Background

The Patent Act imposes direct infringement liability on "whoever without authority makes, uses, offers to sell, or sells any patented invention."⁵⁶ In order to determine whether an invention is "patented" within the meaning of the Act, courts ask whether it is covered by one or more claims of the patents asserted in litigation.⁵⁷ Claims are numbered sentences at the end of a patent, often long and oddly worded, that define the boundaries of the patentee's rights. Generally, patent claims can refer to a physical object, such as an apparatus or a device, or an activity, such as a process or a method.⁵⁸ While claims directed to an object recite the object's structural elements—for example, "a table comprising a top and legs"—claims directed to a process or a method recite steps of the activity using gerunds.⁵⁹ Thus, an example of a method claim might be "a method of opening a door, comprising inserting a key into a latch, turning the key, twisting a door handle, and applying pressure to the door."

When patent infringement is asserted against a manufacturer, apparatus claims can form the basis for direct liability under § 271(a) based on the manufacturer's making and selling of the object, such as a table, that the claims cover.⁶⁰ The situation, however, is more complicated with method claims because infringement does not arise until the claimed activity is performed, i.e., until someone "use[s]" the invention within the meaning of § 271(a). Concretely, the hypothetical claim to the method of opening a door is not infringed until someone opens the door—i.e., until the door becomes operational. Stated another way, the acts of making the door and selling it to a customer cannot give rise to liability until the customer operates the door.⁶¹ And unless the manufacturer itself opens the door,⁶² the manufacturer's liability—if any—can generally only be indirect, i.e., derivative from the customer's infringement.⁶³ To be sure, indirect infringement of apparatus claims can also be asserted against manufacturers. Nonetheless, it is method claims that typically give rise to the complex, controversial multi-party problems that one encounters in patent law today. Method claims underlie many cases where indirect infringement, particularly inducement of infringement under § 271(b), is asserted against the manufacturer.⁶⁴ In addition,

⁵⁶ 35 U.S.C. § 271(a).

⁵⁷ AbTox, Inc. v. Exitron Corp., 122 F.3d 1019, 1023 (Fed. Cir. 1997).

^{58 35} U.S.C. § 101 (2012).

⁵⁹ Dmitry Karshtedt, *Limits on Hard-To-Reproduce Inventions: Process Elements and Biotechnology's Compliance with the Enablement Requirement*, 3 HASTINGS SCI. & TECH. L.J. 109, 118 (2011).

⁶⁰ Karshtedt, *supra* note 1, at 923-24 n.53 (2014) (discussing method and apparatus claims).

⁶¹ Id.

⁶² And even if the manufacturer does itself open the door, the patent owner may wish to also hold the manufacturer liable for the acts of its customers so as to increase the damages base.

⁶³ Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111 (2014).

⁶⁴ Karshtedt, *supra* note 1, at 923-24.

only method claims present the special problem of "divided infringement" encountered in Akamai.⁶⁵

B. A Brief History of Patent Infringement Liability of Non-Performing Parties

Liability of a party who has not itself performed an objective element of an offense is ubiquitous in civil and criminal law, and patent law is no exception. The origins, history, and purpose of such liability in patent law have been extensively recounted elsewhere,⁶⁶ but some background will be helpful to set the stage for further discussion. *Wallace v. Holmes* was a significant early case imposing patent infringement liability on a party that might be characterized as a non-performer.⁶⁷ This case dealt with a patent on an "improved lamp" having a chimney and a novel, specially designed burner that helped keep the bottom of the chimney cool.⁶⁸ The defendant made and sold burners "in all material respects like that described in the patent,"⁶⁹ but not the chimneys.

The circuit court articulated several reasons why, even though the defendant's product did not meet every element of the patent claim, the defendant was nonetheless liable for infringement. The court explained that the defendant sold the burners "with the certain knowledge that such burners are to be used, as they could only be used, by the addition of a chimney,"⁷⁰ which resulted in "assisting . . . in a gross infringement of the complainant's patent" by those who bought the burner and combined it with the chimney.⁷¹ In addition, even though the defendant "did not make an actual prearrangement with any particular person to supply the chimney to be added to the burner," the court explained that "every sale they make is a proposal for the purchaser to do this."⁷² As a result, the court made a "certain inference" that the defendant acted "in actual concert" with others—unidentified chimney manufacturers—and therefore liable as a "joint infringer."⁷³ The court also voiced a practical concern: while the patentee could in theory go after the end users, this strategy could make them "helpless and remediless" because of "the small value of each separate lamp, and the trouble and expense of prosecution."⁷⁴ The language in *Wallace* might arguably be

⁶⁵ Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015) (en banc). *See generally* Mark A. Lemley et al., *Divided Infringement Claims*, 33 AIPLA Q.J. 255 (2005).

⁶⁶ Charles W. Adams, *A Brief History of Indirect Liability for Patent Infringement*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 369 (2006); Adams, *supra* note 52; Timothy R. Holbrook, *The Intent Element of Induced Infringement*, 22 SANTA CLARA COMPUTER & HIGH TECH. L.J. 399 (2006); Mark A. Lemley, *supra* note 7, at 235-36. ⁶⁷ 29 F. Cas. 74 (C.C.D. Conn. 1871) (No. 17,100); Adams, *supra* note 66, at 371-72 (discussing *Wallace*).

⁶⁸ Wallace, 29 F. Cas. at 79.

 $^{^{69}}$ *Id.* (statement of the facts).

⁷⁰ *Id.* at 80.

⁷¹ Id.

⁷² Id.

 $^{^{73}}$ *Id.* Adams is incorrect to say that the *Wallace* court observed "that the defendants acted in concert with the users of the lamp to infringe the patent." Adams, *supra* note 66, at 373. The supposed concerted action is actually with the unidentified manufacturers of the chimney: "The defendants have not, perhaps, made an actual pre-arrangement with any particular person to supply the chimney to be added to the burner; but, every sale they make is a proposal to the purchaser to do this, and his purchase is a consent with the defendants that he will do it, or cause it to be done." *Wallace*, 29 F. Cas. at 80.

read as setting forth an action for direct infringement where the two manufacturers (of the burner and the chimney) are acting as joint tortfeasors,⁷⁵ and of derivative infringement based on the burner manufacturer's assistance of an end user's infringement. Nonetheless, the case has been cited mainly for the latter proposition.⁷⁶ There is now wide consensus that *Wallace* ushered in the doctrine of derivative, or "contributory," infringement.⁷⁷

But Neither *Wallace*, nor the early cases that relied upon it, used the term "contributory infringement." For example, in *Bowker v. Dows*, a circuit court noted that "the manufacture and sale of the extract of [a certain chemical] would not, without more, be an infringement,"⁷⁸ but, citing *Wallace*, found liable for infringement a defendant who "sells an extract containing [that chemical] to persons who intend to use it in the combination claimed in the patent, and it is advertised and sold for that very purpose."⁷⁹ The court made no suggestion that the theory of infringement was a derivative one, and further opined that it would be unfair in certain situations to impose liability only on performing parties and allowing non-performers to go scot-free, underscoring the equitable rationale⁸⁰ of non-performer infringement theories:

We do not think that the law requires us to hold those persons who actually use the combination (most of them, and perhaps all, without any purpose or knowledge of infringing), as the only persons liable, to the exoneration of the only person who makes and sells the extract for the express and avowed purpose of its use in the combination.⁸¹

Early Supreme Court also made no suggestion that the non-performer's liability was always to be styled as derivative. *American Cotton-Tie Co. v. Simmons*, the first Supreme Court case to recognize patent infringement by a non-performer, cited *Bowker* and stated simply that "[b]ecause the defendants prepare and sell the arrow tie, composed of the buckle or link and the band, intending to have it used to bale cotton and to produce the results set forth in the Cook and the McComb patents, they infringe those patents."⁸² And *Morgan Envelope Co. v. Albany*

⁷⁵ The manufacturer of the chimney, though, might be relieved of liability because the chimney is a so-called "staple" article of commerce. *See* 35 U.S.C. § 271(c); Adams, *supra* note 66, at 387.

⁷⁶ Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 187-89 (1980); Adams, *supra* note 66, at 372; *see also* Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 F. 712 (6th Cir. 1897).

⁷⁷ See Adams, supra note 66; Giles S. Rich, Infringement Under Section 271 of the Patent Act of 1952, 21 GEO. WASH. L. REV. 521 (1953).

⁷⁸ 3 F. Cas. 1070 (No. 1,734) (C.C. Mass. 1878).

⁷⁹ *Id.* at 1071.

⁸⁰ Although these sorts of theories are not formally grounded in equity, indirect infringement has been described as an "equitable doctrine." *See, e.g.*, Procter & Gamble Co. v. Nabisco Brands, Inc. 604 F. Supp. 1485, 1489 (D. Del. 1985), *overruled on other grounds by* Nat'l Presto Indus., Inc. v. West Bend Co., 76 F.3d 1185 (Fed. Cir. 1996); *see also* Hiram Walker & Sons v. Corning & Co., 255 F. 129, 131 (N.D. Ill. 1918) (discussing "the equitable doctrine of contributory infringement" in the trademark context).

⁸¹ *Id.*; *see also Dawson Chem.*, 448 U.S. at 188 ("The court permitted the patentee to enforce his rights against the competitor who *brought about* the infringement, rather than requiring the patentee to undertake the almost insuperable task of finding and suing all the innocent purchasers who technically were responsible for completing the infringement.") (discussing *Wallace*) (emphasis added).

⁸² 106 U.S. 89, 95 (1882).

Perforated Wrapping Paper Co. summarized the state of the law as follows: "There are doubtless many cases to the effect that the manufacture and sale of a single element of a combination, with intent that it shall be united to the other elements, and so complete the combination, is an infringement."⁸³ The Court did not qualify the word "infringement" with any adjective connoting derivative liability.⁸⁴

The label "contributory infringement" was attached to non-performer liability for the first time in a reported case in Snyder v. Bunnell, a circuit court opinion that issued a few years after *Cotton-Tie* (but before *Morgan Envelope*), and the term eventually caught on.⁸⁵ Crucially, the courts that used this label made clear that they viewed the relationship between a direct and contributory infringer as that between "the principal and the accomplice,"⁸⁶ signifying derivative liability by the non-performer.⁸⁷ Indeed, with the advent of the "contributory" label, some courts began to draw a sharp line between a performer, who could be liable for direct infringement, and a non-performer, who could be liable only for contributory infringement. One Court of Appeals decision, in attempting to determine whether defendants "are direct or contributory infringers," explained that, "[t]o be direct infringers, the defendants must have used the plaintiff's process."88 After determining that "defendants do not use the machine" that performs the process, but "merely supply it for use"⁸⁹ by others, the court concluded that the defendants "are clearly not direct infringers of the plaintiff's process patent."90 Nonetheless, the defendants could be liable as contributory infringers because "they manufacture[] and sell materials for use in an infringing operation with knowledge that they will be so used" and "induce their customers to use such infringing processes."⁹¹ The increasing use of the word "contributory" has, apparently, led to a rigid conceptual separation between the forms of liability for performers and non-performers. This is not always sensible because, as I will further explain, one can "use" a process through the instrumentality of another person.

The Patent Act of 1952 codified infringement in § 271 and set forth acts ("make," "use," "sell") that constitute infringement in § 271(a). But what about §§ 271(b) and (c) The Conference Committee report accompanying the Act characterized these parts as formalizing the judicially recognized doctrine of contributory infringement, which "has been applied to enjoin those who

⁸³ 152 U.S. 425, 433 (1894).

⁸⁴ See H. Hume Mathews, *Contributory Infringement and the* Mercoid *Case*, 27 J. PAT. & TRADEMARK OFF. SOC'Y 260, 264 (1945) ("The courts have realized that joint and several liability may be involved in the violation of a patent right as in the violation of other rights; they gave redress against one who contributed to an infringement by concerting with or aiding and abetting a direct infringer even before such a joint wrongdoer was named a 'contributory infringer.'").

⁸⁵ 29 F. 47, 48 (C.C.S.D.N.Y. 1886).

⁸⁶ Thomson-Houston Elec. Co. v. Ohio Brass Co., 80 F. 712, 721 (6th Cir. 1897).

⁸⁷ Interestingly, the trend in criminal law itself has been to eliminate distinctions between principals and accomplices. *See infra* Part IV.A.

⁸⁸ B.B. Chemical v. Ellis, 117 F.2d 829, 833 (5th Cir. 1941), aff'd, 314 U.S. 495.

⁸⁹ Id.

⁹⁰ Id. at 834.

⁹¹ Id.

sought to cause infringement by supplying someone else with the means and directions for infringing a patent."⁹² It explained that part (b) "recites *in broad terms* that one who aids and abets an infringement is likewise an infringer" and that part (c) concerns the specific circumstance of sale of a component that the Report elsewhere calls "a special device constituting the heart of a patented machine."⁹³ Although the Report thus appears to assume that non-performer liability has been considered derivative upon the infringement liability of the performer, *Wallace, Bowker*, and the early Supreme Court cases show that this characterization is not inevitable.⁹⁴

The Report provides very strong evidence that Congress generally thought that indirect or derivative liability constitutes the primary route for holding those who do not themselves perform the steps of patent claims responsible for patent infringement, and my goal here is not to write a revisionist history of § 271. Nonetheless, the case law does suggest that liability for infringement has not always been subsumed under the "derivative" label, but rather reflected general legal principles of attribution.⁹⁵ This history means that Congress's codification of the judge-made law of infringement in 1952 must allow some room for direct liability for partial performers and nonperformers.⁹⁶ Indeed, the Federal Circuit has already recognized direct liability based on the attribution of the acts of others to the defendant under joint enterprise, actual agency, and "vicarious liability" theories.⁹⁷ All three routes to liability are derived from the general common law principles and the first two approaches, in any event, are relatively uncontroversial. Causal imputation is, too, a part of the law, and I argue that it also supplies a ready route to liability for those who do not themselves perform some or all of the steps of a patent claim. Moreover, I contend that reading the Patent Act in view of the principle of causal responsibility would makes eminent sense as a policy matter. Meanwhile, as the remainder of this Part explains, current approaches have serious problems.

C. Indirect Infringement and Its Discontents

Courts and commentators generally agree that "[t]he goal of secondary liability is to give patent owners effective protection in circumstances in which the actual infringer either is not the

⁹² S. Rep. 82-1979, S. Rep. No. 1979, 82nd Cong., 2nd Sess. 1952, 1952 U.S.C.C.A.N. 2394, 2402, 1952 WL 3180, at *2402.

⁹³ *Id.* (emphasis added).

⁹⁴ In addition, the Report mentions causing infringement, *id.*, a reference that might endorse imputation theories through causation. *See infra* notes 382-397 and accompanying text.

⁹⁵ Moreover, there is some suggestion in the legislative history of the 1952 Act that causation theories of the sort one sees reflected in the innocent instrumentality context were contemplated by the relevant stakeholders. *See, e.g., Contributory Infringement of Patents. Hearings Before Subcommittee on Patents, Trade-Marks and Copyrights of the Committee on the Judiciary, House of Representatives*, 80th Cong., 2d Sess., 3 (1948) ("The doctrine of contributory infringement is nothing more that the application to the patent law *of the general legal principle that one who causes a wrong is as guilty as one who actually does the wrong with his own hands.*") (Memorandum on H.R. 5998, Submitted by the New York Patent Law Association) (emphasis added). The Supreme Court relied on this memorandum in interpreting a related issue involving § 271 in *Dawson Chemical Co. v. Rohm & Haas Co.*, 448 U.S. 176, 205 (1980). ⁹⁶ *Cf.* SCA Hygiene Prods. Aktiebolag v. First Quality Baby Prods., LLC, 807 F.3d 1311 (Fed. Cir. 2015) (en banc). ⁹⁷ Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015) (en banc).

truly responsible party or is impractical to sue."⁹⁸ But the requirements for establishing indirect infringement can make it difficult for patentees to vindicate their rights even in cases where it seems intuitively clear that the non-performer is truly responsible.⁹⁹ To be sure, there are good reasons for making non-performer liability difficult to establish.¹⁰⁰ An expansive conception of such infringement might ensnare legitimate and socially valuable commercial activities, from providing Internet search tools¹⁰¹ to supplying food and shelter to the infringers. As remarked by a court more than a hundred years ago, "[i]n a sense, a trespass is aided if the trespasser is fed during the trespass. Yet it can hardly be contended that an infringer's cook is liable as a contributory infringer."¹⁰² The law, reasonably so, makes it difficult to impose infringement liability on a general service provider, whether on the Internet on in the brick-and-mortar world, without any showing that it intends to profit from an activity covered by an intellectual property right.¹⁰³

Patent law takes these commands quite seriously—and perhaps, to forgive an expression, to a fault. Consider the level of proof needed to establish "active inducement" of infringement under § 271(b). The word "induce" has been interpreted to require, at the very least, specific intent to cause acts that happen to result in the infringement.¹⁰⁴ In addition, though, courts require that the defendant know of the existence of a patent covering the accused product, or at least be willfully blind to its existence, *in every case in which liability is grounded under this section*.¹⁰⁵ This is a very significant hurdle because "numerous potential infringers do not have actual knowledge of the patent at the time of suit."¹⁰⁶ What is more, courts somehow link these requirements of knowledge of the patent and intent to cause acts that infringe and, even in cases

⁹⁸ Lemley, *supra* note 7, at 228; *see also* Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 221 (1980) ("[T]he policy of stimulating invention that underlies the entire patent system runs . . . deep. And the doctrine of contributory infringement, which has been called 'an expression both of law and morals,' can be of crucial importance in ensuring that the endeavors and investments of the inventor do not go unrewarded.").

⁹⁹ See supra note 7.

¹⁰⁰ Lemley, *supra* note 7, at 228 ("[T]he law must take equal care to avoid imposing liability on those who participate in the stream of lawful commerce merely because their products can be misused."); Rantanen, *supra* note 7, at 1591. ¹⁰¹ See Mark Bartholomew, *Cops, Robbers, and Search Engines: The Ouestionable Role of Criminal Law in*

Contributory Infringement Doctrine, 2009 BYU L. REV. 783; Mark Bartholomew, Indirect Infringers and Good Samaritans, 3 AKRON INTELL. PROP. J. 1 (2009).

¹⁰² Tubular Rivet & Stud Co. v. O'Brien, 93 F. 200, 202-03 (C.C.D. Mass. 1898) (cited in Lemley, *supra* note 7, at 236).

¹⁰³ *Id. But cf.* Mark P. McKenna, *Probabilistic Knowledge of Third-Party Trademark Infringement*, 2011 STAN. TECH. L. REV. 10 (discussing expansion of indirect liability in trademark law); Alfred C. Yen, *Torts and the Construction of Inducement and Contributory Liability in Amazon and Visa*, 32 COLUM. J.L. & ARTS 513 (2009) (making similar conclusions for copyright law).

¹⁰⁴ See DSU Medical Corp. v. JMS Co., 471 F.3d 1293, 1305 (Fed. Cir. 2006) (en banc in relevant part). As I explain *infra*, this requirement is correct based on general causation principles. *See infra* note 45 and accompanying text. In addition, it was clearly contemplated by the drafters of the statute. *See* Rich, *supra* note 77, at 537.

¹⁰⁵ Global-Tech Appliances, Inc. v. SEB SA, 131 S. Ct. 2060 (2011). For a contrary approach, see Lemley, *supra* note 7.

¹⁰⁶ Ted Sichelman, *Patent Revisionism at the Supreme Court?*, 45 LOY. U. CHI. L. J. 307, 310 (2013); *see also* Ted Sichelman, *Minding Patent Infringement* (San Diego Leg. Stud. Paper No. 11-051, 2011), *available at* http://papers.ssrn.com/abstract=1734380.

where the defendant is aware of the patent that is ultimately found to be directly infringed, allow the defendant to negate the intent to infringe by putting forward evidence of subjective good-faith belief of noninfringement.¹⁰⁷

In practice, this approach appears to elevate the mens rea with respect to the underlying patent right beyond mere knowledge or willful blindness, or even "purposeful intent," to a level that is extremely rare in other areas of law.¹⁰⁸ For example, a claim of battery generally does not require proof of intent to violate the law or to cause harm-well-intentioned but unwanted touching is still a battery.¹⁰⁹ And even in criminal law, which is concerned to a much greater degree than civil law with moral culpability, the level of mens rea one sees for inducement under § 271(b) is rarely, if ever, present-though, of course, the parallel is complicated by the difficulty of drawing direct analogies between crimes and violations of patent rights.¹¹⁰ All of these requirements are, in any case, in severe tension with the fundamental principles that mistake or ignorance as to extent of another person's rights (e.g., in the law of trespass),¹¹¹ or mistake or ignorance as to controlling law (e.g., in criminal law) does not relieve one from liability.¹¹² More generally, particularly in tort cases, "it is a fallacy—call it the 'moralistic fallacy'—to suppose that the essence of wrongdoing is a strong form of culpability or blameworthiness."¹¹³ Nevertheless, patent law goes out of its way to protect manufacturers in these method patent cases, and all of this rigmarole appears to arise from the mere fact that they are non-performers. There is no consideration of the broader context of the infringement.¹¹⁴

As suggested by the restaurant example,¹¹⁵ high mens rea hurdles needed to establish nonperformer infringement in certain circumstances may be warranted.¹¹⁶ To give a more realistic

¹⁰⁷ Commil USA, LLC v. Cisco Sys., Inc., 135 S. Ct. 1920 (2015).

¹⁰⁸ See infra notes 306-309 and accompanying text. Cf. Weiss, supra note 39, at 1453-56, 1473-77; see also id. at 1393-96.

¹⁰⁹ See, e.g., Lambertson v. United States, 528 F.2d 441 (2d Cir. 1976); White v. Univ. of Idaho, 797 P.2d 108 (Idaho 1990); Mohr v. Williams, 104 N.W. 12 (Minn. 1905); Vosburg v. Putney, 50 N.W. 403 (Wisc. 1891); see also Richard A. Epstein, *Intentional Harms*, 4 J. LEG. STUD. 392, 396 (1975). *But cf.* Nancy J. Moore, *Intent and Consent in the Tort of Battery: Confusion and Controversy*, 61 AM. U. L. REV. 1585 (2012) (noting confusion in the case law on these points).

¹¹⁰ I address this issue in *infra* in Part IV.A.

¹¹¹ See RESTATEMENT (SECOND) OF TORTS § 158; see infra Section IV.D.1. But cf. Bailey v. S.J. Groves & Sons, 230 S.E. 2d 267 (W. Va. 1976) (repudiating the strict liability approach in trespass law). The bottom line, however, is that whatever mens rea hurdles trespass imposes, trespass law does not seem to distinguish between actual trespassers and causers of trespass. See RESTATEMENT (SECOND) OF TORTS § 158. Cf. supra note 241 and accompanying text. ¹¹² See infra Section IV.D.

¹¹³ John C.P. Goldberg, *Inexcusable Wrongs*, 103 CAL. L. REV. 467, 501 (2015). In addition, this form of culpability threatens to swallow up patent law's willfulness statute. *See* 35 U.S.C. § 284 (2006); *cf*. United States v. Moran, 757 F. Supp. 1046 (D. Neb. 1991) (in the context of willful infringement of copyright, analyzing issues of purposeful intent analogous to those that appear in indirect patent infringement context). *But cf*. Rantanen, *supra* note 7, at 1632 (defending this result); *see also* Jacob S. Sherkow, *Patent Infringement as Criminal Conduct*, 19 MICH. TELECOMM. & TECH. L. REV. 1, 29-31 (2012).

¹¹⁴ See infra notes 126-127 and accompanying text.

¹¹⁵ See infra notes 100-103 and accompanying text.

¹¹⁶ *Cf. infra* notes 312-314 (noting that similar rules in criminal law are designed to protect marginal participants in an offense).

scenario, where the technology accused of facilitating infringement has different kinds of uses, some that are infringing and others that are not,¹¹⁷ it may stand to reason to require knowledge of a specific intellectual property right underlying the infringing branch of the technology's application, and perhaps even scienter. But as we will see, this is not what is happening in many patent cases. Unlike owners of restaurants and makers of internet search engines,¹¹⁸ many manufacturers accused of indirect patent infringement are not providers of a general service or platform. Instead, they supply specific software features, medical devices, or drugs that enable infringement of particular method patents-rather than facilitating generalized "piracy" mixed in with non-infringing uses of the service or product.¹¹⁹ In many such cases, the end user has no choice but to perform patented steps when it would like to get any value out of the product that it bought, or out a particular feature in a product.¹²⁰ The law, however, does not distinguish between these two types of scenarios at all. A claim against a manufacturer of a medical device that, when deployed by a customer, executes the steps of a patented method in its only mode of operation is subject to exactly the same scienter hurdles as a claim against a restaurant owner accused of aiding and abetting the violation of patent rights by feeding the infringer. It is clear why we should try to shield the latter from liability; the former, not so much.

Anticipating an objection that I address in greater detail in Part VI, one might argue that the scienter requirements currently in place are justified because supplying a medical device or Outlook software to customers are, too, run-of-the-mill commercial activities that have only been made "illegal" by the happenstance that the steps the device or software executes are covered by a patent.¹²¹ But this argument proves too much. First, there are numerous activities in life that might not seem wrong based on everyday notions of moral culpability, but are nonetheless illegal or tortious because the law makes them so, often without any scienter.¹²² The second difficulty, related to the first, is that *direct* patent infringement does not require any proof of culpable intent.¹²³ Although using medical devices that one has bought and paid for, exactly as intended by the manufacturer, is also an activity that does not seem on its surface tortious or at odds with anyone's conceptions of morality, an end user can be held liable for doing so even without the knowledge of the underlying patent. The related argument that many patents are ultimately held not infringed (or invalid), used by some to justify or even to support expanding the general application of scienter rule of *Commil*, likewise fails to account for the way in which direct infringers are

¹¹⁷ For a patent law example, see Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261 (Fed. Cir. 1986).

¹¹⁸ Cf. infra Section V.B.

¹¹⁹ See infra Section V.C. Cf. STEVENS, supra note 17, at 254 (discussing the need for more stringent mens rea requirements in copyright law, where "machines could be used for both lawful and unlawful purposes"). ¹²⁰ See infra Section V.A.

¹²¹ Cf. Timothy R. Holbrook, The Supreme Court's Quiet Revolution in Induced Patent Infringement, NOTRE DAME L. REV. (forthcoming, 2016), available at http://papers.ssrn.com/abstract=2653077; Rantanen, supra note 7.

¹²² See, e.g., United States v. Dotterweich, 320 U.S. 277 (1943); supra note 109 and accompanying text; see also infra notes 402-403 and accompanying text.

¹²³ See In re Seagate Tech., LLC, 497 F.3d 1360, 1368 (Fed. Cir. 2007) (en banc).

treated.¹²⁴ As long as the patent remains valid at the end of the litigation, the directly infringing end user will be liable; good-faith belief in noninfringement is no defense to direct infringement.¹²⁵ In sum: under the current approach, the manufacturer of the device that can only be utilized so as to infringe can avail itself of numerous mens rea defenses, but the customer using the device as intended is strictly liable. This result seems to be completely backwards.

Why the massive difference in the treatment of the manufacturers and end users in these situations? The formal reason is that the customer performs the method claim steps and therefore falls into the direct infringer box, while the manufacturer does not perform the steps and thus goes into the indirect infringer box. The difference hinges only on who performs the steps, and does not take into account which of the two parties designed the device—reminding one of the much-maligned "last human wrongdoer" rule of proximate causation in tort law.¹²⁶ More remarkably, as noted above, patent law would apparently not distinguish, in terms of the mens rea hurdles, between the manufacturer who supplies the device from the restaurant owner who feeds the user.¹²⁷ As non-performers, they are equal in the eyes of the law. All that makes very little economic or practical sense, but courts do not take practical considerations into account in these cases. They see the manufacturer as a non-performer, put it into the indirect infringement box—and voilà, there's now a requirement of scienter. Parts III-IV show that the law is not so inflexible; the remainder of this Part completes the discussion of problems with courts' approaches to non-performer infringement.

D. "Divided Infringement" and Its Discontents

So-called "divided infringement" is another problematic area of patent law. As outlined in the Introduction, this label was adopted to describe a rule under which, for a time, no party could be liable for infringement of some claims because no single entity performed the claim's steps.¹²⁸ A detailed example using simple technology, based on the case of *Move, Inc. v. Real Estate Alliance, Ltd (REAL)*, will help illustrate the problem.¹²⁹ The plaintiff owned a patent directed to methods for locating available real estate property using a zoom-enabled map on a computer. The patent contains a claim that reads, in full: "A method using a computer for locating available real estate properties comprising the steps of:

- (a) creating a database of the available real estate properties;
- (b) displaying a map of a desired geographic area;
- (c) selecting a first area having boundaries within the geographic area;

¹²⁴ See, e.g., Holbrook, *supra* note 121. The Federal Circuit actually did make a good-faith belief in invalidity a defense in *Commil*, but the Supreme Court reversed this holding. Commil USA, LLC v. Cisco Sys., Inc., 720 F.3d 1361 (Fed. Cir. 2013), *vacated*, 135 S. Ct. 1920 (2015).

¹²⁵ There may be, to be sure, practical hurdles in the way of suing direct infringers.

¹²⁶ PROSSER & KEETON ON TORTS 277 (5th ed. 1984); *see* Oliver Wendell Holmes, Jr., *Privilege, Malice, and Intent*, 8 HARV. L. REV. 1, 10 (1894).

¹²⁷ 35 U.S.C. § 271(c), which might be applicable here, presents the same hurdles as § 271(b).

¹²⁸ See supra notes 8-11 and accompanying text.

¹²⁹ 709 F.3d 1117 (Fed. Cir. 2013).

(d) zooming in on the first area of the displayed map . . .;

(e) displaying the first zoomed area;

(f) selecting a second area having boundaries within the first zoomed area;

(g) displaying the second area . . .; and

(h) identifying available real estate properties within the database which are

located within the second area."¹³⁰

The defendant operated an interactive website, using data from a real estate database it created (step (a)), that allowed users to search for properties.¹³¹ The landing page provided a search box in which a user could type in the state and county of interest. Once this was done—for example, the user typed in "California – Los Angeles County"—the website displayed the county map, thus performing step (b).¹³² The website then invited the user to "click on the map or the links below to search for homes and real estate in California"; the links would include parts of Los Angeles County, such as "San Fernando Valley" or "Los Angeles – Westside to Downtown." Once the user performed step (c) by clinking in one of those links of on the map, the website zoomed into and displayed this smaller area—steps (d) and (e)—and the process repeated itself. Thus, the website asked the user to "click on the map or the links below" to pick an area within a previously chosen area, such as "Beverly Hills" or "West Hollywood" within "Los Angeles – Westside to Downtown." Once the user did so, at step (f), the website displayed the smaller area and identified available properties within it (steps (g) and (h)). To sum up, all of the claim's steps were performed, but divided between two parties—the accused infringer, who operated the website's host computer, and the user of the website, who performs the "selecting" steps (c) and (f).¹³³

On these facts, the Federal Circuit held in 2013 that there was no infringement by the website's operator as a matter of law because it did not "exercise direction or control over users of its websites."¹³⁴ Many commentators have strongly criticized this rule because it rendered a large number patents on "interactive" methods wholly without value, arguing that it created a "loophole" in patent law and attacking it on economic, policy, and fairness grounds.¹³⁵ The contrary view is that divided infringement problems are of the patentees' own making and can be fixed with careful claim drafting.¹³⁶ Furthermore, it has been argued that the rigorous enforcement of the single-entity

¹³⁰ *Id.* at 1119-20 (quoting U.S. Patent No. 5,032,928 claim 1 (filed Apr. 24, 1989)) (emphasis added).

¹³¹ See Brief for Defendant/Counterclaim-Appellant Real Estate Alliance Ltd., at *16, 20, 2010 WL 2968764, Move, Inc. v. Real Estate Alliance Ltd., 709 F.3d 1117 (No. 12-1342) (Fed. Cir. 2013).

¹³² It is conceded that the website has performed step (a).

¹³³ *Move*, 709 F.3d at 1122.

¹³⁴ *Id.* at 1122-23. Until August of 2015, the only known away in which the direction or control test could be satisfied were "a principal-agent relationship, a contractual relationship or in circumstances in which parties work together in a joint enterprise functioning as a form of mutual agency." Akamai Techs., Inc. v. Limelight Networks, Inc., 786 F.3d 899, 905 (Fed. Cir.), *vacated*, 612 Fed. Appx. 617, *superseded by* 797 F.3d 1020 (Fed. Cir. 2015) (en banc); *see also supra* notes 15-19 and accompanying text.

 ¹³⁵ See, e.g., Stacie L. Greskowiak, Note, Joint Infringement after BMC: The Demise of Process Patents, 41 LOY. U.
 CHI. L.J. 351 (2010). W. Keith Robinson, No "Direction" Home: An Alternative Approach to Joint Infringement, 62
 AM. U. L. REV. 59, 59 (2012). See Akamai, 786 F.3d at 917-18 (Moore, J., dissenting) (collecting criticisms).
 ¹³⁶ See, e.g., Lemley, supra note 65.

rule ensures that the notice function of patents is fulfilled.¹³⁷ But even the Supreme Court, lately not a champion of strong patent rights, has hinted the approach exemplified in cases like *Move v*. *REAL* was wrong.¹³⁸ And rightly so, for a state of affairs in which competent patent prosecutors pushed through thousands of valid but uninfringeable patents, many on valuable technologies, such as that at issue in the *Akamai* case, seemed, to say the least, highly questionable.¹³⁹

The Federal Circuit's recent en banc *Akamai* decision, presumably responding to these critiques and taking the Supreme Court's hint, unanimously changed the applicable standard.¹⁴⁰ While the operative test previously in force allowed for attribution of claim steps from users only based on agency or contractual relationships, the court expanded the zone of attribution with its new vicarious liability test.¹⁴¹ Now, an accused infringer can be held liable when it "conditions participation in an activity or receipt of a benefit upon performance of a step or steps of a patented method and establishes the manner or timing of that performance."¹⁴² In *Akamai* itself, the Federal Circuit held that both prongs of this test were met because Limelight was actively involved in its customers' execution of claim steps that it did not perform.¹⁴³ Limelight required its customers to sign a standard form contract delineating their responsibilities and had its engineers "continuously engage with customers' activities."¹⁴⁴ Time will tell whether the more arms-length relationship between the customer and the accused infringer in cases like *Move* would also be sufficient for imposition of liability.

Whatever one thinks of the result of *Akamai*'s latest installment, it is difficult to argue that vicarious liability is the right doctrine to use in these circumstances. Employer liability for the tortious acts of its employees, committed in the scope of employment, is the paradigmatic application of vicarious liability.¹⁴⁵ But a customer is not an employee, and even when vicarious liability is not predicated on an employer-employee relationship, its hallmark is the defendant's "right and ability to supervise" another party.¹⁴⁶ This doctrine, therefore, simply does not fit the

¹³⁷ Brief of Amicus Curiae Electronic Frontier Foundation in Support of Petitioner, 2014 WL 880930, at *3-4 Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111 (2014).

¹³⁸ Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111, 2120 (2014).

¹³⁹ Akamai, 786 F.3d at 915-32 (Moore, J., dissenting); Damon Gupta, Virtually Uninfringeable: Valid Patents Lacking Protection Under the Single Entity Rule, 94 J. PAT. & TRADEMARK OFF. SOC'Y 61 (2012).

¹⁴⁰ Akamai Techs., Inc. v. Limelight, Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015) (en banc). Unanimous en banc decisions have been fairly rare at the Federal Circuit lately. This decision's unanimity confirms the overwhelming view that the previous rule was unworkable. *See supra* note 19. This Article will not repeat normative arguments for liability in divided infringement cases like *Akamai*, which are referenced in footnotes throughout this section, but will instead focus on providing a defensible legal foundation for this correct result.

¹⁴¹ Akamai, at 797 F.3d at 1023.

¹⁴² Id.

¹⁴³ *Id.* at 1024.

¹⁴⁴ *Id.* at 1025.

¹⁴⁵ See KENNETH S. ABRAHAM, THE FORMS AND FUNCTIONS OF TORT LAW 213-15 (4th ed. 2012) (explaining that, under the doctrine of *respondeat superior*, "employers are vicariously liable even absent their own negligence, for torts committed by their employees 'within the scope of employment'").

¹⁴⁶ Metro-Goldwyn-Mayer Studios Inc. v. Grokster, Ltd., 545 U.S. 913, 930 n.9 (2005); Ellison v. Robertson, 357
F.3d 1072, 1076 (9th Cir. 2004); Shapiro, Bernstein & Co. v. HL Green Co., 316 F.2d 304, 306-308 (2d Cir. 1963).

manufacturer-customer scenarios we have considered, for one generally has no right or ability to supervise one's customers. Providing a chattel or a service to someone is a long way away from hiring an employee or even an independent contractor to perform tasks on your behalf. To be fair, *Akamai*'s "manner and timing" language harkens back to copyright in trademark cases in which defendant dance halls provided physical space to direct infringers,¹⁴⁷ and perhaps cases in which direct infringer operated under license from the defendants.¹⁴⁸ These opinions already push the outer limits of vicarious liability, and even then the quasi-supervisory relationships they involve are much different from the standard manufacturer-customer relationship.¹⁴⁹ Finally, the doctrine of vicarious liability—like the doctrine of indirect or contributory infringement—is a liability-shifting doctrine.¹⁵⁰ But the customer did not even perform a tortious act in *Akamai* or *Move*.¹⁵¹

To summarize: even leaving aside the glaring fact that there no liability to be shifted in divided infringement cases, vicarious liability simply does not apply to relationships that many of them entail. Two paths forward are then possible. Either, *Akamai* is a sui generis case involving the rare manufacturer-customer relationship that gives rise to vicarious liability, and cases like *Move* and many like it will continue to result in no liability—so the problem of divided infringement has not really been solved. Or, *Akamai* applies broadly but the Federal Circuit's application of vicarious liability is now so different from that doctrine's roots that it cannot be called that in good faith. Neither result is tenable.

E. The Connection Between Indirect and Divided Infringement

Problems with indirect infringement cases like *Lucent* and divided infringement cases like *Akamai* are not very different. It is telling, for example, that the Federal Circuit based its 2012 attempt to pin liability on Limelight on an inducement theory under § 271(b), and that it achieved the same result under § 271(a) by 2015—while the facts obviously have not changed.¹⁵² This struggle stems from the fact that the rigid line that courts have tried to draw between performer infringement (which goes into the direct infringement box) and non-performer infringement (which goes into indirect infringement box) is arbitrary and overly formalistic. When facts like those at issue in *Akamai* push on that line, the supposedly clear distinction between direct and indirect liability based on who performs method claim steps becomes blurred and the system cannot handle them. But courts are overthinking the problem. As I explain in Part VI, both *Akamai* and *Lucent* exemplify scenarios where a manufacturer or a service provider supplies a tool that

¹⁴⁷ *Shapiro*, 316 F.2d and 307-08 (discussing the dance hall cases). For a particularly broad conception of "premises," see A & M Records, Inc. v. Napster, Inc., 239 F.3d 1004, 1023-24 (9th Cir. 2001).

¹⁴⁸ See, e.g., Shapiro, 316 F.2d and 306.

¹⁴⁹ See, e.g., Napster, 239 F.3d at 1023-24; cf. In re Aimster Copyright Litig., 334 F.3d 643, 654-655 (7th Cir. 2003) (expressing "doubts" that vicarious liability should be imposed on similar facts and noting that vicarious liability "has been extended in the copyright area to cases in which the only effective relief is obtainable from someone who bears a relation to the direct infringers that is analogous to the relation of a principal to an agent").

¹⁵⁰ See supra note 17 and accompanying text.

¹⁵¹ See supra note 18 and accompanying text.

¹⁵² See supra notes 25-30 and accompanying text.

causes customers to perform some (in *Akamai*) or all (in *Lucent*) steps of a particular method patent, and there is no reason for an entirely different approach for dealing with the two sets of cases. Here's a concrete illustration of the problem. Suppose a claim that a defendant is accused of infringing has ten steps. It does not make sense, when the manufacturer-defendant has caused the end user to perform all ten steps, to limit the available theories of liability to § 271(b), but allow for § 271(a) liability where the defendant performed one step and caused the end user to perform the remaining nine. In both, by hypothesis,¹⁵³ the manufacturer provided a feature or device whose only intended use results in the performance of one or more steps of some patent's claim.

Perhaps, creative litigants could recharacterize some indirect infringement claims as instances of vicarious liability under the latest installment of *Akamai*.¹⁵⁴ But long-term viability of this strategy under is unclear because vicarious liability has traditionally been viewed as a form of indirect, or secondary, infringement in intellectual property cases.¹⁵⁵ Thus, one might reasonably argue that routine casting of indirect infringement claims as "vicarious liability" might render subsections (b) and (c) superfluous, thus violating the statutory scheme.¹⁵⁶ If this argument is accepted, however, we will have the strange result that vicarious liability (as deployed by the Federal Circuit) applies only in the scenario where it actually defies traditional tort doctrine—when the customer has not engaged in tortious conduct.¹⁵⁷ The goal of the remainder of the Article is to cut these Gordian knots. Under the principle of causal responsibility, certain cases that currently fall into indirect or divided infringement categories because of non-performance or partial performance of claim steps by the defendant, might instead both be treated the same way, and without dubious resort to scienter or vicarious liability.¹⁵⁸ The Article explains this approach in Part V, while Parts III and IV explain the causal responsibility principle and show how it works in real cases.

III. The Concepts of Causal Responsibility and of Causing the Acts of Others

A. Selected Causation Concepts

¹⁵³ In other words, I limit my discussion to cases where the product or service provided has no other use but to perform the steps of a claimed method.

¹⁵⁴ This is already happening. *See, e.g.*, Corrected Reply Brief for Plaintiff-Appellant Adaptix, Inc., Adaptix, Inc. v. Apple Inc. (No. 2015-1441), 2015 WL 7693423.

¹⁵⁵ See, e.g., Perfect 10, Inc. v. Visa Int'l Serv. Ass'n, 494 F.3d 788, 802-06 (9th Cir. 2007) (copyright and trademark example). Unlike inducement and contributory infringement, vicarious liability in patent law is not codified.

¹⁵⁶ Similar arguments were addressed in the now-vacated *Akamai* panel opinion on remand from the Supreme Court. *See* Akamai Techs., Inc. v. Limelight Networks, Inc., 786 F.3d 899, 906-908, *vacated*, 612 Fed. Appx. 617, *superseded by* 797 F.3d 1020 (Fed. Cir. 2015) (en banc).

¹⁵⁷ In §§ 271(b) and (c) cases, by hypothesis, the end user *has* engaged in tortious conduct because proof or underlying direct infringement is required. *See* ACCO Brands, Inc. v. ABA Locks Mfrs. Co., 501 F.3d 1309, 1312-13 (Fed. Cir. 2007) (explaining that proof of indirect infringement necessarily requires proof of instances of direct infringement). ¹⁵⁸ The actual statutory classification does not matter—liability could be formally grounded in 271(a) or (b). I explain

why at infra notes 329-340 and accompanying text.

Causation in law can be complex, multifarious, and enigmatic. It is also trans-substantive causation appears in criminal law, tort law, contract law, among others. Causation problems in specific areas of law, as well as across legal disciplines, have drawn significant attention of philosophers, legal scholars, and courts. To advance the claims in this Article, this Part focuses on how causation concepts have been applied to multi-party problems.¹⁵⁹ Some general background on causation, nonetheless, is helpful to set the stage for further discussion.

Two familiar causation concepts in tort and criminal law are but-for cause and proximate cause. But-for causation relates to the notion that, if it were not for something that the defendant did, the harmful outcome or event at issue would not have occurred.¹⁶⁰ Proximate causation, in contrast, is a mechanism for limiting the liability for events that are, in some way, too remote or unforeseeable given the nature of a defendant's acts.¹⁶¹ Both concepts have particular salience in multi-party problems. For example, if a defendant gave words of encouragement to a person who was in any case determined to commit a particular crime, how should the but-for causation analysis proceed and what is its relevance to the defendant's liability?¹⁶² Or, if the defendant negligently provided alcohol to a person who killed someone in an alcohol-induced rage, could the defendant's liability be cut off on proximate cause principles even though but-for causation seems clear?¹⁶³

But-for and proximate cause do not exhaust the universe of causal principles in law. Another cluster of important issues, particularly pertinent to multi-party problems, relates to the concept that Michael Moore described as "scalar" causation.¹⁶⁴ This term refers to the idea that when an event or outcome has multiple causes, the causal contribution from each individual agent might be small or big—which, in turn, influences the analysis of the agent's liability.¹⁶⁵ In tort law, this concept is reflected in the principle of causal apportionment of liability between multiple tortfeasors.¹⁶⁶ And, as we will see, the innocent agency doctrine in criminal law might also be viewed through the lens of scalar causation.¹⁶⁷ The important point this intuition leads to is that a

¹⁵⁹ For another proposal for use of causation concepts to analyze liability for non-performers in intellectual property cases, see Bartholomew, *Cops, Robbers, and Search Engines, supra* note 101, at 827-40.

¹⁶⁰ PROSSER & KEETON, *supra* note 126, at 263-72.

¹⁶¹ *Id.* at 272-321.

¹⁶² State ex rel. Martin v. Tally, 15 So. 722 (Ala. 1894); see infra Part IV.

¹⁶³ See, e.g., Phan Son Van v. Pena, 990 S.W.2d 751 (Tex. 1999).

¹⁶⁴ MICHAEL S. MOORE, CAUSATION AND RESPONSIBILITY: AN ESSAY IN LAW, MORALS, AND METAPHYSICS 275 (2009).

¹⁶⁵ MOORE, CAUSATION AND RESPONSIBILITY, *supra* note 164, at 299-314.

¹⁶⁶ See MARK A. FRANKLIN ET AL., TORT LAW AND ALTERNATIVES: CASES AND MATERIALS 370-72 (9th ed. 2011). For a theoretical treatment, see Mario J. Rizzo & Frank S. Arnold, *Causal Apportionment in the Law of Torts: An Economic Theory*, 80 COLUM. L. REV. 1399 (1980). Although this Article does not propose causal apportionment for patent infringement because of the lack of precedent for it in patent law—indeed, patent law has generally not adopted the principle of comparative responsibility to apportion damages between multiple defendants—at least one article does suggest such a possibility. *See* Bernard Chao, *The Case for Contribution in Patent Law*, 80 U. CIN. L. REV. 97 (2011).

¹⁶⁷ See infra Section IV.B.

defendant can be a major causal contributor without physically performing the act that directly brings about the harm. Moore explains:

[O]ne who picks the victim of the murder, orders a subordinate to do it, pays him well for it, locates the victim for the hit-man, brings the gun and ammunition, and drives the hit-man to the location of the killing, substantially causes the death of the victim. We should thus say plainly that one way to be an accomplice is by causing the harm through the action of another. Substantially aiding another to cause some harm is to substantially cause the harm oneself, whatever the pretensions of the intervening causation fiction.¹⁶⁸

Several takeaways are significant here. The first is the converse of the conclusion that the mastermind in the scenario is a substantial causer. Thus, the hit-man, though he or she engages in the acts that physically bring about the victim's death, might be viewed as a minor cause of the crime. The second is that, even though a human being—the hit-man—is interposed between the mastermind and the victim, the chain of causation between the mastermind's acts and the victim's death is not cut off. In the language of torts, the hit-man's volitional act of killing the victim is not a "superseding cause" that relieves the mastermind from responsibility.¹⁶⁹ The mastermind's actions are both but-for and proximate causes of the victim's death and, significantly, the mastermind's causal contribution is substantial—and arguably greater than that of the person who actually does the killing.

B. Causing the Acts of Others

Moore's analysis also raises an important issue that is closely related to, but different from, the concepts of scalar causation and of substantially causing harm through the instrumentality of another. It is a prior question of whether one can intelligibly speak of causing the acts of other individuals. In other words, can we say that the mastermind Moore's scenario caused the hit-man to kill the victim? This phrasing is problematic because the hit-man is, after all, a human being, and it seems awkward to argue that one can cause another person to do something in the same way that one can cause a door to open by pushing. This discomfort has led to a great deal of philosophical inquiry into what it means to cause the acts of others—particularly, if the acts said to be caused are voluntary. The overwhelming consensus is that one can, in fact, intelligibly speak of causing to be a route to attribution of acts of performers to non-performer, thereby holding the non-performers legally accountable for those acts.¹⁷⁰

¹⁶⁸ MOORE, CAUSATION AND RESPONSIBILITY, *supra* note 164, at 301.

¹⁶⁹ See, e.g., Doe v. Manheimer, 563 A.2d 699 (Conn. 1989).

¹⁷⁰ See infra Part IV.

I begin with the classic account of causation in the law by H.L.A. Hart and Tony Honoré.¹⁷¹ These authors start out with the seemingly blanket proposition that "a free and deliberate human action is never regarded as itself caused."¹⁷² These authors explain that "[a] deliberate human act is . . . often something *through* which we do not trace the cause of a later event" and argue that the language of "cause" is more appropriate for effects of human action on inanimate objects rather than on other human beings.¹⁷³ Instead, in the field of interpersonal transactions, Hart and Honoré contend that "the concept of reasons for action" is more suitable than the concept of "causes of events."¹⁷⁴ And yet even these commentators, who appear to be less comfortable than most with relying on cause in interpersonal transactions, concede that "[m]any important causal idioms are appropriate for description both of . . . relationships between human actions and ordinary causal sequences."¹⁷⁵ They identify four inquiries that are relevant in the question whether another person did something because of, or as a result of, the first person's words or actions.

(i) in all of them the second actor knows of and understand the significance of what the first actor has said or done; (ii) the first actor's words or deeds are at least a part of the second actor's reasons for acting; (iii) the second actor forms the intention to do the act in question only after the first actor's intervention; (iv) [the first actor] intends the second actor to do the act in question.¹⁷⁶

Although Hart and Honoré do not take the step of concluding that these criteria, if met, justify the conclusion that a person has caused an act of another—perhaps because of their general aversion to using causal language to describe interpersonal interactions—they come close. They conclude that the chain of causation can at least be "traced through" from the non-performer to the effects of the performer's act in cases where the level of the non-performer's involvement in the act is high, i.e., when it meets all of these four criteria.¹⁷⁷ Building on the work of Hart and Honoré, Joel Feinberg, a political philosopher, concluded that it is indeed coherent to speak of causing another's acts and, significantly, noted that there is "compatibility of voluntariness with causal determination."¹⁷⁸ He explained that "the more expectable human behavior is [in response to an action we call a cause], whether voluntary or not, the less likely it is to 'negative causal connection."¹⁷⁹

Other scholars are even more sanguine to the idea that a person can cause the acts of another, with the legal consequence that the acts of the causee—the person who physically

¹⁷¹ H.L.A. HART & TONY HONORÉ, CAUSATION IN THE LAW (2d ed. 1985).

¹⁷² See Joel Feinberg, Causing Voluntary Actions, in DOING AND DESERVING 152, 152 (1970) (quoting H.L.A. Hart & Tony Honoré, Causation in The Law, 72 L.Q. REV. 80 (1956)) (alterations omitted).

¹⁷³ HART & HONORÉ, *supra* note 171, at 44.

¹⁷⁴ *Id.* at 51.

¹⁷⁵ *Id.* at 52.

¹⁷⁶ *Id.* at 53.

¹⁷⁷ *Id.* at 63; *see also id.* at 57-58.

¹⁷⁸ Feinberg, *supra* note 172, at 186.

¹⁷⁹ *Id.* at 166.

performs the acts—become imputed to the causer.¹⁸⁰ Although Sanford Kadish made clear that he was uncomfortable with the legal fiction that the acts of the causee are *actually* the acts of the causer, unless the causee is truly an automaton or a puppet of some sort, he nonetheless accepted the notion of causing acts of another. He argued that "[i]t is quite natural to conceive of the secondary actor as causing the actions of the primary actor" in certain circumstances where the performer's "conduct may be thought of as the product of the secondary actor's manipulation."¹⁸¹ David Lanham's approach is similar—he contended that "there is a point at which an instigator becomes a principal offender and may be held liable for causing the actus reus of the offence even though the immediate actor is another person."¹⁸² In agreement is Paul Robinson, who argued that "[i]n cases where the causal link is strong, it is natural to think that the actor actually did satisfy the element [of a crime] himself; the spectrum of cases along which the strength of the causal relation varies with the actor's degree of control over the other person or, in other words, with the other person's degree of independent action."¹⁸³ Finally, K.J.M. Smith concluded that "[t]he stronger the accessory's causal role and the weaker the perpetrator's, the greater should be the inclination to label the actions as principal through innocent agency."¹⁸⁴ Somewhere along the spectrum of causality, the indirect violator becomes a direct violator, and another person's acts become his acts by operation of law.

Crucially for the purposes of this Article, intent to violate the law (or invade someone's right, or to cause harm) is analytically not required for a court to conclude that a defendant has caused the acts of another.¹⁸⁵ Of course, the state or the plaintiff must prove that the defendant possessed the underlying mens rea required by the substantive offense, whatever it might be.¹⁸⁶ Moreover, as the work of Kadish, Hart and Honoré, and others shows, inherent in the very idea of causing the acts of others is the causer's intent that the causee carry out those specific acts.¹⁸⁷ And, as the discussion of the case examples will demonstrate, there will be other facts required to show that the defendant is sufficiently in control of the situation to be labeled a causer of an act of another—perhaps, provision of a tool that enables the causee to perform the act, some information asymmetry between the two parties, passivity of the causee, and so on.¹⁸⁸ The barrier needed to

¹⁸⁰ See Francis Bowes Sayre, Criminal Responsibility for the Acts of Another, 43 HARV. L. REV. 689, 689 (1930).

¹⁸¹ Kadish, *supra* note 40, at 371.

¹⁸² David Lanham, Accomplices, Principals and Causation, 12 MELBOURNE UNIV. L.R. 490, 493 (1980).

¹⁸³ Robinson, *supra* note 33, at 631.

¹⁸⁴ K.J.M. Smith, A Modern Treatise on the Law of Criminal Complicity 118 (1991).

¹⁸⁵ This becomes particularly evident when the underlying offense lacks the requirement of intent. *Cf.* STEVENS, *supra* note 17, at 253 ("Where the tort alleged does not require a particular state of knowledge or dishonesty, it is not necessary to allege that the procurer knows that the actions carried out amount to a tort."); PETER CANE, THE ANATOMY OF TORT LAW 32 n.6; Kadish, *supra* note 40, at 347 & n.48, 349, 399; Lanham, *supra* note 182, at 509-12; *see also* Lenzi v. Miller [1965] S.A.S.R. 1, 3 ("[T]he usual statutory direction to do or not to do certain things at peril is aimed more directly at the 'accessory' in control of the activity than at the 'principal' whose hand does the forbidden act."). Note that intent to violate the law is generally not even required to establish intentional torts such as battery, either. *See* supra note 109 and accompanying text.

¹⁸⁶ See supra notes 34-38 and accompanying text.

 ¹⁸⁷ See supra note 45 and accompanying text. For a particularly sophisticated treatment of causal explanations for human actions, see generally DONALD DAVIDSON, ESSAYS ON ACTIONS AND EVENTS (2d ed. 2001).
 ¹⁸⁸ See infra Part IV.

overcome to label a defendant a causer is high. But if the underlying offense is strict liability, no showing of a causer's intent to violate the law or invade someone's right is necessary, for such a requirement would contravene the defining characteristic of strict liability.¹⁸⁹ According to Lanham, this result is "a perfectly tenable application of the strict liability principle."¹⁹⁰ He concludes that there is "no reason why strict liability should not be imposed on the real causer of the harm."¹⁹¹

IV. Causal Imputation in Criminal Law and Tort law

A. Why Criminal Law?

The principle of causal responsibility has found the clearest application in the criminal law doctrine of innocent agency.¹⁹² As mentioned in the Introduction, the doctrine applies when a defendant causes a person to perform an act—or, more formally, the defendant performs an act through the instrumentality of another.¹⁹³ For example, if D asks T to give a drink to victim V that, unknown to T (but known to D) is poisoned, D is liable for murder if V dies from the poison.¹⁹⁴ At the outset, it is important to distinguish this route to liability from the "indirect" (or "derivative," or "secondary") approach. D's liability cannot be derived from T's because T is innocent, and is therefore not convictable of murder.¹⁹⁵ Moreover, as a matter of common sense, this situation could not be fairly described as an instance of aiding-and-abetting. Even though T delivers the drink, it is D who is in control of the situation, and D has caused T to perform the actus reus of murder. D, in other words, is not "assisting" T, but using T as an instrument.¹⁹⁶ As I explains below, the causal responsibility principle pervades other areas of law, particularly tort.¹⁹⁷ Nonetheless, criminal cases provide some of the most clearly explicated examples of its application. Reliance on such examples leads to the antecedent question of whether criminal cases are even relevant for understanding patent law. I believe that they are.

First, like criminal law, patent law today relies heavily on the distinction between direct and indirect liability, which suggests that criminal law is a useful template for discovering concepts that might also inhere in patent law. To be sure, even in criminal cases many courts have stopped

¹⁸⁹ See supra note 185 and accompanying text. To be sure, courts in criminal cases have made rulings that appear to depart from this approach. For an explanation why this departure is not coherent, see Weiss, *supra* note 39, at 1479-81 (explaining that the preferred approach (which is rooted in causation) "generally avoids anomalous, unfair distinctions between the principal and the accomplice," including in strict liability cases); *see also id.* at 1388-89. ¹⁹⁰ Lanham, *supra* note 182, at 515.

¹⁹¹ Id.

¹⁹² See supra note 40 and accompanying text.

¹⁹³ See supra notes 33-37 and accompanying text.

¹⁹⁴ See Kadish, supra note 40, at 370.

¹⁹⁵ *Id.* at 328.

¹⁹⁶ *Id.* at 370-72. *Cf.* STEVENS, *supra* note 17, at 254 (discussing the difference between "procuring" and facilitating"); *see also supra* note 52 and accompanying text.

¹⁹⁷ See infra Section IV.C.

fixating on the old common-law labels "accomplice" and "principal," a trend that has been playing itself out in various interesting ways on both the state and federal level.¹⁹⁸ The Washington Supreme Court, for example, ruled that "a verdict may be sustained upon evidence that the defendant participated as an aider and abettor, even though he was not expressly accused of aiding and abetting and even though he was the only person charged in the information."¹⁹⁹ Nonetheless, the terms "accomplice" and "principal" are still routinely used in criminal cases, and the distinction remains significant.²⁰⁰ In contrast, in tort law, the very notion of "indirect" liability is quite underdeveloped and, which occasional exceptions, multi-party problems are often treated under joint-tortfeasor principles.²⁰¹ As discussed above, many pre-1952 patent cases followed the tort approach, eschewing a rigid distinction between direct (performer) and contributory (nonperformer) infringement.²⁰² These cases, in other words, refused to draw bright lines between, and put into different pleading buckets, those who performed the acts covered by patent claims and those who ensured their performance. But for some reason-and even though § 271(b) in the Patent Act, in particular, does not use any adjectives to modify the word "infringer"²⁰³—modern patent law continues to cling to the direct-derivative distinction.²⁰⁴ All this suggest that criminal law in particular is a good model for illuminating issues in multi-party liability in patent law.

To be sure, the Supreme Court in *Akamai* appeared to reject the plaintiff's attempt to rely on an analogy between and § 271(b) and 18 U.S.C. § 2, the federal criminal aiding-and-abetting statute a part of which relies on the common-law principle that "two parties who divide all the necessary elements of a crime between them are both guilty."²⁰⁵ But this remark was in made the context of a narrow issue that the Court was considering, and reflects such dearth of analysis that its precedential value is limited. In discounting the analogy, the Court stated that "we think it unlikely that Congress had this [criminal law] doctrine in mind when it enacted the Patent Act of 1952, given the doctrine's inconsistency with the Act's cornerstone principle that patentees have a right only to the set of elements claimed in their patents and nothing further."²⁰⁶ But, as noted by a number of commentators, this remark stems from a gross misunderstanding of the Federal Circuit

¹⁹⁸ See generally Weiss, supra note 39.

¹⁹⁹ State v. McDonald, 981 P.2d 443, 448 (Wash. 1999) (citations omitted). The same is true in federal cases. *See, e.g.*, United States v. Lester, 363 F.2d 68, 72 (6th Cir. 1966) ("It has long been held than an indictment need not specifically charge 'aiding and abetting' or 'causing' the commission of an offense against the United States, in order to support a jury verdict based upon a finding of either.").

²⁰⁰ See, e.g., Rosemond v. United States, 134 S. Ct. 1240, 1246, 1249-50 (2014).

²⁰¹ See Mark Bartholomew & Patrick F. McArdle, *Causing Infringement*, 64 VAND. L. REV. 675, 694-68 (2011). *Cf.* Robert Rabin, *Enabling Torts*, 49 DEPAUL L. REV. 435 (discussing torts that involve the facilitation of the conduct of others, which do not receive a "secondary" label).

²⁰² See supra Section II.A.

²⁰³ Cf. Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 133 (2d Cir. 2008).

²⁰⁴ In the *Akamai* litigation, for example, the Supreme Court reversed a Federal Circuit decision because decided that liability could not lie on § 271(b) theory, but suggested it might affirm if the theory was simply relabeled under § 271(a). Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111, 2117-20 (2014). This is quite astonishing, especially given how similar issues are treated in criminal law. *See supra* notes 198-199 and accompanying text. ²⁰⁵ *Limelight*, 134 S. Ct. at 2119.

decision that the Supreme Court was reviewing.²⁰⁷ As confirmed on remand, the patentee was not seeking anything broader than the scope of its claims, for it won the case when the Federal Circuit simply invoked § 271(a), along with the principle of vicarious liability, instead of § 271(b) as it did before.²⁰⁸

Second, and perhaps more important, causation concepts underlying the innocent agency doctrine are trans-substantive. Thus, the aim of the Article is not necessarily get patent law to borrow from criminal law. Instead, the idea is to use criminal cases to elucidate how causal responsibility works in general, and, after this principle is understood, to argue how the Patent Act should be properly read. Indeed, theorists like Hart and Honoré (and others) view their theories of causation as applicable to criminal law, tort law, and even contract law, and it is unclear why the notion of causing acts of others would be dependent on the area of law in which one is operating.²⁰⁹ Acting through another should not, and cannot, allow one to escape responsibility whatever area of law is involved. This point helps confirm why, although there are aberrant cases to the contrary, liability related to causing does not analytically hinge upon any intent to cause harm, invade the right of another, or to violate the law in addition to that which is required by the underlying offense.²¹⁰ At bottom, causal responsibility holds that, once one engaged in the activity qualifying one as a causer and demonstrated intent that the causee perform certain acts, those acts become the causer's acts by operation of law.²¹¹ While criminal cases provide excellent examples of its operation, the principle itself is not logically dependent on the underlying law. At bottom, the concept of causing the acts of others is pervasive and trans-substantive,²¹² and there is no indication that the architects of the Patent Act sought to repudiate it in any way.²¹³

B. Innocent Agency as an Instantiation of Causal Responsibility

Even though criminal law, like patent law,²¹⁴ sometimes rigidly fixates on the principal/accomplice and performer/non-performer dichotomies, the cases illustrate that the distinctions are actually not so clear in practice. The doctrine of innocent agency, in particular, illustrates the blurring well. According to Kadish, "the doctrine of causation through an innocent agent has been widely applied in a great variety of situations."²¹⁵ For example, in two pre-1952

²⁰⁷ See, e.g., Jason Rantanen, Judicial Error and Justice Alito's Hypothetical in Limelight, PATENTLY-O, http://patentlyo.com/patent/2014/06/judicial-hypothetical-limelight.html (June 3, 2014).

²⁰⁸ Akamai Techs., Inc. v. Limelight, Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015) (en banc).

²⁰⁹ See generally HART & HONORÉ, supra note 171; see also MOORE, CAUSATION AND RESPONSIBILITY, supra note 164.

²¹⁰ See supra notes 43, 109 & 185 and accompanying text.

²¹¹ On this point, see LON FULLER, LEGAL FICTIONS 17 (1967) (discussing the legal fiction of "qui facit per alum, facit per se," which is Latin for "he who does the acts through another does the act himself").

²¹² See infra Section IV; see also supra notes 185-187 and accompanying text.

²¹³ See infra Section VI.

²¹⁴ Cf. supra Section II.B.

²¹⁵ See Kadish, supra note 40, at 372 (citing MODEL PENAL CODE, comment at 15 n.5 (Tent. Draft No. 1, 1953)); *id.* at 354-75.

decisions,²¹⁶ the Supreme Court rejected lower courts' formalistic attempts to shield from liability those who were responsible for a crime, but did not themselves perform the act constituting the actus reus. The so-called "single entity" rule governing divided infringement in patent law, addressed in recent *Akamai* decision,²¹⁷ holds that a single entity must meet all the elements of a method patent in order to be liable; whatever one thinks of the merits of that rule, the cases that follow make clear that one can satisfy an element by causing it to be performed by another.

In *United States v. Kenofskey*, the defendant, an insurance agent, submitted a false claim to the home office of his company, and his supervisor signed the documents "without knowledge of their fraudulent character" and put them in the mail in due course.²¹⁸ The trial court sustained a demurrer to the indictment charging Kenofskey with a scheme to defraud by means of interstate mail.²¹⁹ It reasoned that "[t]he defendant did not mail the letter," and that "the theory that, as he knew the claim would be mailed to the home office, in the usual course of the business, for approval before payment, he knowingly caused it to be deposited" was "too far-fetched to be tenable."²²⁰ In a brief opinion, the Supreme Court unanimously reversed. The Court noted that the word "cause" in the applicable statute²²¹ "is used . . . in its well-known sense of bringing about, and in such sense it is applicable to the conduct of Kenofskey."²²² Notably, the Court was comfortable with cause-and-effect language even though another human being mailed the document. It stated that Kenofskey "deliberately calculated the effect of giving the false proofs to his superior officer; and the effect followed, demonstrating the efficacy of his selection of means."²²³ That officer was "the means by which [Kenofskey] offended against the provisions of the statute."²²⁴

A subsequent case, *United States v. Giles*, reinforced these points, and more.²²⁵ Notably, the criminal statute at issue in *Giles* did not include the word "cause" as an actus reus of the crime and merely held liable anyone "who makes any false entry in any book, report, or statement of the association, with intent . . . to injure or defraud the association or any other."²²⁶ The accused bank teller in *Giles* was nonetheless charged with "mak[ing] and caus[ing] to be made" a false entry in a book.²²⁷ The prosecution's theory was that Giles did so by "withholding selected deposit slips

²¹⁶ As discussed earlier, I am assuming that in passing the Patent Act of 1952, Congress was legislating against the background of general legal principles. *See supra* note 95 and accompanying text.

²¹⁷ Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020 (Fed. Cir. 2015) (en banc).

²¹⁸ 243 U.S. 440, 441 (1917).

²¹⁹ 235 F. 1019 (E.D. La. 1916). The mail fraud statute the court applied is now codified at 18 U.S.C. § 1341.

²²⁰ 243 U.S. at 441 (quoting 235 F. at 1020).

²²¹ "Whoever, having devised . . . any scheme or artifice to defraud . . . shall, for the purpose of executing such scheme or artifice or attempting so to do, place, *or cause to be placed*, any letter, . . . package, writing, . . . in any postoffice, . . . to be sent or delivered by the postoffice establishment of the United States, . . . ' shall be punished, etc." *Id.* at 442 (alterations in original) (quoting the 1913 version of the federal criminal fraud statute).

²²² Id.

²²³ *Id*.

²²⁴ *Id.*

²²⁵ 300 U.S. 41 (1937).

²²⁶ REV. STAT. § 5209 (1918).

²²⁷ 300 U.S. at 46 (quoting Giles v. United States, 84 F.2d 943, 944 (5th Cir. 1936)); see also 300 U.S. at 45 n.2.

for three or four days before permitting them to reach the bookkeeping department," so that the ledger "show[ed] false balances" as a result.²²⁸ This case, which ultimately resulted in a conviction, shows that liability may lie for performing an act through the instrumentality of another even without a specific statutory prohibition of such a route to committing a crime. Nonetheless, after a jury convicted Giles of making false entries, the Fifth Circuit vacated the verdict, observing that "the record conclusively shows that defendant neither made the false entries nor did anything that could be considered as a direction to the bookkeeper to make them."²²⁹

Acknowledging the majority's exhortation that criminal statutes are to be read narrowly,²³⁰ the dissenting judge, Samuel Sibley, nonetheless reasoned that "strict construction of a criminal law ought not to be pressed so far" as to excuse Giles from liability.²³¹ He explained that the "caused to be made" language that the prosecutor used to charge Giles "is broader than the statute if allowed to include cases of accident, neglect, or other unintended causations, but if limited to intentional causation it does not exceed the statute"—making clear that, in his view, causal imputation was implicit in the federal criminal laws.²³² Judge Sibley argued that "[o]ne may do a criminal deed directly with his own hands," "contrive indirect mechanical means, as a trap or a spring gun," make use of "[t]he acts of an animal or an irresponsible human such as a child or a lunatic" and, finally of "an innocent human who does not know a crime is going forward."²³³ He concluded that the conviction should stand because "false entries are deliberately produced, although through an ignorantly innocent agent" by "the bank employee who concocts the plan and achieves the result."²³⁴

The Supreme Court granted the government's petition for a writ of certiorari and unanimously reversed the Fifth Circuit, adopting the position of the dissent and reinstating the conviction. The Court reasoned that "[t]o hold that [the statute] applies only when the accused personally writes the false entry or affirmatively directs another so to do would emasculate the statute."²³⁵ Notably, the Court again couched its ultimate holding in the language of cause-and-effect, reasoning that "false entries on the ledger were the intended and necessary result of respondent's deliberate action in withholding the deposit tickets."²³⁶ Discussing the aftermath of *Giles*, Lanham explained that the causation provision included in the federal aiding and abetting statute in 1948 "removes all doubt that one who causes the commission of an indispensable

²²⁸ 300 U.S. at 44.

²²⁹ *Giles*, 84 F.2d at 946, *rev'd*, 300 U.S. 41.

 $^{^{230}}$ *Id.* at 945 ("It is settled law that criminal statutes are to be strictly construed and may not be extended by implication, unless that is clearly demanded by their terms.").

²³¹ *Id.* at 947 (Sibley, J., dissenting).

²³² Id.

²³³ *Id.* at 946-47. The bookkeepers had a duty to make entries based on the deposit slips; under a causation theory, that fact means that their behavior is expected (and therefore did not break the causal chain). *Id.* at 947. ²³⁴ *Id*

²³⁵ 300 U.S. at 48-49.

²³⁶ Id.

element of the offence by an innocent agent or instrumentality is guilty as a principal."²³⁷ Although he contends that this section arguably created new grounds for liability,²³⁸ Lanham also notes that "there is a tendency in later decisions to treat section 18(2)(b) as a declaration of the old position rather than an enactment of a new head of liability."²³⁹ The version of the innocent agency rule in force today states that "[w]hoever willfully causes an act to be done which if directly performed by him or another would be an offense against the United States, is punishable as a principal."²⁴⁰ This form of liability is not derivative,²⁴¹ and it applies to all federal crimes, be they murder or strict liability offenses.²⁴²

Numerous Court of Appeals and state supreme court decisions are to the same effect. The Eight Circuit in *Nigro v. United States*, though not citing either *Kenofskey* or *Giles*, affirmed a conviction of a physician for illegally selling narcotics to an addict in violation of the Harrison Anti-Narcotic Act.²⁴³ The defendant argued that, because he only issued prescriptions and it was the pharmacists who made the "sales" constituting the actus reus of the offense, he could be liable, if at all, for aiding and abetting the sales by pharmacists.²⁴⁴ But there was "no proof that at the time the sales alleged in the indictment were made the druggists had guilty knowledge of the fictitious character of the prescriptions," and so their sales were not criminal.²⁴⁵ Thus, Nigro argued, "there was no crime . . . to aid and abet" and the conviction should be thrown out.²⁴⁶ The Eighth Circuit disagreed, concluding that he "participated in the prohibited sale by issuing the fictitious prescriptions."²⁴⁷ It explained that "a registered physician who issues a prescription . . . to an addict not in the course of his professional practice, and the addict upon such prescription purchases

²³⁷ *Id.*; *see also* Andrew White, Case Note, *The Scope of Accomplice Liability under Section 18 USC section 2 (b)*, 31 CASE W. RES. L. REV. 386, 393 n.63 (1980) (quoting H.R. Rep. No. 304, 80th Cong., 1st Sess. A5). This provision was further amended in 1951 to give the version of 18 U.S.C. § 2(b) that is in force today. There is similar state legislation. *See, e.g.*, REV. CODE OF WASH. § 9A.08.020 (2011).

²³⁸ *Id.*; *see also* Kadish, *supra* note 40, at 382-83 (discussing the effect of "action-causing" theories of liability); SMITH, *supra* note 184, at 124-27 (similar).

²³⁹ Lanham, *supra* note 182, at 502.

²⁴⁰ 18 U.S.C. § 2(b) (2012). For an explanation why the word "willfully" was not intended to create an additional mens rea hurdle separate and apart from the mens rea for the underlying crime, see Weiss, *supra* note 39, at 1447-51.

²⁴¹ See supra notes 37-43 & 185-189 and accompanying text; see also KIP SCHLEGEL, JUST DESSERTS FOR CORPORATE CRIMINALS 7-8 (discussing the interaction of substantive strict liability statutes and 18 U.S.C. § 2(b)).

²⁴² For a leading example predating codification of 18 U.S.C. § 2(b) (and using the language of aiding-and-abetting), but illustrating the fundamental principles at issue, see United States v. Dotterweich, 320 U.S. 277, 284 (1943) ("[U]nder [a strict liability statute] a corporation may commit an offense and all persons who aid and abet its commission are equally guilty."); *cf. id.* at 286 ("There is no proof or claim that [the defendant] ever knew of the introduction into commerce of the adulterated drugs in question, much less that he actively participated in their introduction. Guilt is imputed to the respondent solely on the basis of his authority and responsibility as president and general manager of the corporation.") (Murphy, J., dissenting). Complicating the issue is the fact that examples of aiding and abetting strict liability crimes or causing such crimes through an intermediary are rare. *Cf.* Kadish, *supra* note 40, at 347 ("The requirement of intention for complicity liability is satisfied by the intention of the secondary party to help or influence the primary party to commit the act that resulted in the harm.").

²⁴³ 117 F.2d 624 (8th Cir. 1941).

²⁴⁴ *Id.* at 630.

²⁴⁵ Id.

²⁴⁶ Id.

²⁴⁷ *Id.* at 631.

morphine even from an innocent druggist, the physician participates in the illegal sale and is guilty of 'selling' within the meaning of the statute."²⁴⁸ According to Lanham, this result can be best justified on the principle of causation elucidated in *Giles*.²⁴⁹ That is, the prescribing doctor "is regarded as the true principal by virtue of having caused the actus reus."²⁵⁰

Illustrating the innocent agency/causation approach in state criminal cases, the Supreme Court of West Virginia in *State v. Bailey* upheld the conviction of one Bailey for the theft of liquor.²⁵¹ Bailey told another person that the liquor was his and asked that person to retrieve it for him. In support of its conclusion, the court explained that "[i]f the party who actually did the act was innocent of intentional wrong, and the act on his part was by procurement of another, it imputes the criminal intent to that other and makes him the guilty party, although he was not in any sense an accomplice, co-conspirator, or aider and abettor of the actor."²⁵² The court quoted from a treatise explaining that the law holds liable one "from whose sole and unaided will comes a criminal transaction . . . whatever physical agencies he employs, and whether he is present or absent when the thing is done."²⁵³ Even if the physical agency is "an animate object like a human being," the law punishes "him whose will set the force in motion."²⁵⁴

An addition observation is that the results in these cases do not logically depend on the actual innocence of the "innocent agent." Indeed, numerous cases exist in which both the agent and the causer are convictable of some crime.²⁵⁵ Perhaps the most evocative stylization of this scenario, discussed by some courts, is that of Iago and Othello. According to Kadish, Iago should be convicted of murder, while Othello, the "semi-innocent" agent acting out of passion, should be convicted of a lesser crime, perhaps manslaughter. Glanville Williams is in agreement: "If a person can act through a completely innocent agent, there is no reason why he should not act through a semi-innocent agent. It is wholly unreasonable that the partial guilt of the agent should operate as a defence to the instigator."²⁵⁶ As Section D shows, a similar result obtains in trespass cases.

C. Traditional Aiding-and-Abetting Distinguished from Causing the Acts of Another

The significant causal contribution made by defendants in the innocent agency cases can be distinguished from the minimal causal contribution required to hold a defendant liable for aiding and abetting.²⁵⁷ Consider the classic case of *State ex rel. Martin v. Tally*, in which the Supreme

²⁴⁸ Id.

²⁴⁹ Lanham, *supra* note 182, at 502.

²⁵⁰ *Id.* at 501

²⁵¹ 60 S.E. 785 (W. Va. 1908). This case was relied upon in a similar case in another state. *See* People v. Mutchler, 140 N.E. 820, 823 (Ill. 1923).

²⁵² 60 S.E. at 787.

²⁵³ *Id.* (quoting BISH. NEW CRIM. LAW § 649, at 392 (7th ed. 1882)).

²⁵⁴ Id.

²⁵⁵ KADISH ET AL., CRIMINAL LAW AND ITS PROCESSES: CASES AND MATERIALS 630-632 (8th ed. 2007).

²⁵⁶ Kadish, *supra* note 40, at 387 (quoting GLANVILLE WILLIAMS, TEXTBOOK ON CRIMINAL LAW 374 (2d ed. 1983)).

²⁵⁷ Some criminal law theorists have characterized accomplice liability as "noncausal" for this reason. See, e.g., Joshua Dressler, *Reassessing the Theoretical Underpinnings of Accomplice Liability: New Solutions to an Old Problem*, 37 HASTINGS L.J. 91, 120, 124-26 (1986); *see also* Bartholomew, *Cops, Robbers, and Search Engines, supra* note 101,

Court of Alabama allowed a murder case to proceed to trial on an aiding-and-abetting theory.²⁵⁸ Tally learned that a telegram had been sent to the victim, one Ross, warning him that the Skelton brothers were intending to kill Ross. Tally then had a subsequent telegram sent to the telegraph operator, a friend of Tally's who also happened to be the mayor of the town where Ross ended up as he fled from the Skeltons. Tally's telegram said: "Do not let the party warned get away. Say nothing."²⁵⁹ This message apparently caused a delay in the delivery of the warning telegram to Ross, who was killed by the Skeltons in due course.

Tally's argument for innocence was that Ross would have been murdered whether or not he would have received the warning telegram in time. In other words, as the court framed it, the question was whether it is "essential to [Tally's] guilt that his act [of interfering with the warning telegram] should have contributed to the effectuation of [the Skeltons'] design—to the death of Ross?"²⁶⁰ The court answered the question as follows: "The assistance given . . . need not contribute to the criminal result in the sense that but for it the result would not have ensued. It is quite sufficient if it facilitated a result that would have transpired without it."²⁶¹ The court further explained:

It is quite enough if the aid merely rendered it easier for the principal actor to accomplish the end intended by him and the aider and abettor, though in all human probability the end would have been attained without it. If the aid in homicide can be shown to have put the deceased at a disadvantage, to have deprived him of a single chance of life which but for it he would have had, he who furnishes such aid is guilty, though it cannot be known or shown that the dead man, in the absence thereof, would have availed himself of that chance \dots ²⁶²

The relatively minimal actus reus in such aiding-and-abetting cases is made up on the mens rea side by the requirement of a high level of scienter. Nonetheless, scholars have been troubled by the minimal actus reus—and a correspondingly small causal contribution to the offense—that is sufficient for an aiding-and-abetting conviction.²⁶³ Some, for example, have advocated for lesser

at 840-42; Douglas Husak, *Abetting a Crime*, 33 LAW & PHIL. 41, 60-61 (arguing that holding causally minor accomplices and principals equally liable violates the principle of fair labeling). The "noncausal" characterization has been contested. *See* Michael S. Moore, *Causing, Aiding, and the Superfluity of Accomplice Liability*, 156 U. PA. L. REV. 395, 402-20 (2007).

²⁵⁸ 15 So. 722 (Ala. 1894).

²⁵⁹ *Id.* at 734.

²⁶⁰ *Id.* at 732.

²⁶¹ *Id.* at 738.

 $^{^{262}}$ *Id.* at 738-39. The modern approach is the same. *See, e.g.*, State v. Carothers, 525 P.2d 731, 736 (Wash. 1974) ("The legislature has said that anyone who participates in the commission of a crime is guilty of the crime and should be charged as a principal, regardless of the degree or nature of his participation. Whether he holds the gun, holds the victim, keeps a lookout, stands by ready to help the assailant, or aids in some other way, he is a participant.").

²⁶³ Bartholomew, *Cops, Robbers, and Search Engines, supra* note 101, at 841. To be sure, courts require at least a possibility that the accomplice's act matter to the final outcome—this is what the *Tally* court means when it refers to "a single chance of life." *Cf.* Moore, *supra* note 257, 432-40 (2007) (discussing the notion of "chance-raising" accomplices).

D. Causal Responsibility in Tort Law

1. Trespass

Although it rarely relies on causal responsibility in an explicit way, the operation of this principle in tort law is unmistakable.²⁶⁸ Consider § 158 of the *Restatement of Torts*, which appears in both *First* and *Second Restatement*.²⁶⁹ This section states that "one is subject to liability to another for trespass, irrespective of whether he thereby causes harm to any legally protected interest of the other, if he intentionally . . . enters land in the possession of the other, or causes a thing or a third person to do so."²⁷⁰ Remarkably, this section treats the performer of the intrusion—"a third person"—as equivalent to an inanimate object—"a thing," reminding one of Robinson's description of the equivalency between human and non-human causal links in 18 U.S.C. § 2(b).²⁷¹ Given this provision, it seems surprising that, according to the Supreme Court, the parties in *Akamai* could "point . . . to no tort case in which liability was imposed because a defendant caused

²⁶⁴ See, e.g., Dressler, supra note 257.

²⁶⁵ Husak explains that "when the parties are related through agency, when the alleged principal is an innocent instrumentality of the aider, or when the parties are co-perpetrators," attribution is proper because all these cases "involve more than mere assistance." Husak, *supra* note 257, at 57. As do many other commentators, Husak also argues against the concept of derivative liability: "[T]he basic mistake in positive law is its treatment of complicity as a form of derivative liability." *Id.* at 58.

²⁶⁶ Dressler, *supra* note 257, at 118-19.

²⁶⁷ Paul S. Davies, Accessory Liability for Assisting Torts, 70 CAMBRIDGE L.J. 353, 364 (2011) (citing Jane Stapleton, Duty of Care: Peripheral Parties and Alternative Opportunities for Deterrence, 11 L.Q.R. 301 (1995)).

²⁶⁸ I am not referring here to the principle of causal apportionment, however. *See supra* note 166 and accompanying text.

²⁶⁹ A related argument was made in an amicus brief, but it was styled as generally applicable to § 271(b) and did not theorize causal responsibility. *See* Brief of Amicus Curiae William Mitchell College of Law Intellectual Property Institute in Support of Respondent, at *20-21, Global-Tech Appliances, Inc. v. SEB S.A., 131 S. Ct. 2060 (2011).

²⁷⁰ RESTATEMENT (SECOND) OF TORTS § 158. "Intentional" here is used not in the sense "not accidental," but as product of a deliberate act. No awareness of any illegality is required, however. See *id.* § 166; *see also* CANE, *supra* note 185, at 32 n.6; PROSSER & KEETON, *supra* note 126, at 73-75. For case examples, see Murrell v. Goodwill, 106 So. 564, 565-66 (La. 1925); Castleberry v. Mack, 167 S.W.2d 489, 490 (Ark. 1943).

²⁷¹ See infra note 33 and accompanying text.

an innocent third party to undertake action that did not violate the plaintiff's legal rights."²⁷² Such cases surely exist,²⁷³ and § 158 reflects this state of affairs.

In either the "third person" or the "thing" scenario, the effect of § 158 is to make the causer of the intrusion liable as though the causer himself or herself had intruded, and the performer/non-performer distinction is without great significance. Importantly, a comment to this section makes clear that duress or even a legal obligation are not required to conclude that the defendant caused a third party to enter the land:

If, by any act of his, the actor intentionally causes a third person to enter land, he is as fully liable as though he himself enters. Thus, if the actor has commanded *or requested* a third person to enter land in the possession of another, the actor is responsible for the third person's entry if it be a trespass. *This is an application of the general principle that one who intentionally causes another to do an act is under the same liability as though he himself does the act in question.* So too, one who by physical duress causes a third person to go upon the land of another or who carries the third person there against his will is liable as a trespasser, although the third person may not be liable.²⁷⁴

Thus, the causer and the causee are treated equally, and might both be liable for the same trespass.²⁷⁵ Interestingly, even though the causee might meet the definition of "innocent instrumentality" when it trespasses upon the land of another upon request from the causer, it is still liable because trespass is a strict liability offense. This result changes if duress is involved, but the causer is liable in any event.

More importantly, the liability of the causer is not "secondary," and, no intent to violate the law is required to prove the liability either of the causer of the causee.²⁷⁶ The intent to have another enter the land that happens to belong to a third party, even when the conclusion as to ownership is formed by mistake, is all that must be proven for liability of the causer.²⁷⁷ So long as the person enters the land himself or herself, or "intentionally causes" another to do so, it is a trespass; no other mens rea hurdles are present. While there are of course significant differences between patent law infringement and trespass, the two torts have often been compared and the

²⁷² Limelight Networks, Inc. v. Akamai Techs., Inc., 134 S. Ct. 2111, 2119 (2014).

²⁷³ See, e.g., Cunningham v. Pitzer, 2. W. Va. 264, 273 (1867) (discussing the duress defense to trespass and explaining that "[i]f the defendant is not liable [for trespass because of duress], those who forced him to commit the act are, whether he is or not"); *see also* Waller v. Parker, 45 Tenn. 476 (1867); Smith v. Stone [1647] Sty 65 (a person thrown onto another's land not liable for trespass).

²⁷⁴ RESTATEMENT (SECOND) OF TORTS § 158 comment j.

²⁷⁵ Cases bear this out. *See, e.g.*, Kropka v. Bell Telephone Co. of Pa., 91 A.2d 232 (1952). The liability of the causees may lie because of tort law's aversion to excuses. *See generally* Goldberg, *supra* note 113.

²⁷⁶ Even in criminal trespass cases, mistake of fact might not be a defense. *See, e.g.*, State v. Gould, 40 Iowa 372 (1875).

²⁷⁷ While some courts have begun to require negligence for proof of trespass, *see supra* note 111 and accompanying text, they still do not create heightened mens rea hurdles for the liability of the causer versus the causee.

parallel is instructive.²⁷⁸ Both, after all, are strict liability offenses. But patent law generally requires scienter on the part of the causer (i.e., in § 271(b) and (c) cases where the manufacturer causes users to perform the claimed steps), while trespass does not. Why the difference in the treatment of the causer relative to the causee in patent infringement law versus the law of trespass? An explanation for this disjunction has not been offered.

2. Products liability

Lest it be thought that trespass is an outlier, consider products liability. Manufacturers of defective products are routinely held liable, without even a hint of a "divided" or "indirect" tort problem, even though they themselves do not perform an act that results in the completed tort— the act that directly causes a compensable injury.²⁷⁹ In a classic case, *Codling v. Paglia*, a car manufacturer was held strictly liable for injuries to a third party when the car's steering wheel got stuck, leading to a head-on-collision.²⁸⁰ The Court of Appeals of New York emphasized the passivity of the driver and the fact that the manufacturer was truly in control with respect to the defect. Because "the product in the hands of the consumer is often a most sophisticated and even mysterious article," the court thought it absurd to expect the consumer to discover a latent defects so as to prevent the accident.²⁸¹ That is on the maker of the defective car—the driver is merely an unwitting instrument of harm who actuates the defect. Thus, when the "intended use" ²⁸² of a product results in an act that causes injury to a third party, the driver's damage-causing act is effectively imputed to the manufacturer. As long as the product has not been modified or misused,²⁸³ the presence of intermediaries (retailer, user, etc.) is immaterial to the level of scienter required.²⁸⁴ It is strict liability either way.

While strict products liability for manufacturing defects is a doctrine of relatively recent vintage, the rule that the automaker is not relieved from (direct) liability because another entity is interposed between it and the injured party has long been a part of the law. In the nineteenth

²⁷⁸ See, e.g., Consol. Fruit-Jar Co. v. Wright, 94 U.S. 92, 96 (1876) ("A patent for an invention is as much property as a patent for land. The right rests on the same foundation, and is surrounded and protected by the same sanctions."). *But cf.* ROBIN FELDMAN, RETHINKING PATENT LAW 211-12 (2012).

²⁷⁹ See, e.g., West v. Caterpillar Tractor Co., 336 So. 2d 80, 87 (Fla. 1976) (emphasis added). To be sure, courts have moved away from a pure strict liability approach in design defect cases. See Aaron Twerski & James A. Henderson Jr., *Manufacturer's Liability for Defective Product Designs: The Triumph of Risk-Utility*, 74 BROOK. L. REV. 1061 (2009). But the strict liability approach still holds in manufacturing defect scenarios. *Id.* at 1063.
²⁸⁰ 298 N.E.2d 622 (N.Y. 1973).

²⁸¹ *Id.* at 627.

²⁸² Greenman v. Yuba Power Prods., Inc., 377 P.2d 897, 701 (Cal. 1963). Somewhat controversially, perhaps, many states have extended the manufacturer's liability to uses that are "reasonably foreseeable." *See, e.g.*, Barker v. Lull Eng'g Co., 573 P.2d 443, 454 (Cal. 1978); *see also* Richard A. Epstein, *Plaintiff's Conduct in Products Liability Actions: Comparative Negligence, Automatic Division and Multiple Parties*, 45 J. AIR L. & COMM. 87, 91 n.10 (1979). The "intended use" formulation, however, appears uncontroversial.

²⁸³ See generally David G. Owen, Products Liability: User Misconduct Defenses, 52 S.C. L. REV. 1 (2000).

²⁸⁴ To be sure, the items of recovery in products liability cases relate to physical injury, *see, e.g., Greenman*, 377 P.2d at 700, which is obviously not the form of injury one sees in patent law. The point of the illustration, however, is that primary liability can be imposed on a defendant even though there may be numerous human intermediaries between it and the victim.

century, the much-maligned privity doctrine could, for example, exonerate a manufacturer from liability for injuries even to the user when he or she bought a product from a dealer rather than the manufacturer.²⁸⁵ Of course, privity also barred any claims of injured third parties against the manufacturer. The doctrine did make exceptions for products that are "imminently dangerous"²⁸⁶ and also ensnared manufacturers who actually knew of the defect²⁸⁷—in effect, requiring scienter—but in general, privity functioned to shield manufacturers from liability in such scenarios. Though based on contract principles, this doctrine also relied on the concepts of "remoteness" and "directness" that are reminiscent of patent law's handling of liability of those who do not themselves perform the patented steps.²⁸⁸

Privity, of course, has been gone from tort law for many years—since Judge Cardozo in recognized in the iconic *MacPherson v. Buick* case that it is the manufacturer, and not the retailer or the user, who is truly responsible for the injuries.²⁸⁹ To get around the vestiges of privity, some courts spoke of a manufacturer's "constructive control" of an article after it left the manufacturer's hands to justify the imposition of liability.²⁹⁰ In general, though, courts in modern tort cases have not been troubled in the least about imposing liability on the manufacturer even though the retailer sold the article and the user performed the act that is the immediate cause of damage. Furthermore, they have not denominated the manufacturer's liability in these cases as "indirect" or as a form of "aiding-and-abetting."²⁹¹ Indeed, even though a retailer (and, in third-party injury cases, also a user) is interposed between the manufacturer and the plaintiff, it is easy to conclude that the manufacturer itself caused the accident by supplying a product that was dangerous in its normal, intended mode of operation.²⁹² As Justice Traynor explained, "there is greater reason to impose liability on the manufacturer" than on a party "who is but a conduit of a product that he is not

²⁸⁵ See, e.g., Shepard v. Kensington Steel Co., 262 Ill. App. 117 (1931).

²⁸⁶ Thomas v. Winchester, 6 N.Y. 397 (1852).

²⁸⁷ Lewis v. Terry, 43 P. 398 (Cal. 1896).

²⁸⁸ See generally William Prosser, *The Assault Upon the Citadel (Strict Liability to the Consumer)*, 69 YALE L.J. 1099, 1105, 1130 (1960); *see also id.* at 1123-24 (discussing "a blanket rule which makes any supplier in the chain liable directly to the ultimate user").

²⁸⁹ MacPherson v. Buick Motor Co., 111 N.E. 1050 (1916).

²⁹⁰ Ybarra v. Spangard, 154 P.2d 687, 691 (Cal. 1944).

²⁹¹ Note that while strict liability developed to its modern form after 1952, the year that § 271 was codified, the demise of privity long preceded these developments. In addition, the so-called "enabling torts," such as negligent entrustment, have always been viewed as primary and not secondary—even though another party performs a damage-causing act. *See* Winn v. Haliday, 69 So. 685 (Miss. 1915); Giguere v. Rosselot, 3 A.2d 538 (Vt. 1939). *See generally* Rabin, *supra* note 201. This sort of liability is justified by the defendant's significant causal contribution to the damage-causing act. *See* Henry Woods, *Negligent Entrustment: Evaluation of a Frequently Overlooked Source of Additional Liability*, 20 ARK. L. REV. 101, 110-12 (1966) (discussing the role of the *Restatement of Torts*' "substantial factor" analysis in negligent entrustment liability).

²⁹² See Greenman v. Yuba Power Prods., Inc., 377 P.2d 897, 901 (Cal. 1963) ("To establish the manufacturer's liability it was sufficient that plaintiff proved that he was injured while using the [accused device] in a way it was intended to be used as a result of a defect in design and manufacture of which plaintiff was not aware that made the [accused device] unsafe for its intended use.").

himself able to test."²⁹³ Patent law completely ignores the sensible principles underlying the collapse of privity, and in fact maintains its vestiges by creating significant barriers for holding manufacturers liable for patent infringement in analogous scenarios. It is time for patent law to move into the twentieth century.

To be sure, true aiding-and-abetting liability does exist in tort law. In the well-known case of *Halberstam v. Welch*, a woman was held liable for wrongful death because she supported her murderous boyfriend and knew that she was enjoying a lifestyle of wealth thanks to his crimes.²⁹⁴ There are also numerous cases involving the aiding-and-abetting of civil fraud.²⁹⁵ All of these cases require scienter, and rightly so because the level of participation of the accused party in these cases is not that of a causer. Indeed, relative to the actual murderer or fraudster, the enabler is a relatively minor causal contributor, and we should be quite careful before holding a significant other or an accountant liable for what appear to be everyday life activities without this higher standard of mens rea. No such concern exists in trespass "causer" cases or products liability cases because the defendants are major causal contributors fully in control of the events, while the causees or users are merely passive instrumentalities.²⁹⁶ Without clearly saying so, tort law recognizes the causal responsibility principle and makes distinctions between causers and aiders and abettors that are very similar to those one encounters in criminal law. A non-performer can be held directly liable, and the foregoing cases confirm that the causal responsibility principle that justifies this result is pervasive.

V. Implications for Patent Law

What does all this mean for patent law? Are there cases in which end users who perform elements of method claims are mere "human causal links" rather than active tortfeasors who derive some measure of support from an enabler or an aider an abettor? Undoubtedly there are. Many manufacturer-user cases fall into this pattern, and we should not hesitate to apply the causal responsibility principle to hold them liable. Imposition of liability in such cases would not only be consistent with the common law explicated in the previous Part, but it would make economic and logical sense as well. The manufacturers work in the field of technology that the patent covers,

²⁹³ Escola v. Coca-Cola Bottling Co. of Fresno, 150 P.2d 436, 444 (Cal. 1944) (Traynor, J., concurring). Also, Dean Prosser stated that one reason why courts rejected privity was that "[t]he middle man is no more than conduit, a mere mechanical device, through whom the thing sold is to reach the ultimate user." Prosser, *supra* note 288, at 1123. ²⁹⁴ 705 F.2d 472, 483 (D.C. Cir. 1983).

²⁹⁵ See Schlitz, supra note 291.

²⁹⁶ Even if a few individual users might become aware that they are infringing (as through a demand letter), in many cases of the sort this Article addresses a large majority of users are not aware of the patent, suggesting that the user base is passive in the aggregate. Perhaps, if a defendant can prove that a particular set of users to whom they have provided infringing instrumentalities knew of the patent and were, therefore, not passive, it could show that causation is cut off with respect to those users and damages should be reduced accordingly (assuming that the defendant-manufacturer does not meet the current requirements for liability under § 271(b) or (c)). The use of the reasonable royalty approach, however, might complicate this analysis. *See* Karshtedt, *supra* note 1, at 955-76; *see also id.* at 921 n.42.

which places them in a much better position than users to prevent the performance of steps covered by patent claims. As Jonathan Masur explained, "the inefficient and socially wasteful ways in which [modern indirect infringement doctrine] allocates search make contemplation of an alternative worthwhile.").²⁹⁷ Of course, as in trespass scenario, users who perform every step of the claim may also be exposed to lawsuits given the strict liability nature of direct infringement.²⁹⁸ Nonetheless, removing the hurdles that shield non-performers from liability under patent law's version of "the last human wrongdoer" rule²⁹⁹ would, on the margins, likely help shift the focus of many patent owners from the passive user to the truly responsible manufacturer. That would be a welcome development, particularly given the recent outcry over what appear to be abusive lawsuits against technology users.³⁰⁰

Thus, patent law can benefit from using causal responsibility to impute the acts of others to manufacturers-defendants. If the Patent Act is read with this principle in mind, some thorny problems and unintuitive results would become more tractable. As I argued in earlier work, there is a pervasive sense in many patent cases that the manufacturer "who provides the enabling technology is the real tortfeasor, while the primary actor is something of a passive instrumentality."³⁰¹ I also noted the facts of such cases, now pursued under indirect infringement theories, "often reveal a tight causal link between the acts of the inducer and harm to the plaintiff."³⁰² Finally, explained that the performance of elements of patent claims by customers is frequently "perfectly reasonable and expected"³⁰³—while the customers themselves are often "clueless and blameless."³⁰⁴ This Part develops these intuitions with the help of the philosophical and doctrinal ammunition provided in the preceding parts of this Article.

A. Indirect Infringement Cases

1. Applying the law to the facts

As discussed earlier, proof of patent infringement by inducement presents high mens rea hurdles.³⁰⁵ Particularly significant is the requirement that not only did the defendant specifically

²⁹⁷ Jonathan S. Masur, Patent Liability Rules as Search Rules, 78 U. CHI. L. REV. 187, 204 (2011).

²⁹⁸ The may be approaches for end users to immunize themselves from suits under current law, but it might be an uphill climb. For an interesting proposal, see Saurabh Vishnubhakat, *An Intentional Tort Theory of Patents*, 68 FLA. L. REV. (forthcoming 2016).

²⁹⁹ See supra note 126 and accompanying text.

³⁰⁰ THE RACKSPACE, http://www.rackspace.com/blog/immunize-end-users-from-patent-trolls ("End users' are you and me: small businesses, developers, students, professionals, and other ordinary Americans who use technology in our daily lives. We didn't steal somebody's idea."); ELECTRONIC FRONTIER FOUNDATION, https://www.eff.org/deeplinks/2013/05/hey-patent-trolls-pick-someone-your-own-size. *See generally* Brian J. Love & James C. Yoon, *Expanding Patent Law's Customer Suit Exception*, 93 B.U. L. REV. 1605 (2013) (recounting all the reasons why the manufacturers are in a much better position to defend certain lawsuits.

³⁰¹ Karshtedt, *supra* note 1, at 918.

³⁰² *Id.* at 928.

³⁰³ *Id.* at 967.

³⁰⁴ *Id.* at 968.

³⁰⁵ See supra Section II.B.

intend for the performer to carry out acts that happen to be infringing, but also that it know of the patent. In addition, the defendant can negate the showing of mens rea by introducing evidence that it believed that the patent was not being infringed—even if a jury or a court ultimately concludes otherwise. This "heightened form" of the "bad purpose approach" appears to correspond to what Baruch Weiss considers to be "the most rigorous mental state imposed by the criminal law."³⁰⁶ In the context of the criminal cases that he discusses, Weiss concludes that it is aberrant³⁰⁷—in part, no doubt, because it flouts the maxim that ignorance of the law is no excuse.³⁰⁸ And in patent cases, which after all occur in the context of civil litigation, this approach is even less supportable.³⁰⁹ To be sure, the high level of mens rea for holding non-performers liable can sometimes be justifiable, especially when the defendant provides some general product or service used by the performer, or assists the performer in some relatively minor way.³¹⁰ Indeed, Weiss makes clear that mens rea hurdles of the "bad purpose" variety can sometimes be useful for protecting a marginal participant in a wrongdoing.³¹¹ But the patent law's bad-purpose requirement applies to all non-performer cases, without regard to the extent of the defendant's role in the infringement.³¹² The causation framework, in contrast, provides a significantly more flexible approach based on the defendant's level of participation.

Although the heightened form of the "mens rea of illegality" rule is now (after *Commil*) firmly entrenched in patent law,³¹³ causation principles might still relieve the plaintiff from having to meet it in certain scenarios. Some non-performer cases, in which defendants can now be charged only with indirect infringement, can be recharacterized as direct infringement claims based on the notion that the manufacturer has caused the customers' acts. What would be some of their features? Recall that causing an act of another might include provision of a critical tool that enables that person's performance of specific acts, intent that those acts be carried out (or substantial certainty that those acts would occur),³¹⁴ and perhaps also instructions describing how to carry out the act as well as some form of information asymmetry between non-performer and performer that makes

³⁰⁶ Weiss, *supra* note 39, at 1454-55 (discussing a case where a court, relying on the word "willfully" in 18 U.S.C. § 2(b), concluded that it was not "adequate to simply charge the jury that to find intent it could consider whether defendant knew that he was doing 'something unlawful' or that he was doing 'something wrong'" in some general way; instead, "the defendant also had to be aware of the precise reporting requirements at issue, and must have specifically sought to frustrate them") (citing United States v. Curran, 20 F.3d 560, 567-70 (3d Cir. 1994)); *see also* Masur, *supra* note 297, at 189 ("[T]he putative contributory infringer must be aware of the full legal status of the patent and the relationship between the direct infringer and the patent holder. This is an extraordinary requirement, one that is present few other places in the law.").

³⁰⁷ Id.

³⁰⁸ See supra note 270 and accompanying text.

³⁰⁹ To be sure, in patent cases (and trespass cases), the issue is not ignorance of the law but of others' rights.

³¹⁰ See supra Section IV.C.

³¹¹ See Weiss, *supra* note 39, at 1481-83.

³¹² See supra notes 100-107 and accompanying text. As I reiterate in the next Section, a different rule applies to the special case of divided infringement.

³¹³ See supra Section II.C.

³¹⁴ On the substantial certainty requirement as a route to proving the intent element of an intentional tort and its role in secondary liability in copyright law, see Yen, *supra* note 103. For a leading tort case on this issue, see Garratt v. Dailey, 279 P.2d 1091 (Wash. 1955).

the former causally important.³¹⁵ In general, to borrow from Hart and Honoré, the non-performer might in some way provide the performer with reasons for acting.³¹⁶ And finally, reinforcing the above, that the performer's role is in some way passive in that the performer, predictably, carries out acts as expected by the non-performer.³¹⁷

Consider, under this framework, the facts of *Lucent v. Gateway*.³¹⁸ Lucent sued Microsoft on indirect infringement theories for providing Outlook software, which (when utilized by end users) infringed a patented method of scheduling appointments with the aid of a graphical interface.³¹⁹ Microsoft produced the underlying technology and, in so doing, supplied both the tool that is specially adapted to perform steps covered by certain method claims and supplied instructions that helped ensure that the tool would be used to do exactly that. Performance of these specific steps was thus both expected and intended—and, indeed, the verdict of infringement in that case was independently upheld on both § 271(b) and (c) theories.³²⁰ Most customers, often individual users, likely knew nothing about the underlying technology—introducing information asymmetry in the scenario—and Microsoft undoubtedly gave them a reason for acting by providing the software.³²¹ Having bought the software, the end users naturally carried out the claimed steps as instructed.³²² Thus, the manufacturer's involvement here featured the required intent and the heightened actus reus. In fact, the actus reus was a "double" actus reus—the Microsoft provided a nonstaple article adapted to infringe *and* took affirmative steps through marketing and instructions that helped ensure that the steps in the process were performed.³²³

³¹⁵ See supra Part IV.B; cf. supra note 263-267 and accompanying text.

³¹⁶ HART & HONORÉ, *supra* note 171, at 153.

³¹⁷ See supra notes 188-189 and accompanying text; see also Bartholomew & McArdle, supra note 201, at 713 (discussing a copyright case where "the court relied on 'an additional step in the causal chain' to find for the defendant credit card company, explaining that there was no causation because, even though the credit card company made infringing websites profitable, there still had to be a decision by the websites and their users to engage in the infringing conduct in the first place").

³¹⁸ See Lucent Techs., Inc. v. Gateway, Inc., 580 F.3d 1301 (Fed. Cir. 2009).

³¹⁹ Gateway and Dell were also sued in that case. They were accused of indirect infringement based on their sales of Microsoft software capable of practicing the patented methods. The case against Gateway and Dell based on causation principles is, of course, more difficult to make out than the case against Microsoft. These entities did not design the accused software, but rather passed it along in the stream of commerce. Under traditional products liability principles, they would be liable along with Microsoft, though they might have a case for indemnification against it. *See* Vandermark v. Ford Motor Co., 391 P.2d 168 (Ca. 1964); RESTATEMENT (THIRD) OF TORTS: APPORTIONMENT LIAB. § 22(a)(2)(ii) (2000). But many states have recognized the unfairness of exposing innocent retailers to liability and have shielded them by statute in various ways. For a review, see Jim Sinunu & Amy Kott, *Protection for Retailers: Developments in Strict Product Liability and Indemnification*, 23 WESTLAW J. 1 (June 2011).

³²⁰ *Lucent*, 580 F.3d at 1320-24.

³²¹ This is so even if, at some point, the direct infringers might learn that the devices they are using are covered by a patent. *See also supra* note 296 and accompanying text.

³²² The fact that only a feature of the product was infringing does not change the analysis. *See, e.g.*, Ricoh Co. v Quanta Computer, Inc., 550 F.3d 1325, 1337 (Fed. Cir. 2008) (one cannot "escape liability as a contributory infringer merely by embedding [the infringing feature] in a larger product with some additional, separable feature"). Nonetheless, the double actus reus is particularly important in cases like this: when the patented feature is a part of a larger product sold by the infringer, the instructions can help guarantee that the feature does not, so to speak, "sit on the shelf." Of course, as *Lucent* makes clear, the relative insignificance of the infringing feature in the larger product affects the magnitude of damages. 580 F.3d at 1323-36.

³²³ *Lucent*, 580 F.3d at 1320-25.

Finally, the customers did not get to modify the product in any way, and did not seek to incorporate it into some larger products like commercial developers might³²⁴—they were generally just regular computer users.

Under the framework in the previous Part, it is not difficult to conclude that the Microsoft caused the acts of the users and should be liable directly and not derivatively, thereby bypassing the knowledge-of-the-patent requirement mandated by the Supreme Court's interpretation of § 271(b). In other words, direct infringement under § 271(a) can be pled on these facts, and § 271(b) can be by passed. Besides software,³²⁵ other scenarios in which a manufacturer provides articles that end up performing the steps of a certain method patent when used as intended include medical devices,³²⁶ pharmaceuticals,³²⁷ and perhaps diagnostic kits as well.³²⁸

2. Some preliminary objections and responses

Those who would prefer to retain a more formal performer-direct/non-performer-indirect dichotomy based in the statutory classifications might find the direct liability label (i.e., rooting the liability on these facts in § 271(a)) objectionable. If so, the conduct at issue could simply be labeled a form of § 271(b) inducement that requires a lower mens rea than other forms of inducement, such as those where a device or a feature provided to a consumer has infringing and noninfringing uses. In fact, Mark Lemley made a similar proposal more than 10 years ago, suggesting a "sliding scale inquiry in which a more specific intent to infringe is required to find liability if the defendant's conduct is otherwise less egregious."³²⁹ Lemley even argued that the knowledge-of-the-patent requirement should be omitted in cases where the non-performer is a causer, but he would essentially limit the sweep of causation theories to cases in which corporate officers caused the corporation to act.³³⁰ As this Article illustrates, the concept of causation is not so narrow. And the applications of causal responsibility would lead to the same result whether they find a home under § 271(a) or § 271(b).

³²⁴ See Love & Yoon, *supra* note 300, at 1618 (discussing the importance of this fact in the context of the authors' proposal for reviving the customer suit exception). See *supra* notes 282-283 on modification issues in products liability cases.

³²⁵ For another example, see i4i Ltd. P'ship v. Microsoft Corp., 598 F.3d 831, 850–52 (Fed. Cir. 2010), *aff'd*, 131 S. Ct. 2238 (2011).

³²⁶ See, e.g., Smith & Nephew, Inc. v. Arthrex, Inc., 502 F. App'x 945 (Fed. Cir. 2013); Tyco Healthcare Grp. LP v. Biolitec, Inc., No. C-08-3129 MMC, 2010 WL 3324893 (N.D. Cal. Aug. 23, 2010).

³²⁷ See, e.g., AstraZeneca LP v. Apotex, Inc., 633 F.3d 1042 (Fed. Cir. 2010).

³²⁸ Cf. infra Part V.C.

³²⁹ Lemley, *supra* note 7, at 226; *see also id.* at 244 (Table 1). Under this approach, § 271(b) can be viewed as polymorphic, i.e., allowing for different levels of mens rea depending on circumstances. For a discussion of the concept of policy polymorphism in statutes, see Jonathan Siegel, *The Polymorphic Principle and the Judicial Role in Statutory Interpretation*, 84 TEX. L. REV. 339 (2005), and for an example in patent law in particular, *see id.* at 363 n.131).

³³⁰ Lemley, *supra* note 7, at 244-45.

However the proposed approach might be implemented, causation theories would not swallow all non-performer liability in patent law.³³¹ There are numerous cases under § 271(b), for example, in which the accused device has substantial noninfringing uses, and causation principles would therefore not apply.³³² And there are likewise numerous § 271(c) cases where the accused infringer sells a nonstaple article to another manufacturer rather than to a passive user.³³³ These cases will arguably also not be affected by the proposed approach. To be sure, one might make a strong argument that the mere sale of a nonstaple product lacking in a substantial noninfringing use within the meaning of § 271(c) *to anyone* is sufficient to attribute the acts of a user to a manufacturer on a causation theory.³³⁴ If so, then this argument would be another way to undermine the already controversial *Aro* case, which concluded that requirements to prevail under that section included the defendant's knowledge of the patent and spawned other mens rea hurdles in the way of holding indirect infringers liable.³³⁵

Nonetheless, I believe the causation approach fits more naturally with fact patterns involving passive users than with those involving active manufacturers working in technical fields, and who use the nonstaple device to build another product. The latter are in a much better position than the former to search for relevant patents, and cannot really be viewed as "conduits."³³⁶ More generally, the distinction between active and passive parties appears to be central to the causal responsibility cases. In particular, the level of activity and initiative of the *performing* party could make a difference to whether the *non-performing* party could be charged with causing as opposed to aiding-and-abetting an offense,³³⁷ with the attendant effect on proof of mens rea to hold the non-performing party liable. Indeed, a performer's relative passivity can often be an important predicate to treating the non-performer as a principal as opposed to an accomplice.³³⁸ Moreover, the passivity of end users (such as car drivers, with respect to their ability to discover latent manufacturing defects) figures prominently in products liability cases.³³⁹

While seems unlikely that Congress had active and passive users specifically in mind at the time the 1952 Act was passed, it was legislating against a common law regime where such a distinction was important. As I will further explain in Part VI, a reading of the Patent Act in view these principles is sensible. Two doctrinal ways to incorporate them in patent law are to move the

³³¹ See also infra Part VI.

³³² See, e.g., Warner Lambert Co. v. Apotex Corp., 316 F.3d 1348 (Fed. Cir. 2003) (providing an example in which a defendant drug manufacturer encourages a particular use, but a drug has multiple uses); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261 (Fed. Cir. 1986) (inducement claim where there are alternative approaches to solve Rubik's Cube); see also supra notes 52-53 and accompanying text.

³³³ See, e.g., Dawson Chem. Co. v. Rohm & Haas Co., 448 U.S. 176, 187-89 (1980).

³³⁴ See infra note 341 and accompanying text.

³³⁵ Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 488 (1964); *see* Sichelman, *supra* note 106 (criticizing *Aro*).

³³⁶ See supra notes 292-293 and accompanying text. Robertson, supra note 55, at 934.

³³⁷ See SMITH, supra note 184, at 118 ("The stronger the accessory's causal role and the weaker the perpetrator's, the greater should be the inclination to label the actions as principal through innocent agency.").

³³⁸ See supra notes 180-184 and accompanying text.

³³⁹ See supra Section IV.D.2.

passive-customer causation cases out of § 271(c) and into § 271(a) based on causation principles or, as suggested above in the § 271(b) context, to keep them within § 271(c) but treat this section as a "polymorphic" provision that allows for two different types of mens rea depending on the nature of the manufacturer-user relationship.³⁴⁰

However one gets there, at least in the egregious cases like *Lucent*, in which defendants exhibit both § 271(b) and § 271(c) behavior and customers passively perform claimed steps to get the value out of a product, the higher mens rea required by the Aro-GlobalTech-Commil line of cases should be bypassed on causation principles.³⁴¹ A mere sale of a nonstaple product to a passive user (i.e., where the sales of a product lacking in a noninfringing use are unaccompanied by advertising and manuals telling the users to use the product in an infringing way) presents a more difficult question. While it is tempting to say that such a sale does rise to the level of causationgiven that courts have treated sales of nonstaples as conclusive evidence of intent that the claimed steps be performed³⁴²—there is significance to the accused infringers' advertising and other actions taken to encourage the performance of the claimed steps. The acts of spelling out the function of the nonstaple product generate demand, ensure that the infringing feature does not "sit on the shelf" when it is a part of a larger product,³⁴³ and underscore the information asymmetry between the manufacturer and the user. Having said that, there may be scenarios where a mere sale of a nonstaple to a passive user rises to the level of causation, and the question of whether more than a mere sale is needed to establish causation-based liability is probably best addressed on a case-by-case basis.

B. An Interlude into Other Areas of IP

At this point, the Article's critiques of patent law's approach to non-performer infringement and its suggestions for improvements might be usefully compared to what actually happens in areas of intellectual property law other than patent. First, as Felix Wu astutely observed, accused instrumentalities in copyright law have substantial noninfringing uses basically by hypothesis.³⁴⁴ Copyright law exists to protect content, not technology, and devices that might enable copyright infringement are agnostic with respect to whether the content they help find, copy, display, or download is copyrighted or not. Same with trademark law—it makes no difference to the eBay platform whether the item it helps sell is counterfeit or not. Thus, many cases of non-performer infringement in copyright and trademark law resemble traditional aiding and abetting, and mens rea hurdles to prevail against those engaged in activities that are neutral

³⁴⁰ See supra note 329 and accompanying text.

³⁴¹ For a recent article suggesting that courts have focused too much on intent and not enough on conduct in induced infringement cases, see W. Keith Robinson, *Only a Pawn in the Game: Rethinking Induced Patent Infringement*, SANTA CLARA COMPUTER & HIGH TECH. L.J. (forthcoming 2016).

³⁴² See A. Samuel Oddi, Contributory Infringement/Patent Misuse: Metaphysics and Metamorphosis, 44 U. PITT. L. REV. 73, 91-92 (1982) (collecting cases).

³⁴³ See supra note 322 and accompanying text.

³⁴⁴ Felix Wu, *Secondary Copyright Remedies*, 14th Annual Intellectual Property Scholars Conference, Berkeley, CA (Aug 8. 2014).

with respect to the underlying intellectual property right at issue are reasonable and necessary.³⁴⁵ Not so in many patent law cases. Patent law protects the underlying technology, and the manufacturer that makes the technology is generally in control of whether to design (or redesign) its product in a way that is infringing or noninfringing-or negotiate with the patentee for a license.³⁴⁶ In contrast to defendants in indirect copyright and trademark infringement cases, manufacturers that provides articles lacking in substantial noninfringing use are dependent on the customer's whim; indeed, they leave the users no choice but to infringe.³⁴⁷

Second, copyright (and trademark) cases show that the line between direct and indirect infringement is not always clear-cut, and that both the provider and the user can be direct infringers³⁴⁸—an issue that patent law has utterly failed to appreciate. In *Religious Technology* Center v. Netcom On-Line Communication Services, Inc.,³⁴⁹ for example, it was contested whether bulletin board servers merely enabled the making of copies of copyrighted materials by users or whether they were so involved in the copying that it could be said that they were infringing directly. To be sure, the issue in *Netcom* was not framed in causal imputation terms—rather, the court grappled with whether the servers were actually making copies.³⁵⁰ Nonetheless, Netcom specifically alluded to the idea that some threshold causal contribution must be met before a defendant could be held directly liable.³⁵¹

The issue came up again in several cases³⁵²—including, most recently, in American Broadcasting Companies, Inc. v. Aereo, Inc., a case that reached the Supreme Court.³⁵³ Aereo involved a technology that enabled the streaming of specific content, often copyrighted, directly to the service's subscribers upon a user's request.³⁵⁴ Even though the user in Aereo selected the content and pressed "play," the service provider was held to be *directly* liable for copyright

³⁴⁵ Cf. supra Section IV.C.

³⁴⁶ Of course, the control might be more limited if the manufacturer is "ambushed" by a patent, but it is still the case that the manufacturer, not the user is the right entity to deal with the infringement.

³⁴⁷ For an extended argument that the substantial noninfringing use doctrine that borrowed from patent law's 35 U.S.C. § 271(c) never caught on in practice, see Peter S. Menell & David Nimmer, Legal Realism in Action: Indirect Copyright Liability's Continuing Tort Framework and Sony's De Facto Demise, 55 UCLA L. REV. 1 (2007); see also Peter S. Menell & David Nimmer, Unwinding Sony, 95 CALIF. L. REV. 941 (2007).

³⁴⁸ Tiffany provides a trademark example. In that case, the plaintiff made colorable claims of direct and indirect trademark infringement against eBay. 600 F.3d 93 at 101-10.

³⁴⁹ 907 F. Supp. 1361 (N.D. Cal 1995). I thank Shyam Balganesh and Patrick Goold for drawing the relevance of the issues in Netcom and Aereo to this Article to my attention.

³⁵⁰ *Id.* at 1368-73.

³⁵¹ Id. at 1370 ("Although copyright is a strict liability statute, there should still be some element of volition or causation which is lacking where a defendant's system is merely used to create a copy by a third party."). Interestingly, in this copyright case the service provider was passive (and therefore a minor causal contributor), but the user was active. The result that the provider could only be liable indirectly, if at all, under these circumstances, is consistent with the approach in this Article.

³⁵² See, e.g., CoStar Grp., Inc. v. LoopNet, Inc., 373 F.3d 544 (4th Cir. 2004); Cartoon Network LP v. CSC Holdings, Inc., 536 F.3d 121, 132-33 (2d Cir. 2008) ("[T]he purpose of any causation-based liability doctrine is to identify the actor (or actors) whose 'conduct has been so significant and important a cause that [he or she] should be legally responsible."") (quoting PROSSER & KEETON, *supra* note 126, at 273). ³⁵³ 134 S. Ct. 2498 (2014).

³⁵⁴ *Id.* at 2507.

infringement.³⁵⁵ Espousing a view that seems to underlie the assumptions behind the patent cases we have been considering, the dissent maintained that the defendant, Aereo, could not be directly liable because it did not perform a volitional act.³⁵⁶ But the six justices in the majority were not persuaded. While the Court justified direct liability for Aereo based on the purpose of the specific statutory provision of the Copyright Act at issue (designed to deal with cable providers),³⁵⁷ the Court was unmistakably moved by the active involvement of the service provider in the infringement. For example, the Court found it important that "Aereo sells a service that allows subscribers to watch television programs, many of which are copyrighted, almost as they are being broadcast," and that "[i]n providing this service, Aereo uses its own equipment, housed in a centralized warehouse, outside of its users' homes."³⁵⁸ Indeed, Rebecca Giblin and Jane Ginsburg maintain that courts should build on Aereo by explicitly focusing on the level of participation of the accused entity in the infringement and, in effect, abandon the formalistic performer/nonperformer and direct/indirect dichotomies in cases where they do not make sense.³⁵⁹ This view is consistent with Douglas Husak's insightful theoretical article that legal liability can sometimes be predicated based not on a defendant's act, but on his or her control of the situation.³⁶⁰ This is causal responsibility in action, and Aereo's overall approach is thus consistent with that in this Article.³⁶¹

Finally, a service provider's ability to police non-infringing behavior raises another interesting issue that comes up in secondary liability cases in other areas of intellectual property law.³⁶² For example, in *Tiffany (NJ), Inc. v. eBay*, the evidence showed that eBay took great pains to attempt to prevent trademark infringement arising from sales of counterfeit products, sometimes without prompting from trademark owners like Tiffany.³⁶³ But what exactly would it mean for a manufacturer of a device lacking in any noninfringing use (and who naturally advertises the sole use, which happens to be infringing, to generate demand for the product), to police infringement by the end users of its products? Sell the device and then ask the customer not to use it?³⁶⁴ The fact

³⁵⁵ Id.

³⁵⁶ Id. at 2513 (Scalia, J., dissenting).

³⁵⁷ Id. at 2508-10 (majority opinion).

³⁵⁸ *Id.* at 2506. Compare these activities to the activities of some manufacturers in patent cases.

³⁵⁹ Rebecca Giblin & Jane C. Ginsburg, We (Still) Need to Talk About Aereo: New Controversies and Unresolved Questions after the Supreme Court's Decision, 38 COLUM. J. L. & ARTS 109 (2014).

³⁶⁰ See Husak, supra note 53. Husak's article is about criminal liability, but nothing in the reasoning limits his theory to criminal law.

³⁶¹ This Article references control throughout. *See, e.g., supra* notes 53, 188, 196, 281, 296 & 346 and accompanying text.

³⁶² See, e.g., Fonovisa, Inc. v. Cherry Auction, Inc., 76 F.3d 259 (9th Cir. 1996). For a comparison of indirect liability theories in copyright and trademark law, see Mark Bartholomew & John Tehranian, *The Secret Life of Legal Doctrine: The Divergent Evolution of Secondary Liability in Trademark and Copyright Law*, 21 BERKELEY TECH. L.J. 1363 (2006).

³⁶³ 600 F.3d 93, 98-100 (2d Cir. 2010).

³⁶⁴ To be sure, it is more difficult to obtain the information needed to discover patent versus trademark infringement. Again, though, the non-performer is in a better position than the performer to get this information in the patent cases of the sort that I have described. *Cf. supra* note 346 and accompanying text.

that these very questions seem incoherent further points out the flaw in the current approach in patent law.

C. Divided Infringement Cases

The causation framework also provides an alternative route to the salutary result that the Federal Circuit reached in divided infringement cases under its dubious vicarious liability approach.³⁶⁵ The solution parallels that proposed for cases in Section A, except here the user performs all, rather than just some, elements of the patent claim at issue. As before, the test for attribution is whether one party has caused the act of another. Thus, we can ask whether the device, when used as intended, is only capable of performing the infringing steps, or whether it has substantial noninfringing uses. And we can also ask whether the manufacturer intends for a passive user to perform the steps of a patent claim and encourages the user to do so.

Under this approach, one would probably conclude that the owner of the website in *Move*, Inc. v. Real Estate Alliance, Ltd., the real estate search case discussed above, causes the customer to select the geographic area within a map.³⁶⁶ This is what the website was designed to do, and the "click here" instruction encouraged the customer to perform the steps that are a part of the claim, while the website server performed the rest;³⁶⁷ the customer's role was passive. Of course, the customer was interested in finding real estate, and it chose to use defendant's website. But the mechanism by which it obtained the information required performance of steps covered by a patent, and the customer did what the defendant's website told it to do-performing those steps in the process. The defendant thus provided a tool and gave end users reasons for engaging in actions corresponding to the claimed steps, as well as instructions that helped push the end users further toward carrying out those actions.³⁶⁸ As a result, the performance of the clicking steps was fully expected and predictable. Those steps, then, are attributable to the defendant website owner on causation principles, which means that it performed all the steps either by itself or via causal imputation. The defendant would thus be liable as a direct infringer. Given the accused infringer's active participation in the performance of the "tagging" step in Akamai, the same result would obtain in that case, but without the odd reliance on vicarious liability.³⁶⁹

Of course, facts in divided infringement cases vary widely and, in some, questions might arise about the sufficiency of the causal link needed to attribute the conduct of the user to the manufacturer or service provider. Interesting scenarios are presented by method of treatment patents involving diagnostic tests. As explained by Christopher Holman, a typical set of facts in suits for infringement of such patents might include the following: "a physician might order a diagnostic test, but an independent laboratory performs that test and provides the physician with

³⁶⁵ See supra Section V.D.

³⁶⁶ 709 F.3d 1117 (Fed. Cir. 2013).

³⁶⁷ See supra notes 129-134 and accompanying text.

³⁶⁸ See supra notes 174-176 and accompanying text.

³⁶⁹ See supra notes 135-142 and accompanying text.

the results, and he or she uses the information to inform treatment decisions."³⁷⁰ In an article written prior to the August 2015 Federal Circuit's decision in *Akamai*, Holman contended that, "[i]n the absence of an agency relationship between the physician and laboratory, which often will not exist in practice, it will be difficult to hold any party liable for infringement under the current interpretation of divided infringement law."³⁷¹ While *Akamai* likely changed this result, it might be argued that the causation theory provides another, more solid ground for justifying the physician's (or medical researcher's) liability. Thus, the laboratory test step might be imputed to the person ordering the test, who would then be deemed to perform all of the steps of the patent claim. In other cases, of course, the causal link might be insufficient or the chain of causation might be cut off by an intermediary who is active.

VI. Objections

Several closely related objections, many of which I already alluded to throughout the Article, might be raised against this approach. I mention and address each one in turn.

First, one might contend that it is very difficult to find relevant patents and figure out whether they cover a product.³⁷² Thus, the argument continues, some level of scienter must be retained in patent law, at least for indirect infringement cases. This critique, however, is in severe tension with the strict-liability nature of patent infringement³⁷³—meaning that we do not require notice or scienter in direct infringement cases. And the lynchpin of strict liability is causation, not fault.³⁷⁴ While fault can be used to protect marginal participants in the infringement,³⁷⁵ that reasoning does not apply to the activities of defendants discussed in this Article because of their extensive roles in the infringement. Moreover, infringement by a non-performer harms the patentee economically just as much as infringement by a performer.³⁷⁶

³⁷⁰ Christopher M. Holman, Caught Between a Rock and a Hard Place: How Limelight Compounds the Challenges Facing Biotechnology Innovators After Mayo and Myriad, 33 BIOTECHNOLOGY L. REP. 135, 137 (2014); see also Erik P. Harmon, Note, Promoting the Progress of Personalized Medicine: Redefining Infringement Liability for Divided Performance of Patented Methods, 42 HOFSTRA L. REV. 967 (2014).

³⁷¹ *Id.*

³⁷² Incidentally, most of the concerns about patent notice have been voiced without distinguishing direct or indirect infringement. *See, e.g.*, Christina Mulligan & Timothy B. Lee, *Scaling the Patent System*, 68 NYU ANN. SURV. AM. L. 289 (2012).

³⁷³ For a discussion of similar issues in trespass, another strict liability tort, *see supra* notes 270-278 and accompanying text.

³⁷⁴ Cf. Bartholomew, Cops, Robbers, and Search Engines, supra note 101, at 830-40.

³⁷⁵ *Cf. supra* Section IV.C.

³⁷⁶ Incidentally, most of the concerns about patent notice have been voiced without distinguishing direct or indirect infringement. *See* Mulligan & Lee, *supra* note 372. But the disparate treatment of manufacturers and users under current law makes very little sense in cases where products provided to passive consumers lack noninfringing uses. If anything, the manufacturer is much better equipped than the customer to deal with the notice problems of patent law because it operates in the relevant technology space.

A second objection is that my proposed approach in effect extends the coverage of method claims, which cover steps rather than apparatuses or devices. This objection maintains that the patent owner should live with the consequence of the choice to claim the invention in method form.³⁷⁷ In particular, it is thought that the problems encountered in divided infringement cases could have been avoided with better claim drafting.³⁷⁸ But method claims, like apparatus claims and other claim forms, are explicitly authorized in the statute, and it would be odd to have a law of infringement under which such claims are frequently left without an effective remedy.³⁷⁹ In addition, method claims, including claims that might present divided infringement problems, might sometimes be the only choice for protecting inventions in certain fields.³⁸⁰

Furthermore, it seems odd that the distinction between method and apparatus claims has more or less been ignored for the purpose of patent eligibility³⁸¹ and exhaustion,³⁸² but in infringement cases we insist on placing hyperformalistic limits on method claims that ignore the notions of causal responsibility. Indeed, what this Article proposes is not an extension of the scope of method claims. Liability based on causing action of another is recognized as an inherent route to legal responsibility throughout the law,³⁸³ and any distinction between method claims and other claim types is trumped by the more general principle that we are responsible for the acts that we cause.³⁸⁴ Congress in 1952 did not seek to override this principle, but instead sought to codify

³⁷⁷ *Cf.* Lemley, *supra* note 65. Had the claims been drafted in apparatus form, a manufacturer could be sued, without controversy, for direct infringement based on "making" or "selling" the article. *See* Karshtedt, *supra* note 60, at 923-24 n.53 (discussing method and apparatus claims).

³⁷⁸ See Lemley, supra note 65.

³⁷⁹ See, e.g., Stacie L. Greskowiak, *supra* note 135; Sichelman, *supra* note 106 (arguing that infringement of many patents on important technologies will not be compensated during the time before the accused indirect infringer is faced with a demand letter or an infringement complaint, and became aware of the patent).

³⁸⁰ *Cf. generally* Christopher T. Abernethy, *Cruel Hand of* Bilski: *Culminating the Shortsighted Crusade for the Marginalization of the 'Process' Patent* (May 2009) (unpublished comment), *available at* http://papers.ssrn.com/abstract=1420205 (describing challenges to the patent eligibility of method claims directed to certain subject matter). Of course, in many of these cases, the patent owner in theory has a remedy against the direct infringer, who actually performs the method claim steps. But, as numerous authorities have recognized, in many cases such a strategy is impractical if not impossible. Moreover, the very purpose of the indirect infringement statute was to enable lawsuits against upstream manufacturers where suits against direct infringers were impractical. *Hearings before Subcommittee No. 3 of the House Committee on the Judiciary on H.R. 3866*, 81st Cong., 1st Sess., 1 (1949) (subtitle of the bill: "A Bill To Provide for the Protection of Patent rights Where Enforcement Against Direct Infringers Is Impracticable").

³⁸¹ See Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2360 (2014); see also Mayo Collaborative Servs. v. Prometheus Labs, Inc., 132 S. Ct. 1289, 1294 (2012) (deriding excessive reliance on "draftsman's art") (citation omitted). *Cf.* Oddi, *supra* note 342, at 109 ("There appears to be an unarticulated assumption on the part of the majority in *Dawson* that in many, if not all, instances of contributory infringement the patent owner is being deprived of patent protection due to some technicality of patent law.").

³⁸² Quanta Computer, Inc. v. LG Elecs., Inc., 553 U.S. 617 (2008). *But cf.* Carnegie Mellon Univ. v. Marvell Tech. Grp. Ltd., 807 F.3d 1283 (Fed. Cir. 2015) (taking a step toward achieving some logical consistency between how method claims are treated for the purpose of exhaustion versus damages).

³⁸³ See supra Part IV. In particular, as experience with criminal cases teaches, courts often deemed causation theories to be implicit in the statutes—even in the face of the rule of lenity and the rule that courts cannot create new crimes— and became explicit only with adoption of the omnibus causation provision, 18 U.S.C. § 2(b), in the late 1940s. *See supra* notes 225-239 and accompanying text.

³⁸⁴ In patent cases, this happens when a product that can only perform a patented process is sold to a passive user.

common-law theories of non-performer liability in an infringement statute that, as the accompanying Conference Report explicitly mentions,³⁸⁵ incorporates the concept of causation.

A third objection posits that my proposed approach is nonetheless contrary to statute. The argument is that the 1952 Patent Act was meant to segment rigorously performer and non-performer liability for patent infringement. Under this view, performer infringement can only be "direct" and would fall under Section 271(a), and non-performer infringement can only be indirect and would fall under §§ 271(b) or (c). Those objecting on this ground might point to the language in the Conference Report that "Paragraphs (b), (c), and (d) relate to the subject referred to as contributory infringement," which "has been applied to enjoin those who sought to cause infringement by supplying someone else with the means and directions for infringing a patent."³⁸⁶ They might also refer to the language, which describes the purpose of § 271(b), that "[o]ne who actively induces infringement as by aiding and abetting the same is liable as an infringer."³⁸⁷ These objectors would then conclude that direct non-performer liability would be contrary to the intent of the statute.

This objection misses the larger point of the Article that a formalistic focus on the performer/non-performer distinction not helpful. First, it is wholly uncontroversial that acts of others can be imputed to an entity to hold it directly liable based on the "agency or contractual relationship" or "joint enterprise" standards.³⁸⁸ Thus, it is difficult to argue that direct infringement can lie only when the defendant *itself physically performed* all of the asserted method claim's steps. The question, then, is not whether non-performer liability can be direct—it obviously can be-but what sorts of mechanisms we can properly use to impute the acts of others onto nonperformers. Second, as indicated in the discussion of the second objection above and in Section II.A, these siloes probably do not reflect the flexible common law doctrine that predated the adoption of § 271. As I have explained in this Part, there is no evidence that the 1952 Act sought to accomplish anything else other than codify the universe of common law concepts that justify attribution of conduct of one party to another.³⁸⁹ These concepts include assistance (i.e., aiding and abetting), inducement, and causation, which are all explicitly mentioned in the Conference Report and other legislative history of the 1952 Act.³⁹⁰ The infringement statute therefore must allow for attribution under all of these theories-and it would be wholly consistent with the common law to require different levels of mens rea to prove the liability of, for example, an aider-

³⁸⁵ S. Rep. 82-1979, 82nd Cong., 2nd Sess. 1952, 1952 U.S.C.C.A.N. 2394, 2402, 1952 WL 3180, at *2402; *see also* Aro Mfg. Co. v. Convertible Top Replacement Co., 377 U.S. 476, 492 (1964) ("Congress enacted § 271 for the express purpose of reinstating the doctrine of contributory infringement as it had been developed by decisions prior to *Mercoid*, and of overruling any blanket invalidation of the doctrine that could be found in the *Mercoid* opinions."). ³⁸⁶ 1952 WL 3180, at *2402.

³⁸⁷ *Id.* at 2421.

³⁸⁸ Akamai Techs., Inc. v. Limelight Networks, Inc., 797 F.3d 1020, 1022-23 (Fed. Cir. 2015).

³⁸⁹ 1952 WL 3180, at *2402; *see also* CHISUM ON PATENTS §17.04[3] (2012); Rich, *supra* note 77.

³⁹⁰ 1952 WL 3180, at *2402 ("The doctrine of contributory infringement has been part of our law for about 80 years. It has been applied to enjoin those who sought to cause infringement by supplying someone else with the means and directions for infringing a patent."); *see also supra* note 95 and accompanying text.

and-abettor as opposed to a causer.³⁹¹ And for the real purists, the theories of infringement I propose here may be formally housed in § 271(b) in any event.³⁹²

Fourth, and closely related, trying to parse the words "actively induces infringement of a patent" in § 271(b) to glean what sorts of attribution theories are allowed is, I believe, unhelpful.³⁹³ Judge Linn's observation in his dissent in the first en banc Akamai decision that, unlike the federal criminal "aiding and abetting" statute, its patent infringement analog does not explicitly include a causation-type theory, proves too much.³⁹⁴ For one thing, a literal reading of § 271(b) would exclude aiding and abetting theories-because aiding and abetting a distinct concept from inducement—and that just cannot be the correct reading.³⁹⁵ Indeed, the Conference Report adds that "[p]aragraph (b) recites in broad terms that one who aids and abets an infringement is likewise an infringer," suggesting that a broad range of theories is captured by this statute (and the word chosen, "induce," calls causation concepts to mind in any case).³⁹⁶ As long as imputation under established theories of attribution is shown, infringement should lie, and causal responsibility is extremely well-established. Moreover, a textualist approach to § 271 seems generally untenable: for example, few would seriously argue that § 271(b) lacks any mens rea requirement³⁹⁷—even though, unlike 18 U.S.C. § 2(b), it lacks the word "willfully."³⁹⁸ The mens rea requirements that are ultimately inferred must, then, be based on common law. And common law includes both aiding-and-abetting and causation theories of non-performer responsibility, with their corresponding different mens rea hurdles.³⁹⁹

A fifth concern, already discussed earlier, is that the proposed approach targets seemingly nonculpable acts. In contrast to the provider of a poisoned drink of a fraudulent document, the manufacturer in these patent cases does not engage in malum in se—it simply puts a product into the stream of commerce. This critique, however, misses the mark on a number of levels. First, the causation approach naturally follows from the strict liability nature of patent infringement. In a regime of liability without fault, causation is the determinative inquiry. Of course, to impute the

³⁹¹ See supra notes 329-330 and accompanying text; see also supra Sections IV.B & IV.C.

³⁹² See supra notes 329-330 and accompanying text.

³⁹³ 35 U.S.C. § 271(b).

³⁹⁴ Akamai Techs., Inc. v. Limelight Networks, 692 F.3d 1301, 1344 (Fed. Cir. 2012) (en banc) (Linn, J., dissenting), *rev'd*, 134 S. Ct. 2111 (2014).

³⁹⁵ Karshtedt, *supra* note 1, at 915 n.10.

³⁹⁶ 1952 WL 3180, at *2402 (emphasis added).

³⁹⁷ At least one commentator has: Soonbok Lee, Note, *Induced Infringement as a Strict Liability Claim: Abolishment of the Specific Intent Requirement*, 4 HASTINGS SCI. & TECH. L.J. 381 (2012) (arguing that proximate causation principles, rather than intent, should underlie induced infringement). One issue with this argument is that there is a mens rea of intent inherent in "inducing," or causing, someone to act. *See supra* note 44 and accompanying text; *see also* Rich, *supra* note 77.

³⁹⁸ For a discussion of the significance of the word "willfully" in 18 U.S.C. § 2(b), *see* Weiss, *supra* note 39, at 1447-51.

³⁹⁹ Thus, I disagree with the contention that "[o]nly specific forms of causation of others' infringement, such as active inducement or contributory inducement, constitute infringement under the U.S. Patent Act." John M. Golden, *Injunctions as More (or Less) than "Off Switches": Patent-Infringement Injunctions' Scope*, 90 TEX. L. REV. 1399, 1450 (2012). I submit that "active inducement" encompasses the notions of aiding-and-abetting and causation.

acts of performers onto non-performers, there is a kind of mens rea element that must be proven intent that another perform the acts. This aspect of causation inquiry, however, does not convert patent infringement into a fault-based tort, but simply establishes a necessary causal tie between the non-performer and the actions of the performer. Moreover, the very claim that non-performer liability in patent law is a type of an intentional tort that, like other intentional torts, must be malum in se is seriously flawed on a number of levels. For example, intentional torts like battery do not always require culpable intent, i.e., intent to cause harm. Well-intentioned but unwanted touching is still a battery⁴⁰⁰—just as nonculpable sales and uses of claimed inventions are still infringements. And in addition, the very characterization of non-performer liability as grounded in intentional tort concepts is inaccurate when causal principles are at play. Analytically, there is no need to prove the culpable mens rea, in addition to what is required of the underlying offense, of one who performs an action not by itself but through another.⁴⁰¹

Moreover, this critique cannot account for large swaths of so-called "regulatory crimes," which often fall into the category of malum prohibitum (rather than malum in se) and involve liability without fault. Consider, for example, the liability of corporate officers whose companies place adulterated drugs into the stream of commerce.⁴⁰² Here, criminal liability is imposed for a clearly nonculpable act of running a company. And although strict criminal liability is highly controversial for numerous reasons, strict liability in tort—while often criticized—is widely accepted. Descriptively, the fact that patent infringement is a strict liability offense is generally undisputed.⁴⁰³ Imposition of liability for nonculpable acts that nonetheless could be said to cause the acts of others that are covered by patent claims is fully consistent with this regime.

VII. Conclusion

Imputation of acts of performers to non-performers based on causal principles are longstanding routes of assigning legal responsibility. These approaches provide a path to liability in circumstances where strict adherence to notions of liability styled as "derivative," "secondary," or "indirect" leads to unsatisfying results. Indeed, problems with the direct/indirect labels may be one of the reasons that criminal law has moved away from a formalistic distinction between principals and accomplices. And tort law has often eschewed direct and derivative labels altogether. Yet patent law continues to rely on performer/non-performer and direct/derivative distinctions to a fault, erecting high hurdles to hold non-performers liable and ignoring the notions of causation. As long as we have a law of patent infringement that explicitly recognizes non-performer theories of liability, we should accept imputation theories based on causation. These theories are consistent with intuitive notions or legal responsibility and, indeed, with the explicit observation that, in many

⁴⁰⁰ See supra note 109 and accompanying text.

⁴⁰¹ See supra notes 209-212 & 241-242 and accompanying text.

⁴⁰² United States v. Park, 421 U.S. 658 (1975); United States v. Dotterweich, 320 U.S. 277 (1943).

⁴⁰³ But see Vishnubhakat, supra note 298.

patent infringement cases, the non-performer is more responsible for the acts that are covered by steps of the patent claims that the performer.



BEST PRACTICES IN PATENT LITIGATION

Hon. Faith Hochberg, U.S. District Court for the District of New Jersey (ret.) William Rooklidge, Partner, Gibson Dunn Eric C. Cohen, Partner, Brinks Gilson & Lione Eley O. Thompson, Partner, Foley & Lardner LLP Changes in Patent Litigation Under The Amendments to the Federal Rules of Civil Procedure

University of Akron School of Law Fourth Annual Patent Law Experts Conference February 8-9, 2016

Panelists

Panelists Hon. Faith Hochberg (Ret.) Eley O. Thompson, Foley & Lardner LLP William Rooklidge, Gibson Dunn Eric C. Cohen, Brinks Gilson & Lione

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Introduction

- 1. Overview Rule 1, the obligation of parties to litigate in a responsible and reasonable manner
- 2. Changes in requirements for pleading direct infringement in patent infringement cases due to the elimination of Form 18
- 3. Initial motion practice
- 4. Changes to the scope of discovery
- 5. Case management considerations

Overview Rule 1

Rule 1 was amended to emphasize that the *parties* and the court share the responsibility to manage cases in an efficient manner:

"Rule 1. Scope and Purpose

These rules govern the procedure in in all civil actions and proceedings in the United States district courts, except as stated in Rule 81. They should be construed, and administered, <u>and employed by the court and the parties</u> to secure the just, speedy, and inexpensive determination of every action and proceeding."

Overview Effect of *Octane* Decision

In patent cases, courts have increased power to punish litigants who bring frivolous cases or litigate in an irresponsible manner

Consider how the Supreme Court's Octane and Highmark decisions, giving trial courts greater latitude to award fees, impact decision-making by counsel and the courts on litigation strategy and compliance with the amended rules

Pleadings

Prior Law - In re Bill of Lading Transmission and Processing System Patent Litigation, 681 F.3d 1323, 1334 (Fed. Cir. 2012), held that Twombly-Iqbal applied to pleading indirect infringement but that Form 18, which did not meet the Twombly-Iqbal standards, governed pleading direct infringement (citing Rule 84)

Heightened Standard for Pleading Infringement

Amendment - Form 18 and Rule 84 have been abolished.

Consequence - The *lqbal-Twombly* plausibility standard now governs pleading direct infringement: A complaint must plead "enough factual matter" that, when taken as true, "states a claim to relief that is *plausible* on its face." *Bell Atl. Corp. v. Twombly*, 550 U.S. 544, 570 (2007). *Plausible* does not mean *probable*. Id.

What does this mean for pleading direct infringement?

- Claim charts?
- Something less?

Identifying all asserted claims and all accused products?

Pleading Infringement – Requirements of Pre-Filing Investigation, F. R. Civ. P. 11

Rule 11. Signing Pleadings, Motions, and Other Papers; Representations to the Court; Sanctions * * *

(b) Representations to the Court. By presenting to the court a *** paper *** an attorney or unrepresented party certifies that to the best of the person's knowledge, information, and belief, formed after an inquiry reasonable under the circumstances;

 it is not being presented for any improper purpose,
 the claims, defenses, and other legal contentions are warranted by existing law or by a nonfrivolous argument for extending, modifying, or reversing existing law or for establishing new law;

(3) the factual contentions have evidentiary support or, if specifically so identified, will likely have evidentiary support after a reasonable opportunity for further investigation or discovery; and

(4) the denials of factual contentions are warranted on the evidence or, if specifically so identified, are reasonably based on belief or a lack of information.

How Might Rule 11 Inform the Content of a Complaint?

A reasonable pre-suit investigation requires counsel to read the claims on the accused device, *Eon-Net LP v. Flagstar Bancorp*, 653 F.3d 1314, 1329 (Fed. Cir. 2011), and to "<u>interpret the asserted patent claims</u>..." *Q-Pharma, Inc. v. Andrew Jergens Co.*, 360 F.3d 1295, 1300 (Fed. Cir. 2004).

Best Practices – Is it a "best practice" to include at least one claim chart in a complaint for patent infringement?

What should be pled when the plaintiff needs discovery under Rule 11(b)(3) (e.g. software or information regarding an accused process)?

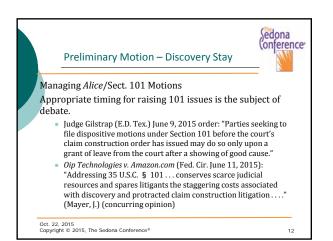
Pleadin	ig Requireme	nts – Propose	ed Legislation
Past Rules	Amended Rules (12-1- 2015)	HR 9	S 1137
Rules 8, 84 and Form 18	Rule 8 Prevailing Standard	Heightened Standard	Heightened Standard
Form statement: "The defendant has infringed and is still infringing the Letters Patent by making, selling, and using [product/process] that embody the patented invention"	<i>Iqbal/Twombly</i> Plausibility Standard	Specify: -Each patent and each claim -Each accused product/process -Claim chart specifically demonstrating infringement -Plaintiff's authority to assert patent	Specify: -Each patent and each claim -Each accused product/process -Claim chart specifically demonstrating infringement



Initial Motion Practice

- Motion to dismiss/judgment on the pleadings

 Rule 12(b)(6) strategy for insufficient pleading under *Twombly*; file motion or wait for infringement contentions under local patent rules?
 - b. Alice
 - 1) Should section 101 "Alice" issues be raised by these motions?
 - 2) Should section 101 issues be postponed until after claim construction?
- 2. Venue, transfer, jurisdiction issues
- 3. Stay pending IPR or CBM petition



Initial Motion Practice Motions to Stay Pending IPR or CBM

Timing

File motion as soon as PTAB petition is filed? OR

File motion after PTAB grants petition?

See VirtualAgility, Inc. v. Salesforce, Inc., 759 F.3d 1307 (Fed. Cir. 2014) (measuring factors at time motion is filed).

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Initial Motion Practice Motion to Stay Pending IPR or CBM

Wait to file PTAB petition after plaintiff serves infringement contentions to eliminate burden and expense of determining patentability of claims not at issue, BUT,

- 1. Can plaintiff add claims to infringement contentions?
- 2. Will plaintiff serve infringement contentions soon enough so that petition is timely?

Changes to the Scope of Discovery Amendments to Rule 26

Amended Rule 26(b)(1) (redlined & highlighted) (1) Scope in General. Unless otherwise limited by court order, the scope of discovery is as follows: Parties may obtain discovery regarding any nonprivileged matter that is relevant to any party's claim or defense and proportional to the needs of the case, considering the importance of the issues at stake in the action, the amount in controversy, the parties' relative access to relevant information, the parties' resources, the importance of the discovery in resolving the issues, and whether the burden or expense of the proposed discovery outweighs its likely benefit. Information within this scope of discovery need not be admissible in evidence to be discoverable, * * * Relevant information need not be admissible at the trial if the discovery appears reasonably calculated to lead to the discovery of admissible evidence. All discovery is subject to the limitations imposed by Rule 26(b)(2)(C).

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Changes to the Scope of Discovery Requirement of Proportionality

- 1. The scope of discovery is defined in part by proportionality
- "Relevant to any party's claim or defense" includes information that "may also support amendment of the pleadings to add a new claim or defense that affects the scope of discovery." Advisory Committee notes.
- 3. What information is needed in a patent infringement case to determine proportionality?

Is the Requirement of Proportionality a Significant Change?

The scope of discovery is now *defined* in terms of relevance and proportionality, but the factors defining proportionality were incorporated from former Rule 26(b)(2)(C)(iii)

Will courts view the requirement of proportionality as a significant change from practice under the former rules?

Is the removal of the "likely to lead to the discovery of admissible evidence" clause more significant?

Changes to the Scope of Discovery Best Practices

- 1. Consider requiring early disclosure of sales information to determine proportionality
- 2. Early disclosure of infringement/invalidity contentions per local patent rules
- 3. Consider phasing discovery

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Changes to the Scope of Discovery Best Practices

- 4. Should discovery be limited by relevance if a complaint specifically identifies only one of a number of accused products?
- 5. Effect of potentially dispositive issues on the timing of discovery
- 6. Timing of core discovery
- 7. Consider timing and extent of e-discovery

Case Management Considerations

Case Management Conference Parties must discuss: Proportionality

> Discovery of electronic information Parties should discuss Potential for early dispositive motions Staging discovery Limiting number of asserted claims Limiting number of terms for claim construction

Case Management Considerations Early Motion Practice

Does the concept of proportionality play a role in early motion practice

Should discovery be stayed pending resolution of an early potentially dispositive motion (e.g., *Alice*) How should motions to stay pending IPR or CBM proceedings be handled?

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Case Management Considerations Claim Construction

Timing of claim construction hearing

Early in case if parties identify potentially dispositive issue that does not require significant discovery? Later in the case if discovery is needed? Not necessary in some cases?

Limit number of asserted claims? Limit number of terms to be construed? Identify claim terms that are potentially dispositive In appropriate cases, couple claim construction hearing with summary judgment motion?

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Case Management Considerations Dispositive motions

Identify truly dispositive issues

Pre-screen potential summary judgment motions to avoid undue burden on the court or parties Require lead counsel sign and present summary

judgment motion

Determine whether to permit multiple summary judgment motions at different points in case, and if so, under what circumstances

Avoid summary judgment motions filed for improper purpose (e.g., "to educate the judge")

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Other Amendments To The Rules

Rule 26(c)(1)(B) specifically authorizes the court to limit discovery by "specifying terms," including "<u>the allocation of expenses</u> for the disclosure or discovery."

Rule 26(d)(2)(A) permits early Rule 34 requests, which may be served more than 21 days after service or the summons and complaint. The request is considered to have been served as at the first Rule 26(f)conference. Rule 26(d)(2)(B)

Rule 26(d)(3) permits the parties to stipulate to the sequence of discovery

Rule 26(f)(3) requires that a discovery plan include issues about preservation of e-discovery and whether to ask the court to include any agreement regarding privilege in an order under F.R. Evid. 502.

Other Amendments to the Rules Responses to Document Requests

Rule 34(b)(2) now requires

- -- That a party "state with specificity the grounds for objecting" to a request
- -- That "production must... be completed no later than the time for inspection specified in the request or another reasonable time specified in the response"
- -- That an "objection must state whether any
- responsive materials are being withheld on the basis of that objection"

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Other Amendments Rule 37 – Failure to Preserve ESI

Rule 37(c) provides that if ESI is lost because a party failed to take reasonable steps to preserve it and it cannot be restored or replaced: (1) upon finding prejudice 32 to another party from loss of the information, may order measures no greater than necessary to cure the prejudice; or

(2) only upon finding that the party acted with the

intent to deprive another party of the

information's use in the litigation may:

(A) presume that the lost information was

unfavorable to the party;

(B) instruct the jury that it may or must presume the information was unfavorable to the party; or

(C) dismiss the action or enter a default judgment.

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Additional Considerations for Trial Counsel

Octane defines "exceptional case" under Section 285 as "one that stands out from others with respect to the substantive strength of a party's litigating position ... *or* the unreasonable manner in which the case was litigated."

District courts have awarded fees based solely on the unreasonable manner in which a case was litigated.

How will this affect cooperation between counsel in the discovery planning process?



DESIGN PATENTS: PATENT LAW'S NEW FRONTIER

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Functionality and Design Patent Validity and Infringement

Perry J. Saidman¹

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I. Introduction²

Confusion and uncertainty surrounding the issue of functionality has plagued design patent law for some time, both as to determinations of validity and infringement.

Regarding design patent validity, there have been wide variations in the test for determining whether a claimed design is impermissibly functional, i.e., not ornamental, such that it constitutes non-statutory subject matter under 35 U.S.C. § 171. At various times courts have used tests that ask whether a claimed design is "primarily functional" or "solely functional", which are ostensibly different standards.³ Another formulation says that a claimed design is impermissibly functional if it is "dictated by" functional considerations.⁴

² An abbreviated version of this article was originally published in 77 Pat. TRADEMARK & COPYRIGHT J. 201 (December 19, 2008), and portions of that version are used here with permission.

³ Power Controls Corp. v. Hybrinetics, Inc., 806 F.2d 234 (Fed. Cir. 1986). See generally, P. Saidman and J. Hintz, The Doctrine of Functionality in Design Patent Cases, 19 U. BALT. L. REV. 352 (Fall 89-Winter 90).

⁴ See In re Carletti, 328 F.2d 1020, 1022 (C.C.P.A. 1964).

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More frequently than not, these facially different tests are used rather interchangeably by the courts.⁵ In addition, the Federal Circuit recently has inexplicably used trade dress functionality standards when determining design patent functionality.⁶

This article will demonstrate how the judicial test for functionality of a patented design has gone astray, particularly in the recent case law. Important definitions regarding the fundamental meaning of the words "functional" and "function" will also be proposed.

Regarding design patent infringement, the case law seems to have accepted without critical review that the presence of socalled functional features in a claimed design is a defense to infringement. This line of cases says that a court must identify during *Markman* claim construction the ornamental and functional features of a claimed design, and then somehow extract the functional features, prior to giving the case to the trier of fact to apply the test for infringement.⁷

In Egyptian Goddess v. Swisa, 543 F.3d 665 (Fed. Cir. 2008), the Federal Circuit sitting en banc, in discussing Markman claim construction of design patents, said: "...a trial court can usefully guide the finder of fact by addressing a number of ... issues that bear on the scope of the claim, [including]: "...distinguishing between those features of the claimed design that are ornamental and those that are purely functional". In support, the court quoted with approval from *OddzOn Prods., Inc. v. Just Toys, Inc.,* 122 F.3d 1396, 1405 (Fed. Cir. 1997): "Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional aspects of the design as shown in the patent." Egyptian Goddess, 543 F.3d at 680.

This article debunks the notion that a court needs to delineate between so-called functional and non-functional design elements during *Markman* claim construction before turning the case over to the trier of fact for applying the ordinary observer test for infringement.⁸

Further, it will be shown that it is only in exceedingly rare cases, so rare that no reported decision can be found, that the so-called functionality of the claimed design needs to be considered during the infringement phase. During such largely hypothetical circumstances, this should be done by the trier of fact rather than by the court.

Although the *Egyptian Goddess en banc* opinion had nothing to do with the merits of the issue of functionality, its pronouncement regarding the alleged functional/ ornamental dichotomy, like much other *dicta* that have previously slipped unnoticed into design patent jurisprudence⁹,

8 C.f. C. Zieminski, A Function for Markman Claim Construction in Design Patents, 90 J. PAT. & TRADEMARK OFF. SOC'Y 326 (May 2008).

9 The most notorious being the shibboleth: "Design patents have almost no scope", In re Mann, 861 F.2d 1581, 1582 (Fed. Cir. 1988).

⁵ See Rosco, Inc. v. Mirror Lite Co., 304 F.3d 1373, 1378 (Fed. Cir. 2002); Eldon Indus., Inc. v. Vanier Mfg., Inc., 923 F.2d 869 (Fed. Cir. 1990).

⁶ Brief for Industrial Designers Society of America as *Amicus Curiae* in Support of Combined Petition for Panel Rehearing and Rehearing *En Banc*, PHG Tech's, Inc. v. St. John Co's, Inc., 469 F.3d 1361 (Fed. Cir. 2006) (No. 2006-1169).

⁷ OddzOn Prod's, Inc. v. Just Toys, Inc., 122 F.3d 1396, 1405 (Fed. Cir. 1997); Spotless Enter's, Inc. v. A&E Prod's Group L.P., 294 F. Supp. 2d 322 (E.D.N.Y. 2003).

needs to be brought to the attention of design patent practitioners so that clarity might emerge in future cases.

II. *de facto* and *de jure* Functional: A Critical Distinction

It is necessary at the outset to differentiate between two distinct meanings of the word "functional".¹⁰ As noted by Judge Rich in the seminal Morton-Norwich trade dress case¹¹, there are two quite different meanings of the word: de facto functional refers to a design or a feature that performs a function; de jure functional in the context of design patents refers to a design that fails to present an appearance that is not dictated by function alone¹², *i.e.*, one for which there are no alternate designs that perform the same function¹³. A de facto functional design or feature may also be *de jure* functional, under very limited circumstances, to be discussed below.

It will also be necessary to keep in mind the difference between the claimed design as a whole, and the individual features of the claimed design (which of course make up the claimed design as a whole).

The only designs that qualify for design patent protection are, *inter alia*,

"...ornamental designs *for an article of manufacture*...." 35 U.S.C. §171 (emphasis added). An article of manufacture is akin to a useful article in copyright jurisprudence, *i.e.*, "...an article having an intrinsic utilitarian function that is not merely to portray the appearance of the article...." 17 U.S.C. §101. Thus, patentable industrial designs inherently have *de facto* functional characteristics and features¹⁴; otherwise, they would be displayed in the halls of an art museum, and be much better served by copyright protection.

The public buys industrial designs (*i.e.*, articles of manufacture), because of how they work *and* how they look. The form and function of a product of industrial design are ideally "inextricably intertwined." Brandir Int'l Inc. v. Cascade Pacific Lumber Co., 834 F.2d 1142, 1144 (2d Cir. 1987). Courts have recognized the difference between *de jure* and *de facto* functional features of an industrial design:

There is no dispute that shoes are [*de facto*] functional and that certain features of the shoe designs in issue perform functions. However, a distinction exists between the [*de facto*] functionality of an article or features thereof and the [*de jure*] functionality of the partic-

¹⁰ The failure to distinguish between these two different meanings has been the root cause for much of the confusion in the law of design patent functionality. A good example of this confusion, as it pertains to parsing of so-called functional and ornamental elements during *Markman* claim construction, is painfully evident in *Spotless Enter's*, *supra* note 7, at 345-347 ("...even elements that are not solely dictated by function are not included in the [*Gorham*] comparison to the extent they are functional...").

¹¹ In re Morton-Norwich Prod's, Inc., 671 F.2d 1332 (C.C.P.A. 1982). Judge Rich's logical lexicon unfortunately did not lead to widespread judicial adoption.

¹² The Supreme Court, specifically addressing design patents, set forth the proper test for design patent functionality as follows: "To qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone." Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 148 (1989).

¹³ Best Lock Corp. v. ILCO Unican Corp., 94 F.3d 1563, 1566 (Fed. Cir. 1996) ("A design is not dictated solely by its function when alternative designs for the article of manufacture are available.").

¹⁴ Hupp v. Siroflex of Am., Inc., 122 F.3d 1456, 1460 (Fed. Cir. 1997) ("...the fact that the article of manufacture serves a function is a prerequisite of design patentability, not a defeat thereof.").

ular design of such article or features thereof that perform a function. Were that not true, it would not be possible to obtain a design patent on a utilitarian article of manufacture.

Avia Group Int'l Inc. v. L.A. Gear California Inc., 853 F.2d 1557, 1563 (Fed. Cir. 1988).

The USPTO agrees:

The distinction must be maintained between the ornamental design and the article in which the design is embodied. The design for the article *cannot be assumed* to lack ornamentality merely because the article of manufacture would seem to be [*de facto*] primarily functional.

Manual of Patent Examining Procedure ("M.P.E.P.") §1501.04(c) [R-5] (emphasis in original).

It should be apparent from even this brief discussion that if the individual *de facto* functional features of an article of manufacture claimed in a design patent were removed from consideration prior to applying the ordinary observer infringement test, there would in most cases be nothing left of the patented design to compare to the accused design. This cannot be the law.

III. Design Patent Validity and Functionality A. The Traditional Test: Alternate Designs

Although there was some confusion in the early case law about the proper standard for determining whether an overall claimed design was impermissibly *de jure* functional,¹⁵ there never was any question that a design patent is invalid when the overall claimed design is determined to be *de jure* functional, since the statutory requirement that a design be "ornamental" is then not satisfied, 35 U.S.C. §171.

There are a number of well-reasoned cases in which the generally accepted standard for determining whether the entire claimed design is impermissibly de *jure* functional is whether there are alternate designs for performing the same function¹⁶. This makes perfect sense, since the overriding policy behind the functionality doctrine is to prevent a design patent from monopolizing a function that should only be monopolized by a utility patent. CHISUM ON PATENTS §23.03[4] (2006). If the function of the overall claimed design can be performed by other designs, then the design patent ipso facto is not monopolizing that function and the claimed design is not *de jure* functional.

Functionality is the converse of the statutory requirement that a claimed

¹⁵ P. Saidman and J. Hintz, supra note 3.

¹⁶ See Avia, 853 F2d at 1563; Best Lock, 94 F3d at 1566; Hupp v. Siroflex, 122 F3d at 1460; Seiko Epson Corporation v. Nu-Kote International, Inc., 190 F3d 1360, 1368 (Fed. Cir. 1999) ("The 'ornamental' requirement of the design statute means that the design must not be governed solely by function, i.e., that this is not the only possible form of the article that could perform its function"); Rosco, 304 F.3d at 1378 ("...if other designs could produce the same or similar functional capabilities, the design of the article in question is likely ornamental, not functional."); Unique Functional Prod's, Inc. v. Mastercraft Boat Co., Inc., 82 Fed. Appx. 683, 690 (unpub., Fed. Cir. 2003) ("We do agree with [the patentee] that the rectangular coupler having a width and a height not substantially greater than those of the trailer extension arm to which the coupler mounts is not purely functional, because one could, after all, make a differently shaped coupler that includes a rectangular opening to receive that extension arm.").

design must be "ornamental" under 35 U.S.C. 8171. Functionality historically has always been an invalidity defense, rather than something the absence of which is required to be proven by the patentee in order to establish infringement.¹⁷ Again, a design patent applicant inevitably claims de facto functional features as part of his overall design, and the PTO examines the overall visual appearance of the entire claimed design, including intrinsic de facto functional features, to ensure that it is overall new, original, ornamental (i.e., not de jure functional), and non-obvious, and grants the patent on these bases. Issued patents are presumed valid, 35 U.S.C. §282 (2007). If a defendant in litigation believes that the PTO erred, i.e., if the defendant believes the overall claimed design was dictated solely by functional considerations and is thus invalid, it has the burden of proving same by clear and convincing evidence.¹⁸ The Federal Circuit described as "stringent" its standard for invalidating a design patent on grounds of functionality.19

B. The Meaning of "Function" Relative to Alternate Designs

When faced with the validity defense of functionality under 35 U.S.C. § 171, the

patent owner logically will focus on proving up alternate designs that perform the same function.²⁰ It has been this author's experience, serving as an expert witness in many design patent cases,²¹ that in such circumstances the patentee will tend to define the "function" of the design broadly (e.g., an electrical connector that conducts electricity from a cable to another conductor), while the accused infringer will tend to define the "function" of the design much more narrowly (e.g., an electrical connector used to hand-terminate a cable during installation thereof to a TV, the connector conducting electricity from a shielded coaxial cable to a center-pin conductor with a hex tightening nut, where the electrical signal is attenuated no more than 5%, the hex nut occupies no more than 25% of the length of the connector, and the connector is crimped to the cable during installation rather than soldered).²² Obviously, the plaintiff's broad definition renders it easier to find alternate designs that perform the same function, while the accused infringer's narrow definition makes it more difficult, and perhaps impossible, to identify alternate designs that perform the same function.

No case has ever addressed the issue of how to properly define the "function" for

22 The tendency of the patentee to define the function broadly, and the accused infringer to define it narrowly, is reminiscent of the pre-*Egyptian Goddess* battle over the point of novelty, where the patentee would posit a broad point of novelty that could easily be found in the accused design, while the accused infringer would posit a narrow point of novelty that is unquestionably not present in the accused design. The inability of the courts, or anyone else, to define the "correct" point of novelty is one reason that led to its demise in *Egyptian Goddess*, 543 F.3d at 678.

¹⁷ This is analogous to the situation that existed prior to *Egyptian Goddess*, *supra*, concerning novelty of a claimed design, the lack of which is an invalidity defense under 35 U.S.C. §102. But the so-called point of novelty test turned the requirement for patentable novelty into something the presence of which had to be found in the accused design in order to establish infringement. *Egyptian Goddess* thankfully excised the illogical point of novelty test from design patent jurisprudence.

¹⁸ L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1122 (Fed. Cir. 1993).

¹⁹ Rosco, 304 F.3d at 1378.

²⁰ See note 37, infra.

²¹ The Federal Circuit recently rejected testimony from an expert patent lawyer, who did not have the requisite technical background, that went to validity and infringement, Sundance, Inc. v. Demonte Fabricating, Inc., __F.3d __ (Fed. Cir. 2008), leaving open, however, the possibility of relevant patent lawyer testimony going to PTO procedure, *Markman* claim construction, and the like, and/or where the patent lawyer indeed has the requisite technical background.

which alternate designs need to exist in order to defeat a functionality defense. Should a court adopt the patentee's general function, or the accused infringer's specific function?

One reason it should be the general function of the design rather than its specific function is because if it were the latter, it would be a rare alternate design that would meet the test, and most design patents would be held invalid. The practice of parading expert engineers to the stand, waiving the technical spec sheets for the design, and testifying as to its numerous, inevitable and specific *de facto* functional features would increase; the accused infringer would posit such an extremely narrow definition of the "function" so that no alternates exist, thereby purportedly invalidating the patent.

In other words, if in order to defeat a functionality defense, proof of alternate designs is required that perform the detailed function of the design, down to its specific engineering specifications, it is much more likely than not that no alternative designs would exist. Recalling that the ultimate industrial design is one that ideally blends form and function,23 under such circumstances it would be the rare design patent that would be held valid, since de facto functional engineering considerations are a normal, often paramount, factor in designing a final product. That does not mean that such de facto functional features cannot also be ornamental, as pointed out elsewhere in this paper.²⁴

Here is a hypothetical example of how, under a narrow definition of "function", a design patent could be held invalid. In *Elmer v. ICC Fabricating, Inc.,* 67 F.3d 1571 (Fed. Cir. 1995), the patented design was a "VEHICLE TOP SIGN HOLDER".²⁵



Suppose the evidence revealed that the fins at the corners of the sign holder needed to be shaped in the manner illustrated in order to minimize the amount of material used, while still providing the necessary support for the corners of the sign holder. Suppose further that the evidence showed that the small upper protrusion was the inevitable, indeed necessary result of using a particular state of the art injection-molding machine. And suppose the evidence further indicated that the designer had conducted a number of premarket studies using various different configurations of the overall sign holder (e.g., square, octagonal, flat, etc.) and found that the only one that allowed consumers to see the messages on the sides of the sign from all angles, while minimizing the amount of material needed to support the sign, was indeed the equilateral triangular configuration that became the subject of the design patent. Assume also that engineers designed the dimensions of the sign holder, e.g., the footprint, so as to fit

²³ See Brandir, 834 F.2d at 1144.

²⁴ See section IV.A, et seq.

²⁵ U.S. Patent No. D290,620 (filed Apr. 29, 1985).

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on top of any vehicle including the smallest of compact cars, and the height of the sign holder was dictated by the size of the particular store's sign as well as to minimize the amount of material used. And the horizontal lower flaps were necessary to stabilize and support the sign holder on the top of a vehicle. Perhaps also the particular dimensions of the lower flaps (length and width) were chosen to minimize the amount of material (an everpresent consideration) while providing the necessary stability. Were the trier of fact to adopt such a narrow definition of "function"²⁶ (perhaps even throwing in the fact that the sign was used exclusively for pizza delivery stores), it is much more likely than not that no alternatives exist that perform that specific function, and thus the design patent would be held de jure functional and invalid.27

Another fundamental reason that the general function of the design rather than its specific function should control the functionality inquiry is because the claimed design is not limited by any of the detailed engineering specifications of the commercial product that embodies the The vast majority of claimed design. design patents, properly procured, do not mention the material used to create the design²⁸, or specific dimensions of the design²⁹, and, while properly disclosing the underlying article of manufacture, do not disclose the design of the product with which the claimed design is intended to

be used.³⁰ It is well established that limitations of the commercial embodiment of a claimed design should not be imported into the design patent specification or claim. *See, e.g.*, Berry Sterling Corp. v. Pescor Plastics, 122 F.3d 1452, 1455 (Fed. Cir. 1997) ("[T]he design patent for an 'ornamental design for a container to fit a vehicle cup receptacle' contained 'no height or volume limitations, no requirements that the container fit in the majority of cup holders, and no stability limitations imposed by the claim.''').

In PHG Tech's, LLC v. St. John Co's, Inc., 529 F. Supp. 2d 852 (M.D. Tenn. 2007), the accused infringer asserted a functionality defense to a design patent claiming the arrangement of labels on a medical label sheet. One theory of this defense was predicated on the argument that the configuration of the labels on the patented label sheet was dictated by the use of certain software to drive the printers that print the label sheets, i.e., if someone wanted to use a label sheet with a different configuration of labels, they would have to change the software so that the printer would print the labels. The accused "The labels infringer St. John argued: must be positioned [on the sheet] where the printer is programmed to print."

St. John cited the *Best Lock* case in arguing for the following rather broad proposition: "[t]here can be no doubt that the need to employ a particular patented design for purposes of compatibility with

²⁶ Accused infringers would likely argue that the definition of the "function" for a particular design is a matter of law for the court to determine under Markman.

²⁷ The general function posited by the patent owner of Elmer's sign is discussed in section IV.C., infra.

²⁸ For example, there was no mention in Elmer's design patent that his sign is made of plastic.

²⁹ While the relative dimensions of a claimed design, e.g., its height to length ratio, are part of the claim, the absolute dimensions are not.

³⁰ Indeed, Elmer's claimed vehicle top sign holder does not disclose, and is not limited by, the particular vehicle(s) with which it is to be used. To hold otherwise would subject the patent owner to far-fetched defenses such as 'the patent owner only uses the claimed design on compact cars, while we use ours only on full-sized sedans'.

a complementary product renders that design functional and precludes valid design patent protection". It contended that the configuration of PHG's label sheet is dictated solely by functional concerns because of the specific requirements of PHG's particular software, just as "[a]ny aesthetic appeal of the key blade design shown in the '636 patent" at issue in *Best Lock Corp.* was "the inevitable result of having a shape that it dictated solely by functional concerns." *PHG*, 529 F. Supp. 2d at 862.

The court did not agree with this argument, and held that PHG's design patent was valid, i.e., was not legally functional, reasoning:

[I]n this case, PHG has presented evidence that the design patents include no limitations as to the size of the label sheet, no requirement that the label sheet fit in a standard printer or be made from specific materials such as laser stock, and no specification that the label sheet be able to run through a high temperature laser printer. Thus, under Berry Sterling Corp., the court is not to consider whether the patented designs can be used with any particular software or printer because there are no such limitations on the scope of PHG's design patents. Thus, as a matter of law, St. John cannot demonstrate that PHG's design patents are invalid on the ground that the labels must be

positioned specifically to work in combination with PHG's computer software. *PHG*, *Id*.

The logical extension of this line of reasoning is that since design patents are granted only on "designs for an article of manufacture,"³¹, i.e., *de facto* functional designs, and since the title and the claim of the design patent must identify the same article of manufacture,³² it is the title of the patent, and thus its claim, that properly defines the article of manufacture, and hence the function, for which alternate designs need to be identified to defeat a functionality defense.

Thus, in a previous example, if the title of the design patent on an electrical connector is ELECTRICAL CONNECTOR, then proof of alternate designs of electrical connectors that conduct electricity from a cable to a conductor would properly defeat a functionality defense.³³ In the example of Elmer's sign holder, where the title and claim of the design patent is VEHICLE TOP SIGN HOLDER,³⁴ then proof of alternate designs of sign holders that are used on vehicle tops would properly defeat a functionality defense. To find otherwise would effectively shut down the USPTO.

C. Trade Dress Functionality and Design Patent Functionality

Several recent Federal Circuit cases that address functionality in the context of

^{31 35} U.S.C. § 171 (2007).

³² M.P.E.P. §1503.01(I) [R-5].

³³ This is borne out by the fact that the USPTO has issued over a thousand design patents on electrical connectors, see Class D13/147, all of which would be invalid if a narrow definition of "function" was used. Note also that the USPTO examines claimed designs for functionality. M.P.E.P. §1504.01(c) [R-5], and thus the thousands of presumptively valid electrical connector design patents have passed USPTO muster regarding functionality.

³⁴ See Elmer's U.S. Patent. No. D290,620 (filed Apr. 29, 1985).

design patent validity illustrate confusion between trade dress functionality standards and design patent functionality standards. Thus far unchallenged, these cases also amply illustrate that bits and pieces of *dicta*, repeated and combined, make poor case law, advocacy and scholarship.

1. The Supreme Court Knows the Difference

The Supreme Court's seminal decision in *Inwood Laboratories* is an oft-quoted case for the definition of functionality.³⁵ But, the relevant portion of the *Inwood* case was about trademark functionality³⁶, and had nothing whatsoever to do with design patent functionality.

Why, one might well ask, should the functionality tests be different as between trademarks and design patents?

For one thing, the Supreme Court has itself distinguished between trademark functionality and design patent functionality. In a case decided 7 years after and without any reference to *Inwood*, the Court defined design patent functionality as follows: "To qualify for protection, a design must present an aesthetically pleasing appearance that is not dictated by function alone." Bonito Boats, Inc. v. Thunder Craft Boats, Inc., 489 U.S. 141, 148 (1989). The Federal Circuit and other courts have cited this definition with approval in design patent cases on numerous occasions.³⁷

2. Reliance on *dicta* Makes Poor Law *PHG Tech's LLC v. St. John Co's Inc.*³⁸ incorporated trade dress functionality standards into a design patent case without any discussion about the propriety of doing so.

PHG had a design patent on a medical label sheet that had eleven rows of labels with each row containing three labels.

In granting a preliminary injunction, the district court found that the claimed design was not dictated by function, i.e., the different sizes and arrangement of labels are primarily ornamental "because there are other ways to arrange different sizes of labels on an $8-1/2'' \times 11''$ sheet." *PHG*, 469 F.3d at 1364.

In vacating, the Federal Circuit said: "Our case law makes it clear that a full inquiry with respect to alleged alternative designs includes a determination as to whether the alleged "alternative designs would adversely affect the utility of the specified article". *PHG*, 469 F.3d at 1367. As for the "case law that makes it clear", the *PHG* court cited only *Berry Sterling Corp. v. Pescor Plastics, Inc.*³⁹

In *PHG*, the Federal Circuit also stated: "Our cases reveal a 'list of... considerations for assessing whether the patented

39 122 F.3d 1452 (Fed. Cir. 1997)

³⁵ Inwood Lab's Inc. v. Ives Lab's Inc., 456 U.S. 844, 851 n.10 (1982) ("A product feature is functional if it is essential to the use or purpose of the article or if it affects the cost or quality of the article.").

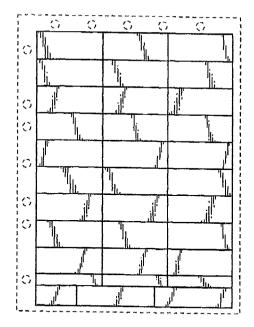
³⁶ More particularly, the Court left undisturbed the finding that the color of pill capsules was functional to patients, i.e., they rely on color to differentiate their medicines, and thus such color is not protectable under the broad trademark definition of functionality. *Id.*

³⁷ See Best Lock Corp. v. ILCO Unican Corp., 94 F.3d 1563, 1566 (Fed. Cir. 1996); Hupp et al. v. Siroflex of America, Inc., 122 F.3d 1456, 1460 (Fed. Cir. 1997); Titan Tire Corp. v. Case New Holland, Inc., 2007 WL 2914513, *9 (S.D. Iowa 2007); Superior Merchandise Co., Inc. v. M.G.I. Wholesale, Inc., 2000 WL 322779, *4 (E.D. La. 2000); M & R Marking Sys., Inc. v. Top Stamp, Inc., 926 F. Supp. 466, 472 (D.N.J. 1996); Krueger Intern., Inc. v. Nightingale Inc., 915 F. Supp. 595, 605 (S.D.N.Y. 1996); Liqui-Box Corp. v. Reid Valve Co., *Inc.*, 1990 WL 261394 (W.D. Pa. 1990).

^{38 469} F.3d 1361 (Fed. Cir. 2007).

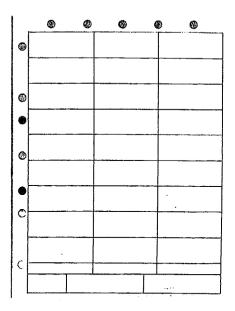
PHG's U.S. Patent No. D263,836

Accused Design



design as a whole – its overall appearance – was dictated by functional considerations'". *PHG*, 469 F.3d at 1366. Yet *Berry Sterling* is the only Federal Circuit design patent case that has ever contained any such "list of considerations", to wit:

- 1. whether the protected design represents the best design;
- 2. whether alternative designs would adversely affect the utility of the specified article;
- 3. whether there are any concomitant utility patents;
- whether the advertising touts particular features of the design as having specific utility; and
- 5. whether there are any elements in the design or an [sic] overall appearance clearly not dictated by function. *Berry Sterling*, 122 F.3d at 1456.



There was no authority cited in *Berry Sterling* for the "list of considerations", and thus the list is pure *dicta*, appearing at the very end of the decision after the substantive issues had been decided. The *PHG* court elevated this *dicta* into a rule of law which this author believes was ill-advised.

The "list of considerations" is eerily similar to commonly used trade dress factors for determining functionality. In *ex parte* prosecution of applications to register trade dress in the USPTO, the Trademark Manual of Examining Procedure ("T.M.E.P.") states at § 1202.02(a)(v) [R-5]:

Trade dress is functional if it is essential to the use or purpose of a product or if it affects the cost or quality of the product. Inwood Lab's, Inc. v. Ives Lab's, Inc., 456 U.S. 844, 850, 214 U.S.P.Q. (BNA) 1, 4 n.10 (1982). A determination of functionality normally involves consideration of one or more of the following factors, commonly known as the "Morton-Norwich factors:"

 the existence of a utility patent that discloses the utilitarian advantages of the design sought to be registered;

(2) advertising by the applicant that touts the utilitarian advantages of the design;

(3) facts pertaining to the availability of alternative designs; and

(4) facts pertaining to whether the design results from a comparatively simple or inexpensive method of manufacture.

In re Morton-Norwich Prod's, Inc., 671 F.2d 1332, 1340-1341 (C.C.P.A. 1982).

The T.M.E.P. goes into quite some detail concerning how an Examining Attorney should evaluate each of these factors, *see* T.M.E.P. §§1202.02(a)(v)(A)-(D).

Since the 2001 Supreme Court decision in *TrafFix*,⁴⁰ the USPTO has moved more towards the using the *Inwood* definition of functionality rather than assessing the *Morton-Norwich* factors,⁴¹ presumably because it is much more difficult for an applicant to overcome a functionality refusal under *Inwood's* broad definition. Nevertheless, the *Morton-Norwich* factors remain alive and well as evidenced by the extensive treatment thereof in the T.M.E.P., as well as in numerous court cases.⁴²

In *PHG*, these trade dress standards for determining functionality have been adopted, without serious discussion, as the standards for determining functionality of design patents.

PHG's "list of considerations" is attractive fodder for attacking design patents, both under the guise of the test for infringement and as an invalidity defense.43 As a result of PHG, which has yet to be challenged in a subsequent Federal Circuit case,44 patentees could be put to the test of not only defending charges that their proffered alternate designs do not adversely affect the utility of the claimed design, but that the claimed design is "the best design" (why would a design patentee not design, manufacture and sell the very best design she can?), that there are "concomitant utility patents" (obtaining a design patent and a utility patent on the same product to respectively protect ornamental and functional features is common practice), and that the patentee's advertising "touts particular features of the design as having specific utility" (advertising for articles of

⁴⁰ TrafFix Devices, Inc. v. Mktg. Displays, Inc., 532 U.S. 23 (2001).

⁴¹ See T.M.E.P. § 1202.02(a)(v) [R-5].

⁴² See, e.g., Fuji Kogyo Co., Ltd. v. Pacific Bay Int'l, Inc., 461 F.3d 675 (Fed. Cir. 2006); Valu Eng'g, Inc. v. Rexnord Corp., 278 F.3d 1268 (Fed. Cir. 2002); New England Butt Co. v. Int'l Trade Com'n, 756 F.2d 874 (Fed. Cir. 1985); *In re* Dippin' Dots Patent Litig., 249 F. Supp. 2d 1346 (N.D. Ga. 2003); Maker's Mark Distillery, Inc. v. Diageo N. Am., Inc., 2008 WL 4165456 (W.D. Ky. 2008).

⁴³ Fortunately, thus far only one reported decision, *Titan Tire Corp. v. Case New Holland, Inc.*, 2007 WL 2914513, at *9 (S.D. Iowa 2007), quotes the PHG "list", although the court did not discuss any of the factors in the list in reaching its decision that the tire tread design in issue was not *de jure* functional based on "the plethora of alternative shapes of tire lug heads."

⁴⁴ On remand, the district court in *PHG* found the patented design to be ornamental, not *de jure* functional, reasoning that: "... a myriad of medical label sheet designs could achieve the same functions that are achieved by the patented designs; that is, alternatives do not adversely affect the utility of the medical label sheet." PHG Tech's, LLC v. St. Johns Co's, Inc., 529 F. Supp. 2d 852 (M.D. Tenn. 2007).

manufacture routinely, and appropriately, tout utilitarian features). The last in the "list of considerations" is, in fact, the test for ornamentality: is the overall design clearly not dictated by function? How can this be a factor in the "list of considerations" to test for design patent functionality when it comprises the test itself?

Also, given that a design patent may be obtained on a design that has never been manufactured or sold, how would a court determine if such a design was the "best design," or whether alternate designs would adversely affect the utility of the claimed design?

A final piece of *dicta*, mentioned for the sake of completeness, appeared in *Amini Innovation Corp. v. Anthony California Inc.*,⁴⁵ where the Federal Circuit sloppily quoted the traditional *Inwood* trade dress functionality formulation, rather than the *Bonito Boats* design patent functionality formulation, in a design patent infringement case about a wood bed with carved ornamentation that had nothing whatsoever to do with the issue of functionality.

3. Should the Tests for Design Patent Functionality and Trade Dress Functionality Be the Same?

Is it appropriate that the functionality tests be the same for these two distinctly different forms of intellectual property?

No court has addressed this issue. Before assuming design patent functionality and trademark functionality should be determined by using the same criteria, the arguments on both sides should be carefully considered in an appropriate case.

It is this author's view that the tests are properly different because the underlying policy rationales and scopes of design patent and trade dress protection are quite different. In short, it should be more difficult to prove functionality of a design patent compared to functionality for trade dress because the former is a statutory scheme for protecting new and original designs, for articles of manufacture that may never have been produced, for a limited (14 year) duration, while the latter is a common law based scheme of avoiding consumer confusion for a design in actual use, that need be neither new nor original, that must be a distinctive source indicator as proven by secondary meaning, and that, with continued use in commerce, can last for an unlimited duration and therefore logically must not hinder competition in perpetuity.

Fundamentally, since an article of manufacture (the *sine qua non* of design patent protection) inherently has *de facto* functional features, what self-respecting lawyer cannot mount a good argument (previously limited to trade dress cases) that a particular feature affects the cost or quality of the design, or is essential to the use or purpose of the design?⁴⁶ Such a standard for design patent functionality would reduce design patents to sitting ducks for alleged infringers.⁴⁷

^{45 439} F.3d 1365, 1371-72 (Fed. Cir. 2006).

⁴⁶ Inwood Lab's Inc. v. Ives Lab's Inc., 456 U.S. 844 (1982).

⁴⁷ Those who may say that trade dress designs are sitting ducks for alleged infringers because of the functionality doctrine are partially correct, especially since the Supreme Court's *TrafFix* decision, *supra* note 40, that in addition to affirming *Inwood's* broad functionality definition, *supra* note 35, also found that disclosure of a feature in a utility patent (which happens often) constitutes strong evidence of functionality.

IV. Design Patent Infringement: The Ornamental/ Functional Dichotomy

Identification of ornamental and functional features of a claimed design in the infringement phase is only necessary in extraordinarily exceptional circumstances that would only rarely, if ever, arise in practice.

A review of the origin of this ornamental/functional dichotomy will be helpful in understanding this somewhat complex issue.⁴⁸

A. The Origin of the Problem

To understand where the courts went astray, for indeed they have, one must first examine the so-called *Read* test from the initial case that purportedly supports parsing functional and ornamental features prior to performing the *Gorham* infringement test.

Read Corporation v. Portec, Inc., 970 F.2d 816 (Fed. Cir. 1992), was based on the unstated but erroneous premise that a design patent cannot protect a product having features that perform a function. As noted previously, this is an absurd conclusion because all industrial designs have ubiquitous, inherent *de facto* functional features. The detriment to the design patentee in claiming those *de facto* functional features is that they may limit the scope of the resulting overall design⁴⁹.

In *Read*, the defendant Portec took the position in the district court that Read's

patented design was invalid based on *de jure* functionality. The district court in *Read*, in denying Portec's JNOV motion to that effect, had it exactly right:

We do not deny that the Read device performed a function. Nevertheless, its overall design was a choice made by the inventor who could have arranged the functioning parts in other, different designs. It is the "overall aesthetics of the various components and the way that they are combined" which constitute the "design" and which validly may be patented. Read Corp. v. Portec, Inc., 748 F. Supp. 1078, 1099 (D. Del. 1990).

In other words, the entire discussion of functionality in the district court was in the context of an invalidity defense – the word "functional" was not mentioned in the same sentence as "infringement". The court affirmed the jury verdict of validity and infringement.

On appeal to the Federal Circuit, the defendant Portec, perhaps stung by the impeccable logic of the district court concerning validity, attacked the jury's verdict of infringement by arguing that the only features in common between the patented and accused designs were functional, that Mr. Read had testified as such⁵⁰, and that Read had submitted no evidence concerning ornamental features. *Read*, 748 F. Supp. at 825. The only evi-

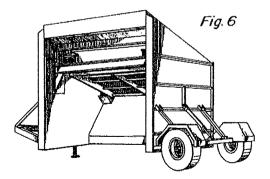
⁴⁸ Portions of this author's previous article *The Dysfunctional* Read *Test: Missing the Mark(man)* Regarding the Test for Design Patent Infringement, 90 J. PAT. & TRADEMARK OFF. SOC'Y 533 (July, 2008) are partially repeated here, but have been updated in accordance with the expanded analysis presented in this article.

⁴⁹ See the Elmer case, discussed in Section IV.C., infra.

⁵⁰ Mr. Read quite naturally testified that the features of his design were *de facto* functional, and of course they were. His material screening device was, after all, an industrial design, an article of manufacture. This qualifies his device for a design patent, rather than disqualifies it. It is a common but unsuccessful tactic for an accused infringer to prove (usually via the expert testimony of an engineer) that all of the elements of a claimed design perform a function, to which the proper response is: So what?

Read's U.S. Patent No. D263,836

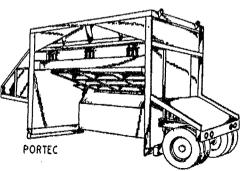
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dence relied upon by Read at trial to prove infringement was Mr. Read's answer "Yes" to the question of whether the *Gorham* test was satisfied.

Perhaps unhappy with the dearth of testimony concerning the ornamental features in Mr. Read's material screening device, the Federal Circuit chided Read for "misperceiving the holding of *Gorham*" and then made its notorious and illadvised pronouncement:

In *Gorham*, however, there was no preliminary issue respecting what the ornamental features of the design in issue were. The *Gorham* design patent claimed only the scroll work on the handle portion of table flatware.... Thus, all elements forming the claimed design were ornamental. Where this is not the case, that is, a design is composed of functional as well as ornamental features, to prove infringement a patent owner must establish that an ordinary person would be deceived by reason of the common features in the



claimed and accused designs which are ornamental. *Id.*

There are several problems with this pronouncement, which unfortunately has since been cited in design patent cases too numerous to count, including *Egyptian Goddess.*⁵¹ First, there is never "a preliminary issue" concerning identification of the ornamental features of a claimed design. What is ornamental is the overall appearance of the claimed design⁵²; the PTO has said so by issuing the design patent, and unless successfully challenged by an invalidity defense, remains so.

Second, Gorham's silverware is not purely ornamental. Gorham's claimed handle design performed the rather obvious function of enabling one to hold the silverware. A purely ornamental design, devoid of function, is more like a work of art, and can hardly be classified as an article of manufacture.

Third, and perhaps most significantly, it is illogical in most cases to suggest that there exists a special class of designs that

⁵¹ Egyptian Goddess, supra. 52 35 U.S.C. §171.

Gorham's U.S. Patent No. D1,440



are composed of de facto functional and ornamental features⁵³; again, by its very nature, an industrial design inherently includes a plethora of *de facto* functional features. The task is not to identify the existence of other features that are ornamental; the pertinent inquiry is whether those *de facto* functional features are *them*selves ornamental (i.e., not de jure functional) because their general functions⁵⁴ could indeed be embodied in other, differ-In other words, all ent-looking ways. functional features are themselves ornamental as a matter of law55, unless it is the rare case that there is no other way to make them look while retaining their general function. Even in such a rare case, the de jure functional elements are still part and parcel of the overall claimed ornamental design.

The Federal Circuit's unfortunate suggestion in *Read* that functional and ornamental features needed to be parsed, never before stated in any design patent case, thereafter became another overused and distracting element of proof in design patentees' infringement cases, wielded heavily by accused infringers, yet serving no policy or jurisprudential purpose.

By means of this one illogical paragraph in this one unfortunate case, functionality morphed from a validity issue into an infringement "defense", *i.e.*, that the patentee had to somehow identify and separate functional features from ornamental features prior to proving its case in chief. This so-called *Read* test is therefore a rather loose, indeed shaky lynchpin for the proposition of parsing ornamental and functional design features prior to performing the ordinary observer infringement test.

B. You Can't Use a Design Patent as a Utility Patent to Protect Functional Ideas

Let's delve a little deeper, to make the infirmity of the *Read* test even more apparent. The only case cited by the court in *Read* for its ornamental/functional pronouncement was *Lee v. Dayton Hudson*, 838 F.2d 1186 (Fed. Cir. 1988). However, the *Lee* court never suggested that ornamental and functional features of a claimed design need to be identified prior to performing the test for infringement. In contrast, the *Lee* court affirmed the notion

⁵³ There are fairly rare cases where an ornamental feature does not perform any function whatsoever, such as when it consists of surface decoration. See, e.g., In re Daniels, 144 F.3d 1452 (Fed. Cir. 1998).

⁵⁴ See Section III.B., supra.

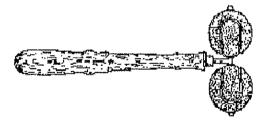
⁵⁵ As were Elmer's fins and protrusion. Elmer, supra. See discussion, infra at section IV.C.

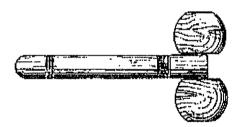
^{56 287} F.2d 192 (C.C.P.A. 1961).

^{57 328} F.2d 1020 (C.C.P.A. 1964).

Lee's U.S. Patent D259,142

Accused Design





that functionality is an invalidity defense by citing and quoting a string of functionality validity decisions, including the seminal C.C.P.A. decisions of *In re Garbo*⁵⁶ and *In re Carletti*.⁵⁷

But the court's overarching discussion in Lee was in response to the patentee's argument, oft made by those who have claimed too narrowly, that his design patent protected the concept of his design, rather than the way his design looked. The court confirmed the tautology that a design patent cannot be used to protect the general function or concept embodied in a particular design: "...a design patent is not a substitute for a utility patent." Lee, 838 F.2d at 1189. In a long series of decisions in which a design patentee attempted to wield its design patent as a utility patent, courts have likewise uniformly and quite properly held that the idea or concept embodied in a design patent cannot be used to stop a different-looking design that embodies the same idea⁵⁸ (this is akin to the idea/expression dichotomy in copyright law). In each of these cases,

including *Lee*, the court was essentially saying the same thing to the overreaching patentee: your design patent does not and cannot protect the concept or general (or specific) function of your product; the accused design, to infringe, must *look like* your overall patented design.

It is a stretch, to say the least, to move from this fundamental legal concept to one that requires delineation between functional and so-called non-functional features prior to determining infringement.

As aptly held by the *Elmer* court, and affirmed in *Egyptian Goddess*,⁵⁹ the bedrock test for design patent infringement is the (whether the claimed design same includes novel, old, ornamental or functional elements): the appearance of the accused design must be substantially the same overall as the patented design in the eye of an ordinary observer. Egyptian Goddess augmented the Gorham ordinary observer test by allowing consideration of the prior art, and thus of novel features, so that even that rare visually dominant de jure functional feature can be taken into

⁵⁸ See N.Y. Belting & P. Co. v. N.J. Car Spring & R. Co., 53 F. 810 (2d Cir. 1892), Kruttschnitt v. Simmons, 118 F. 851 (S.D.N.Y. 1902), Ashley v. Samuel C. Tatum, Co., 186 Fed. 339 (2d Cir. 1911), Applied Arts Corp. v. Grand Rapids Metalcraft Corp., 67 F.2d 428 (6th Cir. 1933), Keystone Retaining Wall Sys. Inc. v. Westrock, *Inc.*, 997 F.2d 1444 (Fed. Cir. 1993), Elmer v. ICC Fabricating, Inc., 67 F.3d 1571 (Fed. Cir. 1995), Sun Hill Industries, Inc. v. Easter Unlimited, Inc., 48 F.3d 1193, 1197 (Fed. Cir. 1995), Oddz-On Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396 (Fed. Cir. 1997).

⁵⁹ Egyptian Goddess, 543 F.3d at 678.

account during infringement analysis, as will be discussed below.

The lack of any logical or legal need to delineate between functional and ornamental design features prior to performing the *Gorham* infringement test is the reason that the court's pronouncement in *Egyptian Goddess* to the contrary is off the mark. But in all fairness, this question was not at issue in the *Egyptian Goddess* case, and presumably the court will in an appropriate case analyze this issue with the clarity it displayed in dispatching the point of novelty test in *Egyptian Goddess*.

C. Elmer Gets It Right

As a practical matter, it is really not all that difficult for an accused infringer or prospective knock-off artist to avoid infringement altogether by leaving out or sufficiently changing claimed *de facto* functional features to such an extent that its product does not look substantially the same overall as the patented design.

This was clearly demonstrated in the *Elmer* case - the first *Markman* case that construed a design patent claim. As noted previously, the patentee included in its overall claimed design, a triangular sign holder for mounting on the top of a vehicle, fins at each of the corners of the

triangle, plus a protrusion extending from the top of the sign holder. The patentee would dearly have loved the Federal Circuit to excise from its infringement analysis his de facto functional features of the fins and protrusion, because the accused design did not have those visual features. In fact, the Elmer plaintiff argued that the fin and protrusion elements shown in solid lines in his drawings were indeed functional, rather than ornamental, and should therefore not be included in the claim. The court rejected this argument, saying that the patentee could have omitted those allegedly functional features from its patent application drawings, but did not do so, and thus effectively limited the scope of its patent claim by including those features in it. Elmer, supra, at 1577.

The court held that a design patent claim is limited in scope to the entirety of what is contained in solid lines in the patent application drawings themselves. *Id.* Extending the logic of this rule, it should be clear that a design patentee claims the entirety of all features shown in solid lines in her drawings, regardless of whether such features are new, old, ornamental, *de facto* or *de jure* functional.

Elmer's U.S. Patent No. D290,620

Accused Design





D. Functionality of Individual Features

Regarding individual design features of an overall design, it is very difficult, as a practical matter, to identify any *de facto* functional design feature whose function cannot be performed by an alternate design⁶⁰. If the functional attributes of a particular feature of the claimed design can be manifested by other features that don't look like it, then that feature is *ipso facto* not a *de jure* functional feature, i.e., it is ornamental, and must be considered part and parcel of the design's overall appearance.

The analysis is only slightly different for that rare claimed design that includes a *de facto* functional feature that is also a *de jure* functional feature⁶¹. Even though an individual feature of an overall claimed design may in a rare instance be incapable of being embodied by a different-looking feature, and thus itself be de jure functional, such a feature should still not be parsed from the infringement analysis. For one thing, this is because the test for design patent infringement does not compare individual features, but rather requires the accused design to be substantially the same overall as the patented design. And the overall ornamental appearance of a claimed design may be composed of individual features that are themselves ornamental, novel, old, de facto functional, and/or de jure functional. A patentee claims such features at her peril, since all claimed visually significant features affect the scope of protection. Validity and infringement are not predicated on the novelty, non-obviousness, or functionality of each individual feature; it is the overall claimed design that matters. The PTO examined and allowed the entire claimed design, with all such features. And it is the entire claimed design that must be deemed substantially the same overall as the accused design in order for infringement to be made out.

Anyone is entitled to use by itself a *de jure* functional feature extracted from an overall claimed design, unless that feature is protected by a utility patent.

Elmer's design consisted entirely of *de facto* functional features whose appearances are in fact protected, but *only* as part of the overall claimed design, not individually. The fins and protrusion of Elmer are unquestionably *de facto* functional, *i.e.*, they perform certain general functions. The fins give extra support at the corners of the triangular sign holder, and the protrusion was presumably formed as a result of the molding of the sign holder.⁶² But, as explained above, a *de facto* functional feature whose function can be

62 The car-top sign itself is, of course, *de facto* functional since the sides of the sign carry a commercial message, and the triangular shape permits the commercial message to be seen regardless of the viewpoint of the observing consumer.

⁶⁰ This is true for the same reason that it is difficult as a practical matter to identify an entire claimed design that is dictated solely by functional considerations. Indeed, only one published Federal Circuit case has done so, *Best Lock, supra*, and under limited factual circumstances (an alleged "must fit" situation). The premise of *Best Lock* has been seriously questioned, *see* the cogent dissent of Newman, J., *Best Lock*, 94 F.3d at 1567, and Christopher J. Gaspar, *The Federal Circuit Locks Down the Ornamentality Requirement: Best Lock v. llco Unican*, 23 J. CORP. L. 179 (Fall, 1997), in which that author demonstrates that the majority in *Best Lock* lost sight of the difference between *de facto* and *de jure* functional.

⁶¹ For one thing, it is rare because it is difficult, as noted previously, to even identify a *de facto* functional feature whose general function cannot be embodied by a different looking feature. For another, it would be foolish for a patentee to claim *de jure* functional features - an enlightened patentee would put such features in broken lines to indicate that they form no part of the claimed design. *See* note 64, *infra*.

embodied by other, different looking designs is by definition ornamental. The function of Elmer's particular fins and particular protrusion could undoubtedly be embodied in a multitude of differentlooking ways and still perform the same general functions.

For *de facto* functional features that are not also de jure functional, such features are by definition ornamental; as such, substantial similarity can indeed, in fact must, be founded on such ornamental features in combination with any other purely ornamental features (e.g., surface decoration) that may be part of a claimed Thus, if a defendant shows that design. substantial sameness results only from common de facto functional features, it is of no moment since such common de facto functional features are themselves ornamental, unless there is no other way to embody them.

E. de jure *Functional Features of an Overall Claimed Design*

In those rare instances where an overall claimed design actually includes a *de jure* functional feature, despite the fact that such feature is part and parcel of the overall claimed design, it is fair to ask whether substantial similarity with an accused design is based *only* upon such *de jure* functional feature. Such an occasion would be even more rare than the already

rare occasion when a *de jure* functional feature is itself part of the patented design - so rare that it is only hypothetical; no reported decision exists. If substantial similarity with an accused design is based *only* upon such a *de jure* functional feature, then that feature must be a dominant visual part of the patented design, so dominant that it dwarfs other *de facto* or purely ornamental features in the eye of an ordinary observer. Although one can perhaps conceive of a hypothetical situation where this would be true⁶³, it is highly unlikely to occur as a practical matter.⁶⁴

One would think that such a visually dominant *de jure* functional feature would give rise to a legitimate invalidity challenge based on functionality. But it is still presumably possible, in that now rarest of rarest of rare circumstances, that even a visually dominant *de jure* functional feature would be insufficient to render the overall claimed design invalid.

Thus, in those rarest of rare circumstances when substantial similarity is based *only* on a common *de jure* functional feature, an accused infringer should logically be allowed to raise that as a defense to infringement. Why? Because anyone is entitled to make and sell a product whose *only* visual similarity to a claimed design is a common *de jure* functional feature (unless, of course, such feature is protected by a utility patent).

⁶³ The standard hypothetical is a claimed design that consists of a bowling ball having a surface ornamentation that covers only a very small portion of its exterior surface. The spherical shape of the bowling ball is dictated solely by function assuming that no other shape would roll down a bowling alley. Thus, the presumably dominant visual portion of the claimed design, its spherical shape, is *de jure* functional, even though the entire claimed design might be judged ornamental by virtue of the very small surface ornamentation.

⁶⁴ The bowling ball hypothetical of the previous note is very unlikely to occur in reality because a patentee would be foolish to claim the spherical shape in solid lines, subjecting his design patent not only to an invalidity challenge based on prior art (assuming bowling balls are old), but another invalidity challenge based on an overall design that is dictated solely by function. Whether or not such challenges are successful is beside the point; an informed patentee would be well advised to claim his design wisely, by putting dominant *de jure* functional elements in broken lines, to avoid having to expend substantial financial resources to defend against prior art and functionality validity challenges.

The question then becomes how should such a defense be properly raised? Does this require the court to identify and parse ornamental and *de jure* functional features under *Markman* prior to performing the test for infringement? For the answer to this, we need look only to the *Egyptian Goddess* decision.

F. Egyptian Goddess Sheds Light on Functionality As a Defense to Design Patent Infringement

1. Should There Be A "Point of Functionality" Test?

Egyptian Goddess excised from design patent law the point of novelty test that required the patentee to prove which features of his design are novel, and are then found in the accused design. Thus, *Egyptian Goddess* unquestionably removed from the court any supposed *Markman* procedure for parsing novel and nonnovel features as a matter of law. Moreover, *Egyptian Goddess* removed the burden from the patentee of proving its point of novelty, placing the burden of production of "comparison prior art" upon the accused infringer.⁶⁵

Taking a page from *Egyptian Goddess*, it would be similarly improper to impose a requirement for the court to parse ornamental and functional features as a matter of law, even in those rarest of rare circumstances when a *de jure* functional feature visually dominates the overall claimed design to such an extent that substantial similarity is based solely thereon. Further following the logic of *Egyptian Goddess*, it would be improper to impose such a requirement upon the patentee during its infringement case in chief.

If a patentee is required to identify ornamental and functional features prior to its infringement case in chief, i.e., under *Markman*, it would result in a rather pointless but heated pre-infringement battle where a defendant would be positing that identified *de facto* functional features were actually *de jure* functional features, while the patentee would be positing just the opposite, i.e., that such *de facto* functional features did not rise to the rare level of being also *de jure* functional.⁶⁶

If such a requirement is imposed not during *Markman* but during the patentee's case in chief, the case law might further devolve into a reverse "point of functionality" test where the patentee is required to prove first that its *de facto* functional features are not also *de jure* functional, and if it loses that battle, then prove that each such *de jure* functional feature is not found in the accused design, and if it loses that battle, then prove that such *de jure* functional feature does not so visually dominate the claimed and accused designs that substantial sameness is based solely thereon.

For one of the major reasons that the point of novelty test was dispatched by the Federal Circuit in *Egyptian Goddess*, a "point of functionality" test would also constitute a back door attack on validity by allowing and encouraging an accused

⁶⁵ Egyptian Goddess, 543 F.3d at 678-79.

⁶⁶ This is similar to the jockeying that took place prior to *Egyptian Goddess* where the patentee would put forward a point of novelty that was found in the accused design, while the accused infringer did the opposite – formulate a point of novelty that was not found in the accused design. This sort of gamesmanship had been well recognized in the courts. *See, e.g.*, Bush Indus., Inc. v. O'Sullivan Indus., Inc., 772 F. Supp. 1442 (D. Del. 1991) ("We find that Bush's formulations of the points of novelty in its designs are not only vague but also slippery...[The point of novelty method used by Bush] is the shopping list approach, since a shopping list will be rewritten for each trip depending on what the shopper needs at the time.").

infringer to posit that the *de facto* functional features of the claimed design are *de jure* functional, in effect attacking the validity of the patent during the infringement phase under the lower preponderance of evidence standard of proof, rather than the higher clear and convincing evidence standard of proof necessary to invalidate a patent.

It would also be a waste of judicial resources for a court during *Markman* claim construction to make such a determination⁶⁷ since, as noted above, it would be exceptionally rare for a claimed design to be so dominated by a *de jure* functional feature that substantial similarity would be predicated solely thereupon.⁶⁸

2. If Not A "Point of Functionality" Test, Then What?

Conceding that an accused infringer nevertheless ought to have an opportunity to prove that substantial similarity is based *only* upon common *de jure* functional features, how should this be done?

The answer again can be found in *Egyptian Goddess* where the court, in dispatching the point of novelty test, made the following findings significant to this discussion:

- 1. The ordinary observer test is the sole test for determining design patent infringement, *Egyptian Goddess*, 543 F.3d at 678;
- 2. The ordinary observer is deemed to view the differences between the

patented design and the accused product in the context of the prior art, *Id.* at 676;

- 3. Examining the novel features of the claimed design can be an important component of the comparison of the claimed design with the accused design and the prior art, *Id.* at 678; and
- 4. If an accused infringer elects to rely on so-called comparison prior art as part of its defense to a claim of infringement, the burden of production of that prior art is on the accused infringer, *Id.* at 678-79.

Once again, in that rarest of rare circumstances described above, an accused infringer should be allowed to rely on the infringement defense that substantial similarity is only due to similarity of a *de jure* functional feature by producing evidence that tends to prove that a visually dominant de facto functional feature in issue cannot be embodied by any other dissimilar feature. The patentee would presumably oppose such a defense by presenting evidence tending to prove that such a feature is merely *de facto* functional; evidence that establishes that there are alternate features, different looking features, that perform the same general function, such that the alleged *de jure* functional feature is in fact ornamental. If it loses that battle, the patentee could then take the position that any *de jure* functional feature does not so dominate the overall claimed design

⁶⁷ This is in line with the Federal Circuit's de-emphasis on verbalization of a claimed design as part of *Markman* claim construction. *See Egyptian Goddess*, 543 F.3d at 679.

⁶⁸ No reported case supports this hypothetical situation.

such that substantial similarity is based solely thereon.

To avoid the currently popular specter of an accused infringer relying upon engineers to testify as to the massive de facto functional qualities of the claimed design (which are always by definition present), and thereby diverting everyone's attention from the appearance thereof,⁶⁹ the accused infringer, to prove de jure functionality, should be limited to producing visual evidence of the following two types: (i) prior art, and (ii) contemporaneous (non-prior) art. The latter is appropriate regarding the issue of functionality since if such a feature is de jure functional, it matters not that it may only have been de jure functional at a certain point in time - it must remain de facto functional throughout its life, i.e., both before and after its creation, in order to ward off an attack as being *de jure* functional. And if the visual evidence is not in the prior art, e.g., it is only in contemporaneous art, it means that the alleged de jure functional feature is itself novel.

One might ask why the infringer should be limited to visual evidence? Is not expert testimony required that explains the function of the design, and whether there are any alternatives for performing that function? The answer is that it is the general function of the article of manufacture that controls. Thus, if one is considering alternate designs of an electrical connector, engineering testimony is not necessary to establish that the function of an electrical connector is to conduct

electricity from a cable to another conductor. Any designs that accomplish this general function will qualify as alternates, as discussed in Section III.B., supra. If no alternate designs exist that can conduct electricity from a cable to another conductor, the de jure nature of the claimed design will be apparent. Given that expert engineering testimony is unnecessary to establish the general de facto quality of the claimed article of manufacture, i.e., it is evident on its face, it is only the appearance of the design and features thereof that matters. That is, the question really is: does the prior or contemporaneous art visually establish that the general function can or cannot be performed by other, different-looking designs?

In sum, the alleged infringer can legitimately take the position that the alleged dominant *de jure* functional feature is visually found either in the prior art, or not (i.e., is novel).

3. Egyptian Goddess to the Rescue

Interestingly, the framework of *Egyptian Goddess* provides tools to handle either situation. If the evidence of *de jure* functionality is in the prior art, *Egyptian Goddess* already mandates that the ordinary observer is deemed to view the differences between the patented design and the accused product in the context of the prior art. And if the alleged *de jure* functional feature is novel, i.e., is not found in the prior art but only in contemporaneous art, *Egyptian Goddess* already mandates that examining the novel features of the

⁶⁹ To add insult to injury, courts have frequently used the inventor's own testimony about the (inevitable) *de facto* functional features of the claimed design to invalidate the patent based on functionality. *See Power Controls, supra* note 3; Eldon Indus., Inc. v. Vanier Mfg., Inc., 923 F.2d 869 (unpub., Fed. Cir. 1990); Five Star Mfg., Inc. v. Ramp Lite Mfg., Inc., 4 Fed. Appx. 922, 923 (unpub., Fed. Cir. 2001).

claimed design can be an important component of the comparison of the claimed design with the accused design.

Thus, no special procedure, or modification of the Egyptian Goddess infringement test, is necessary to allow design patent litigants to take into account those rarest of rare circumstances where: (i) a de facto functional feature may also be *de jure* functional; (ii) the *de jure* functional feature forms a visually dominant part of the claimed design; and (iii) substantial similarity with an accused design is predicated only upon such de jure functional feature. The procedure is already set forth in *Egyptian Goddess*: visually compare the patented design, the accused design and the prior art - this will itself establish whether the alleged de jure functional feature is old, or novel, or exists at all.

The accused infringer would likely provide the trier of fact with visual evidence that tends to show such feature is *de jure* functional, i.e., evidence that establishes that the *de facto* functional feature in issue cannot be embodied by any other dissimilar feature. To the contrary, the patentee would likely present to the trier of fact visual evidence tending to prove that such a feature is merely de facto functional, i.e., evidence that establishes that there are alternate features, different looking features, that perform the same general functions. This visual evidence would be in the form of prior and/or contemporaneous art, which would also determine whether the alleged de jure functional feature is old, or novel, thereby comporting with Egyptian Goddess' mandate to view substantial similarity in the context of the prior art. There would also be an issue of fact concerning whether any de facto feature that is also determined to be *de jure*

functional dominates the claimed design to such an extent that substantial similarity is based solely thereon.

This would place functionality on the same footing as lack of novelty – both are primarily invalidity defenses, but nevertheless may be taken into account in appropriate limited circumstances in determining infringement, but certainly not determined as a matter of law in the *Markman* phase.

The visual nature of the *Egyptian Goddess* mandate of comparing the claimed design, the accused design, and the prior art can thus be heeded in all situations.

V. Conclusion

Regarding design patent validity, this article has pointed out the critical importance of understanding the meanings of the words "functional" and "function", and the dangerous recent trend towards adopting trade dress functionality standards into design patent jurisprudence, converting an objective and easily applied test for alternate designs into a complex set of factual inquiries from which no design patent would be safe.

This article has also demonstrated the illogic of parsing ornamental and socalled functional features of a claimed design prior to performing the test for design patent infringement. Closely examined, and understanding the difference between *de facto* and *de jure* functional, it is clear that such parsing is unwarranted. Further, identification of functional features in the infringement phase is only necessary in those extraordinary limited factual circumstances, so rare that not a single reported decision can be found to support it, where a *de jure* functtional element so dominates a claimed design that substantial similarity is based solely thereon.

Relying on confusing and misunderstood case law, and the trade dress definition of functionality, one commentator has taken the position: "[t]he combination of this broader definition of functionality with the recognition that identification of functional features is properly part of claim construction, and that such features are deleted from the ordinary observer's comparison, may give new life to functionality of features as a defense in design patent cases."70

As hopefully made clear in this article, such an argument is based upon confusion between *de facto* and *de jure* functional features, relies upon *dicta* on top of *dicta* on top of *dicta*, is already taken into account by the design patent infringement analysis announced in *Egyptian Goddess*, and perhaps most importantly, makes no sense in the real world of industrial design patent protection.

70 F. Medlin, Functionality of Individual Features in Design Patents, 77 PAT. TRADEMARK & COPYRIGHT J. 139, 144 (December 5, 2008).

If It Ain't Broke – Don't Fix It Commentary on the USPTO's Contemplated Changes to Amendment and Continuation Practice

By Christopher V. Caraniⁱ

The USPTO is contemplating changes for determining whether amendments or continuation practice. Specifically, the USPTO has sked whether it is "useful for design examiners to consider certain factors for determining whether an amended/continuation design claim satisfies the written description requirement of 35 U.S.C. §112." Fed. Reg. Vol. 79, No. 25 (February 6, 2014) ("Federal Register Notice"). The USPTO's proposed multi-factored approach is wholly unnecessary given (1) the exceptionally rare nature of the perceived problem (as the problem has been explained by the USPTO), (2) existing legally binding precedent from the Federal Circuit on §112 as applied to design patents, and (3) the unwanted uncertainty, inefficiencies and inconsistencies that would result if the proposed approach was implemented.

1. *En Banc* Federal Circuit Has Adequately Addressed 35 U.S.C. §112 in the Context of Design Patents Rendering the Proposed Multi-Factored Analysis Unnecessary

The *en banc* Federal Circuit in *Racing Strollers*, succinctly stated:

"As a practical matter, meeting the ... requirements of § 112 is, in the case of an ornamental design, <u>simply</u> a question of whether the earlier application contains illustrations, whatever form they may take, <u>depicting</u> the ornamental design illustrated in the later application [and formally claimed]."

Racing Strollers, Inc. v. Tri Indus., Inc., 878 F.2d 1418, 1420 (Fed. Cir. 1989) (emphasis added). Thus, the Federal Circuit precedent sets forth a simple visual test for determining §112 compliance: Is the design "<u>depicted"</u> in the earlier illustrations. ("Visual Depiction Test").¹

¹ Indeed, the Federal Circuit has found that §112 description/disclosure requirements can be met <u>even if</u> the design claimed in child application is not *exactly* disclosed in the parent drawings so long as the design is merely "reasonably conveyed." *In re Daniels*, 144 F.3d 1452, 1456 (Fed. Cir. 1998) (permitting the *addition* of holes to complete a pattern not explicitly disclosed in the original filing). The *Daniels* Court reiterated that when analyzing §112 issues for design patent, "<u>one looks to the drawings</u> of the earlier application for disclosure of the subject matter claimed in the later application." *Id. (emphasis added*)

In contrast, the proposed multi-factored analysis delves <u>far beyond</u> the illustrations themselves making additional/subjective determinations, including, *inter alia*, whether there the parent/child share a "common theme," common appearance," "fundamental relationship," or an "operational and/or visual connection," and whether the amended/child design is a "self-contained design." As such, the proposed multi-factored analysis risks contravening the Federal Circuit's Visual Depiction Test.

In sum, consistent with *Racing Strollers*, the §112 description/disclosure requirements is satisfied (in both the amendment and continuation context) where the claimed design in the amendment/child is simply <u>depicted in the illustrations</u> of the parent/initial filing. For example, as long as the solid lines that comprise a child/amended design are depicted in the subset of broken/solid lines in the parent/initial filing drawings, the §112 description/disclosure requirements are satisfied. *Racing Stroller's* simple and practical Visual Depiction Test provides a workable objective rule that applicants and examiners can rely upon; it yields reasonably certain, consistent and just results. In Short, the USPTO should continue to follow the Federal Circuit's Visual Depiction Test.

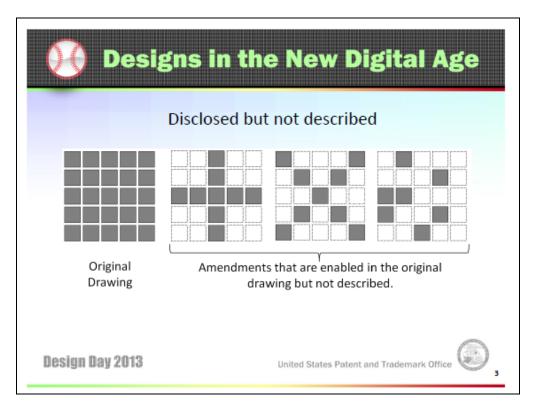
Applying the Visual Depiction Test articulated above, <u>all</u> ten examples set forth in the Federal Register Notice (http://www.uspto.gov/patents/init_events/additional_ex_2014.pdf) would meet the requirements of §112. By way of example, the amended design in Example 8 would satisfies the requirement of §112.



Simply put, the amended design (indeed every line, every curve, every surface) is visually depicted within the illustration of the original figure. The Visual Depiction Test adequately addresses the requirement for §112. Any modified written description test implemented by the USPTO should make sure that such all ten examples unquestionably pass muster under §112.

2. Attempts to Curb the Hypothetical Checkerboard Scheme Should Not Thwart Bona Fide Amendments and Continuations

Included in the materials attached to the Federal Register Notice was a USPTO presentation from the 2013 USPTO Design Day. http://www.uspto.gov/patents/init_events/designday2013.pdf. Slide 3 of the presentation (shown below) sets forth a contrived hypothetical example showing (1) a parent application depicting a generic 5x5 grid of small squares, and (2) three fanciful hypothetical amendments. ("Checkerboard Scheme").



This Checkerboard Scheme is <u>truly outlandish</u> and should <u>not</u> serve as the impetus for constructing new guidelines for interpreting §112 for design patents. To date, the USPTO has not cited any real world examples of perceived abusive amendments/continuation practice. The Checkerboard Scheme has been the only example (albeit hypothetical) that the USPTO has cited in connection with its claim that there is problematic amendment/continuation design patent practice.

There is no evidence of any *actual* attempts to execute the hypothetical Checkerboard Scheme.²

The prosecution practices such as the hypothetical Checkerboard Scheme should not be allowed. If the USPTO is intent on implementing a rule related to §112 to combat the Checkerboard Scheme, it could work **so long as** any such rule was measured and did not impact the prosecution of legitimate good faith amendments/continuations. An applicant's ability to file amendments/continuations on sub-combinations found in the initial/parent figures as a **virtue** of the U.S. design patent system, not a problem. The vast majority of practitioners who engage in amendment/continuation practice are not trying to game the system, but rather are simply trying to best protect the legitimate interests of their clients in a cost-effective manner.

3. Any Proposed Rule Change To USPTO's Longstanding Interpretation of §112 Must Not Only Comply with Federal Circuit Precedent, But Also Be Narrowly Tailored to Meet the Exceptionally Rare Situation of the Checkerboard Scheme

As noted above, any modification to the USPTO's interpretation of §112 must comply with existing Federal Circuit precedent and the Visual Depiction Test. See *Racing Strollers*. To the extent that the USPTO feels the need to construct a rule to combat the hypothetical Checkerboard Scheme, it should be tailored as narrowly as possible to address the perceived problem and no broader. Presumably, the Checkerboard Scheme (or like schemes) comprises just a miniscule percentage of the design patent cases prosecuted before the USPTO. In view of these considerations, the following test is proposed:

An amended design patent claim may not have written description support in the original disclosure when a designer of ordinary skill would not recognize any possible visual, conceptual or physical relationship between the claimed design and the original disclosure.

Again, other than the hypothetical Checkerboard Scheme, the appears to be no evidence of any actual, or other potential, amendment or continuation abuses

² There are legal mechanisms other than §112 that curb practices like the hypothetical Checkerboard Scheme. Design patent applicants are required to submit an oath with each application declaring that they are the true inventor of the claimed design. See 35 U.S.C. §115. To effectuate the hypothetical Checkerboard Scheme, an applicant first would need to not only file an initial application depicting a generic 5x5 grid, but also submit an oath that stating are the true inventor of the generic 5x5 grid. The hypothetical presents an unlikely scenarios.

along the lines of what the USPTO is suggesting. The USPTO has not elaborated beyond the Checkerboard Scheme. Accordingly, any proposed rule for analyzing §112 compliance would need to be constructed to address the Checkerboard Scheme and nothing broader.

4. Public Notice Function is Best Served By Current §112 Test, And Not The Proposed Multi-Factored Analysis

The USPTO's current approach §112 (i.e. inquiring whether the claimed design of amendment/child is shown in the solid/broken lines of the parent/initial drawings) best serves the policy of public notice. The lines in the initial application, whether solid or broken, are the **best proxy** for whether the inventor was in possession of the amended design under §112. The §112 issue under the current approach is a simply "yes' or "no" proposition: Are the lines present in the parent/initial drawings? Of course, whatever is ultimately claimed must satisfy the rigors of §§ 102, 103 and 171. Any concerns about an applicant later "unfairly" claiming just a "fragment" of the original design is not an issue under §112. Rather, whether a particular "fragment" warrants a design patent is to be determined pursuant to §§ 102, 103 and 171 and the controlling design patent jurisprudence interpreting those statutes.

5. The Proposed Multi-Factored Approach Will Create Unwanted Uncertainty Forcing Applicants to Frontload Applications Thereby Raising Transaction Costs

If the proposed multi-factored approach is implemented, it will necessarily inject uncertainty into the system relative to the general rule. Applicants, wishing to steer clear of the uncertainty created by the proposed factors, will be forced to frontload applications. (i.e. filing application with a massive amount of drawings and text directed at every conceivable sub-combination). Guarding against the uncertainty of the proposed multi-factored approach, bloated applications will become the norm. Front-loading applications raises unwanted transaction costs all around. (e.g. professional fees, drafting fees, PTO resources, etc.). What is worse, small and mid-sized entities, along with individual inventors, will be particularly disadvantaged under the proposed factor-based approach; they are not in the position to expend these additional resources to frontload applications, particularly before knowing if a design is commercially valuable. Most simply can't afford to file multiple applications/embodiments in the first instance to adequately protect novel aspects of their designs.

6. Any Rejection Based on a New Rule Would Be Rebuttable With Remarks and Evidence

If the USPTO chooses to add an additional rule for analyzing §112 compliance in these rare instances, the procedural process and burdens that should be applied should be similar to the procedures established by the USPTO

on other issues, such as the issue of inherency. That is, to establish a rejection on the theory of the failure to comply with the written description requirement, the examiner must provide a detailed explanation and reasoning to support that a designer of ordinary skill would not recognize any possible visual, conceptual or physical relationship between the claimed design and the original disclosure. If a strong detailed argument is presented on this basis such that a *prima facie* case has been established, the applicant should have the opportunity to rebut this assertion and can provide file remarks or submit evidence to rebut the rejection.

While the factors listed by the USPTO in the Federal Register Notice are but a few examples of arguments that inherently support that the inventor had possession of the design at the time of the original filing from the perspective of a designer of ordinary skill, the failure to meet a subset of such factors should <u>not</u> be the basis to establish that the design is not in compliance with §112. Other evidence, such as declarations under Rule 132, may be submitted by the applicant to rebut such rejection and may include any information relevant to this issue. The USPTO must fully weigh and consider all of the evidence presented. Again, if such a rule for analyzing §112 compliance were implemented, it would presumably be exercised in only the rarest situation to combat the Checkerboard Scheme or the like.

7. The Same Test for §112 Compliance Applies to All Articles of Manufacture

Regardless of whether the test and the associated procedures are modified relative to the written description requirement of Section 112, the test and associated procedures should be applied similarly to all designs regardless of their corresponding article of manufacture. That is, there should not be a different test or examination procedure for graphical user interfaces and other two-dimensional designs as compared those used for three-dimensional designs.

8. Detailed Special Descriptions Are Not Needed

The Federal Register Notice inquired as to whether use of a descriptive statement in the originally-filed application (e.g., that specifically identifies different combinations of elements which respectively form additional designs) could be a meaningful way for applicants to demonstrate that they had possession of designs claimed in future amendments/ continuation applications. It has long been said that the drawings, not words, are the best way to communicate a design. In short, the Visual Depiction Test is best aligned with this principle.

The presence of a special description statement can be relied upon to show that the amended design claim is in compliance with Section 112. It should be noted, however, that the lack of a special description statement or a very detailed special description statement does not mean that an amended design claim is not in compliance with Section 112.

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Chris has extensive experience litigating Design IP cases, including representations before U.S. district courts, the Federal Circuit, U.S. Supreme Court and the ITC. In the landmark design patent case *Egyptian Goddess v. Swisa*, he authored amicus briefs on behalf of the AIPLA at both the petition and *en banc* stages, taking positions which were ultimately adopted by the Federal Circuit. In *Calmar, Inc. v. Arminak & Assoc.*, Carani authored a brief on behalf of the Industrial Design Society of America in support of a petition for *writ of certiori* to the U.S. Supreme Court.

Chris represents some of the world's most design centric companies, including the top filer of U.S. design patents. He counsels a wide range of clients on strategic design protection and enforcement issues; he is often called upon to render infringement, validity and design-around opinions and serve as a legal consultant/expert in Design IP cases. Chris has worked with clients securing over 2000 design rights, both in the U.S and in over 70 countries around the world.

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DESIGN PATENT FUNCTIONALITY A Sensible Solution

By Christopher V. Carani

or consumers, the appetite for good design is insatiable. Innovative ornamental design, both in the physical and digital realm, can no longer be an afterthought. Consumers crave it. Consumers demand it. Businesses are fast at work striving to create functional products that have eye appeal.

From the design houses of New York City, to the storied industrial design firms of Chicago, to the cutting-edge think tanks of Silicon Valley, the desire for effective and reliable design protection is at an all-time high. The need is paramount as commerce continues to migrate from brick-andmortar stores (where consumers can touch and feel products) to the Internet (where appearance reigns supreme).

With design protection at a premium, the existing jurisprudential doctrines of "functionality" need better clarity. "Functionality" is a general prohibition grossly applied across the field of design intellectual property (IP), which encompasses design patents, trade dress, and copyrights. It is viewed as a way to prevent design rights from being used to monopolize ideas or concepts, which is strictly the province of utility patents. In design patent law, that prohibition is tied to ornamentality; in copyright law, it is tied to the merger doctrine; and in trade dress law, it is tied to nonfunctionality. While the term "functionality" is often loosely used in each of the three IP regimes, the policies and underpinnings for the respective doctrines are quite different, and thus it is injudicious to assume that they are interchangeable.

In design patent jurisprudence, there are two distinct contexts in which the notion of functionality arises. The first context is as a matter of statutory compliance; here, the inquiry regards the functionality (or as discussed below, more appropriately the "lack of ornamentality") of the overall appearance of the claimed design. I will refer to this context as "statutory functionality." The second context arises in the confines of claim construction (known elsewhere in the world in the design context as the determination of the "scope of protection.") Attempting to hold true to the tenet that design patents protect aesthetics and not function, courts have used the claim construction process to (attempt to) identify and factor out aside individual aspects of the claimed design that are deemed to be functional. I will refer to this context as "claim construction functionality." The jurisprudence in both contexts needs desperate attention.

In this article, I set out to: (1) generate a better awareness of the distinction between the issues of statutory functionality and claim construction functionality; (2) establish that the majority's "dictated solely by" test for the distinct issue of statutory functionality is the best approach, inasmuch as it is consistent with the governing statutory framework and sufficiently shields against the unwanted monopolization of a functional ideas via design patents; and (3) explain the wrongheadedness of the current legal trend on the issue of claim construction functionality where courts are eliminating the appearance of so-called functional features from the claimed design. Ultimately, I offer an alternative approach that is sensible, workable, and, hopefully, a unifying solution.

Statutory Functionality: The Tried and True Course

Let the Statute Guide the Way

The issue of statutory functionality asks whether the design patent claim is eligible as statutory subject matter under the "ornamentality" requirement of 35 U.S.C. § 171. A challenge under § 171 is often referred to as a "functionality defense" (i.e., "Is the claimed design functional?"). However, to better track the statute, the operative question should be phrased more accurately a "lack of ornamentality defense" (i.e., "Does the claimed design lack ornamentality?"). To better understand why, it is helpful to consider the relevant statutory framework for utility and design patents. Understanding this interplay allows us to better appreciate the gatekeeper role of ornamentality for design patents.

For utility patents, we look first to 35 U.S.C. § 101 for what is eligible subject matter; for design patents, we look to 35 U.S.C. § 171. Below is a side-by-side comparison of the two governing statutes:

§ 101: Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

§ 171: Whoever invents any new, original and *ornamental* design for an article of manufacture may obtain a patent therefor, subject to the conditions and requirements of this title.

Notably, the terms "useful" and "ornamental" are positive requirements necessitating an attribute (e.g., useful, ornamental), not negative requirements necessitating the *absence* of an attribute (e.g., nonuseful, nonornamental).¹ Thus, § 171 does not require that the claimed design be "devoid of usefulness"; in the same way, § 101 does not require the claimed invention to be "devoid of ornamentality."² The statutory framework of the Patent Act rightfully recognizes that usefulness and ornamentality are not mutually exclusive characteristics. The statute comfortably accommodates the ideal that good design seamlessly melds form and function.

Similar to the way § 101 does not specify a particular minimum amount or degree of usefulness needed for compliance, § 171 does not specify a particular minimum amount or degree of ornamentality. Instead, the gatekeeper requirements of §§ 101 and 171 simply necessitate that the claimed subject matter *is* "useful" for utility patents, and *is* "ornamental" for design patents.

Constructing tests for determining how much usefulness or ornamentality is needed to clear the statutory hurdles has been left to the judiciary. Generally speaking, and with reference to utility patents, the Supreme Court has interpreted the subject matter provisions of the Patent Act to be wide-reaching and inclusive, noting that the "subject-matter provisions of the patent law have been cast in broad terms to fulfill the constitutional and statutory goal of promoting 'the Progress of Science and the useful Arts' with all that means for the social and economic benefits envisioned by Jefferson."³ Specific to design patents, the Court in *Bonito Boats, Inc. v. Thunder Craft Boats, Inc.* also articulated a broad standard for determining compliance with the ornamentality requirement:

Since 1842, Congress has also made protection available for 'any new, original and ornamental design for an article of manufacture.' 35 U.S.C. § 171. To qualify for protection, a design must present an aesthetically pleasing appearance that is *not dictated by function alone*, and must satisfy the other criteria of patentability.⁴

Picking up on this general proclamation, the Federal Circuit has adopted a test that deems a design ornamental so long as the claimed design is not "dictated solely by" its function.⁵ By framing the issue this way, the courts effectively *assume* that a design has enough ornamental quality to pass statutory muster, *unless* it is shown that the design is dictated solely by its function. In other words, the test asks did the designer exercise any independent judgment in arriving at the design or was the overall appearance dictated solely by the functional requirements of the design? For if the entire appearance was preordained by the functional requirements of the article of manufacturer, then, in fact, nothing was designed and no patent reward should grant.⁶

Notably, a second strain of case law for determining statutory functionality has emerged from Federal Circuit dicta. This second strain seeks to tackle statutory functionality by employing a multifactor functionality test imported from trademark law.⁷ Specifically, the second strain states that when assessing statutory compliance with the ornamentality requirement of § 171:

[C]onsiderations might include: whether the protected design represents the best design; whether alternative designs would adversely affect the utility of the specified article; whether there are any concomitant utility patents; whether the advertising touts particular features of the design as having specific utility; and whether there are any elements in the design or an overall appearance clearly not dictated by function.⁸

This multifactored trademark approach is neither doctrinally nor practically consistent with the prevailing "dictated solely by" design patent ornamentality standard; it is not a good fit in the design patent context and should be cast aside. First, the length of potential term of protection for trademarks is significantly longer than for design patents, thus warranting a more difficult standard for trademark rights; trademarks are potentially entitled to a perpetual term, whereas design patents are given a maximum term of 14 years.9 Second, the multifactored trademark approach goes well beyond the simple and express language of the statute (i.e., "is the design ornamental?"). Third, by considering something that is the "best design" as a strike against patentability, the multifactored trademark approach is counter to the constitutional goal of incentivizing and rewarding (presumably good) design. Fourth, the multifactored trademark approach with its sweeping considerations injects unwanted uncertainty into the analysis. Fifth, the multifactored trademark approach disqualifies design protection beyond that needed to shield against the concern of monopolizing functional ideas and thus has the potential to thwart the progress of design.

Although it appears that the multifactored trademark approach has gained some traction, the vast majority of courts still continue to appropriately employ the "dictated solely by" test for statutory functionality.

Alternative Designs: Dispelling the Monopoly Boogie Man With the "dictated solely by its function" test in place, the operative question becomes how does one establish that a design is *not* dictated solely by its function? According to prevailing Federal Circuit case law, proof of *alternative designs* is decisive evidence that a design is not dictated solely by its function.¹⁰ The Federal Circuit has adopted and confirmed this logic:

We apply a stringent standard for invalidating a design patent on grounds of functionality: the design of a useful article is deemed functional where the appearance of the claimed design is dictated by the use or purpose of the article. [T]he design must not be governed solely by function, i.e., *that this is not the only possible form of the article that could perform its function.*¹¹

While not typically used stateside, this approach is employed, and referred to, elsewhere in the world as the multiplicity of forms approach.¹² In practice, it is true that the multiplicity of forms approach is quite easily met, and as explained below this is sensible given the consideration at play; most articles of manufacture, even highly functional items, can take on many others forms and still perform their intended function. Accordingly, the risk that functional ideas are monopolized through design patents is quite low. For example, while a chair certainly is a functional item, a quick pass down the halls of your office will reveal a variety of chair designs-each sufficiently ornamental to satisfy the threshold gatekeeper requirement of § 171. Whether furniture, footwear, consumer electronics, hand tools, or medical devices, skilled designers can almost always redesign the appearance of the item while maintaining the required functional attributes.¹³ Simply put, conjuring up alternative designs is a fundamental skill of their profession.

So while the desire to guard against monopolizing functional ideas through design patents is certainly sound policy, practically speaking, it is a bit of a boogie man. The actual risk of monopolizing functional ideas through design patents is slim. This reality is supported by the fact that there are rarely lack of ornamentality rejections during USPTO examination, and only one published opinion from the Federal Circuit concluding that a design patent was invalid for failure to satisfy the ornamentality requirement of § 171.¹⁴

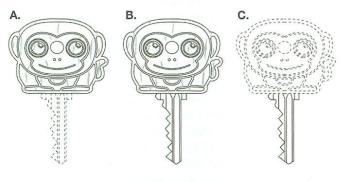
The current prevailing approach, which uses alternative designs to determine ornamentality, wisely side-steps the hairy task of deciding whether a design is "ornamental enough." The approach recognizes the reality that "beauty is in the eye of the beholder," and thus it is futile for the law to qualitative assess ornamentality, including the relative merit of design movements such as art Bauhaus, functionalism, art deco, minimalism, maximalism, etc.¹⁵ At the same time, the approach provides sufficient safeguards against the rare, but still unwanted, backdoor monopolization of functional ideas through design patent protection. Lastly, this approach leaves the door amply open to accommodate the boundary-pushing creativity of the world of design.

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Ornamentality of Overall Claimed Design Drives the Statutory Functionality Inquiry

The statutory functionality inquiry does not, and should not, examine the ornamentality of *individual portions* of a claimed design. After all, rights are not extended to portions of a claimed design; the only protection is for what is claimed, namely, the overall appearance of what is depicted in the drawings in solid lines.¹⁶ Accordingly, the statutory functionality inquiry rightfully focuses on whether the *overall appearance* of the claimed design as a whole is dictated solely by its function.¹⁷ This holistic approach is consistent with other tests in design patent jurisprudence, including those for infringement, novelty, and nonobviousness, which use the *overall appearance* of the design as their guiding principle.

Note that when I refer to the design's overall appearance, I am referring to the overall appearance of the *claimed* design, not the overall appearance of the article of manufacture. As shown in figure 1, often the statutory functionality inquiry hinges on the scope of the design being *claimed*.





In figure 1A, only the key head (i.e., the monkey head-shaped handle) is shown in solid lines and thus claimed. The key blade portion (i.e., the portion to be inserted into a mating keyhole) is shown in dotted lines and thus disclaimed. In figure 1B, the entire key is claimed including its key head and key blade. In figure 1C, the key head is disclaimed and only the key blade is claimed. As noted above, when assessing statutory functionality, the operative question is whether the overall appearance of the *claimed design* is dictated solely by its function.

In figure 1A, the claimed design should pass "ornamentality" muster under § 171 because the design cannot be said to be dictated by its function. A key head can operate without having the same overall appearance as the key head claimed in figure 1A. Unquestionably, the key head could take on different appearances (a lion head? a different looking monkey head?).

Similarly, in figure 1B, where the combination of the key head and key blade are claimed, the overall claimed combination also cannot be said to be dictated solely by function. Here again, by modifying at least the shape of the key head, the overall appearance of the claimed combination is also necessarily modified.

In figure 1C, however, where *only* the key blade is claimed, there may be no alternative designs for this claimed portion. Assuming that the key blade is intended to access a specific key hole, and that no alternative appearances could achieve that function, the claimed design will not satisfy the ornamental requirement of § 171.

The results in each of these three examples are consistent with the legitimate policy concern of preventing the use of design patents to protect functional ideas. Specifically, providing design patent protection to figure 1C would provide an impermissible monopoly over the key blade, if it can only exist in a single form.¹⁸ In contrast, in figure 1B, when the ornamental key head is combined with the key blade, alternative designs for the key exist; any concerns about monopolizing the functional key blade are eliminated.

Once we better understand the multiplicity of forms approach, we can better focus our patent prosecution strategies to hedge against statutory functionality issues. For example, if design and utility applications are being filed on a single product, consider including figures showing alternative designs in the utility patent application, or even using more abstract block figures, rather than the same figures from the design patent application. When the identical design patent figures are used in the utility patent application, right or wrong, there is the potential unwanted appearance that everything in the design patent figures is tied to the functional considerations disclosed in the utility patent application. Note, if you do include alternative designs in your utility patent application figures, be aware that failure to prosecute those designs in separate design patent applications potentially could result in prosecution history estoppel.¹⁹

As a further example, if you are prosecuting a design patent application directed at an isolated portion of a product that may be questionably ornamental (e.g., a key blade), consider prosecuting *additional* claims where that subject matter is bundled with other portions of the article of manufacture that are decidedly more "ornamental" (see fig. 1B). Again, the operative question for statutory functionality is whether the *overall appearance* is dictated by its function, not the functionality of individual elements of the claimed design. As a crude rule of thumb, the more you claim (in solid lines), the greater chance you have to overcome a statutory functionality challenge.

Because design patents are only entitled to one claim, this multiclaim approach may necessitate filing multiple patent applications (unless the varying claim scopes are considered patentably indistinct and can be maintained in the same application). However, to achieve a strategic and effective design patent portfolio, design patent applicants should not shy away from filing multiple applications. (i.e., multiple claims). Ask yourself, how often have you have seen a one-claim utility patent? The answer is most likely rarely, if ever. One of the main reasons for having multiple claims in utility patents is that they hedge against the inherent difficulties in predicting ex ante the contours of the prior art (for validity) and nuances of accused products (for infringement). This same multiclaim approach should be employed for an effective design patent prosecution strategy, and also to hedge against findings of lack of ornamentality.

In sum, with respect to statutory functionality, the nomenclature used in the case law has facially drifted away from the statute's express language. But, that drift can be righted by the Federal Circuit making clear that the prevailing multiplicity of forms approach should be employed exclusively. This approach (1) stays true to the language of the statute and spirit of a subject matter eligibility provision, (2) adequately safeguards against using design patents to monopolize functional ideas, and (3) brings reasonable and desirable certainty to an otherwise grey area of the law. The Federal Circuit looks to have charted the right course.

Claim Construction Functionality: Lost at Sea but Land in Sight

The second context where the issue of functionality enters design patent jurisprudence has been in the area of claim construction. Thanks to express guidance from § 171 and the *Bonito Boats* Court, statutory functionality jurisprudence fairly speaking has stayed on target coalescing around a single (sensible) approach—the multiplicity of forms approach. In contrast, claim construction functionality is currently lost at sea.²⁰ A new course for claim construction functionality needs to be charted to properly realign the doctrine with its initial purpose.

Claim construction functionality is not solely an issue for infringement, despite the fact that it almost exclusively rears its head in that context. As we know from the more developed utility patent case law on claim construction, it is axiomatic that the same claim construction that is used for infringement also must be used for validity.²¹ Thus, the doctrine of claim construction functionality has wide-reaching ramifications and thus the governing principles of its application must be well-defined. As explained herein, while there is currently great confusion in the jurisprudence on claim construction functionality, the good news is that rerouting the course is accomplishable through judicial clarification, rather than overruling precedent.

When employed correctly, claim construction functionality can be accomplished with adherence to the principle that design protection is directed to the overall appearance of the claimed design and further that such protection does not extend to any functional attributes, concepts or characteristics embodied in the claimed design. When employed incorrectly, instead of excepting functional attributes, concepts or characteristics from protection, courts often use claim construction to coarsely lop off visual features, elements and portions from the claimed design that are considered "functional." The correct approach maintains the sanctity of the claimed design; the incorrect approach corrupts it. The Federal Circuit should provide clear guidance that while design patents do not protect functional attributes, concepts or characteristics, they do protect the overall claimed appearance, which is inclusive of all constituent visual features, elements and portions. No attempt should be made to factor out visual features, elements and portions of a claimed ornamental whole. Without this fundamental tenet firmly in place, design patent jurisprudence will continue to operate in a state of confusion.

By way of example, take the trunk²² in figure 2 that includes a lock to secure the trunk's lid. As a matter of claim construction, the fact that the trunk is lockable (i.e. a functional attribute) should be wholly irrelevant to the design patent claim's scope of protection.

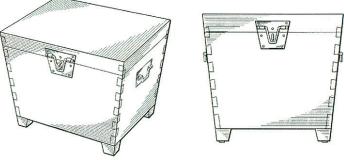


Figure 2

But while this functional attribute of the trunk should be of no moment, the lock's depicted shape, size, and spatial relationship as it relates to the remainder of the trunk is claimed and thus part of the design's scope of protection. This should be true even if the lock's visual appearance were purely functional (which it is clearly not), because the depicted lock is but a portion of an ornamental claimed whole.²³ Regardless of whether the lock is functional or even purely functional, no attempt should be made to dissect out the appearance of the lock. Notably, with respect to utility patent claims, no effort is undertaken to identify and dissect out ornamental elements.²⁴ The same should be true with respect to design patents and functional elements-no effort should be made to identify and dissect out any functional elements. In both contexts, the patent protects the overall claim as issued, not the claim's constituent elements in isolation. But yet this methodology, which I will refer to as the point of ornamentality approach, is precisely what many district courts have been doing as they attempt to identify and limit design patents to ornamental design elements.²⁵

Design patent claim construction methodology that purports to separate functional and ornamental elements of the overall claimed design is wrongheaded. Like the now defunct point of novelty approach (which sought to separate out new and old elements),²⁶ the point of ornamentality approach (which seeks to separate out ornamental and functional elements) conflicts with the tenet that a design patent protects the overall appearance of the claimed design, and is fraught with logistical problems. Instead, claim construction functionality concerns could be addressed with an instruction to the fact-finder (whether judge or jury) that design patents only protect the *appearance* of the overall design depicted in the drawings, and not any *functional attributes, purposes or characteristics* embodied in the claimed design.

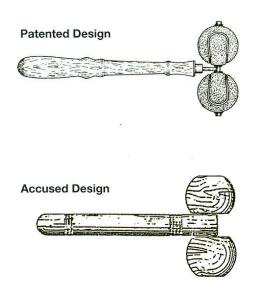
Origins of Claim Construction Functionality Doctrine and Point of Ornamentality Approach

To understand the current state of confusion,²⁷ it is important to appreciate the historical evolution of the claim construction functionality doctrine and the point of ornamentality approach.²⁸

Lee v. Dayton-Hudson (1988)

The origins of the claim construction functionality doctrine fairly can be traced back to the 1988 decision in *Lee v. Day-ton-Hudson Corp.*²⁹ There, the plaintiff-patentee had secured a design patent on a hand-held massage device (see fig. 3). The plaintiff-patentee argued that his design patent covered "a massage device wherein an elongated handle has two opposing

balls at one end, and that the patent is perforce infringed by a massage device with that general configuration."³⁰





In explaining its holding of noninfringement, the Federal Circuit explained that the design patent did not protect the general functional concept of combining an elongated handle that has two opposing balls at one end to form a handheld massage device. It noted that infringement could not be premised upon the gross conceptual similarity between the patented and accused designs. The Lee Court concluded that "[d]esign patents do not and cannot include claims to the structural or functional aspects of the article."³¹ When placed in context, the Lee Court use of the term "aspects" refers to functional attributes, purposes or characteristic; it was not providing instructions to factor out visual features, elements or portions of the overall claimed design. Appropriately, the claimed design was limited to the specific expression of the functional concept as set forth in the patent drawings. Significantly, the court did not employ a point of ornamentality approach going through an element-by-element analysis for each component (i.e., "Is the handle functional?" "Are the massage balls functional?"). Thus, the core teaching of Lee is simple and straightforward: design patents do not protect general concepts; they protect appearances of a concept as specifically depicted in the design patent drawings. As will be shown below with later case law, however, the Lee Court's use of the phrase "functional aspects" for functional attributes, purposes or characteristics soon drifted into meaning eliminating functional features, elements or portions of a claimed design. And from this word choice, the seeds for the point of ornamentality approach were sown.

Elmer v. ICC Fabricating (1995)

In *Elmer v. ICC Fabricating, Inc.*, it was the design patentee (not the accused infringer) who argued that two elements depicted in its design patent drawings for a vehicle sign, namely, lateral support ribs and an injection molding protrusion, should be factored out of the claim because the elements were "functional" (see fig. 4).³²

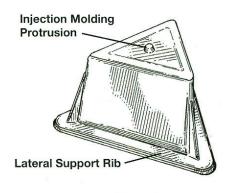


Figure 4

This was a convenient argument for the patentee because the accused product was missing these elements. Although it acknowledged the functional nature of these two elements, even pointing to detailed descriptions of the elements' function in a corresponding utility patent, the Federal Circuit flatly rejected the argument that the design patent claim should be construed to factor out the appearance of these elements.³³ The court pointed out that the depicted elements could have been disclaimed from the claimed design during prosecution had they been reduced to dotted lines. Instead, the elements were depicted in solid lines and thus contributed to, and were part of, the claimed overall design.³⁴ Thus, Elmer stays true to the notion that the claimed overall appearance, including all constituent elements, whether ornamental or functional, is what a design patent protects. The Elmer rightly rejected the temptation to tinker with the overall claimed design by factoring out so-called functional elements. Simply put, if an element is shown in solid lines it is part of the overall claimed design.

OddzOn Products v. Just Toyz (1997)

In *Odd2On Products, Inc. v. Just Toyz, Inc.*, however, the seeds for the point of ornamentality approach that were planted in *Lee* did take root.³⁵ Ambiguous usage of terms like "aspects," "general features," and "elements," are mainly to blame. As shown in figure 5, *Odd2On* regarded a design patent directed to a football-shaped toy having a tailshaft and fins.

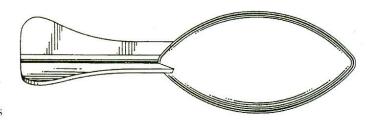


Figure 5

The Federal Circuit began its opinion by affirming the district court's holding that the claimed design passed statutory functionality muster, as the claimed design's overall appearance was not dictated solely by its function. In the context of discussing obviousness, and after noting the existence of several other alternative designs, the court sustained the validity of the patent: Because the presence of a tailshaft and fins has been shown to be necessary to have a ball with similar aerodynamic stability to OddzOn's commercial embodiment, such *general features* are functional and thus not protectable as such. . . . The existence of prior art simply showing a ball with a tailshaft and fins, without more, is not sufficient to render the patented design obvious. . . . Because none of the prior art cited by Just Toys exhibits ornamental characteristics that are the same as or similar to OddzOn's design, we conclude that the district court did not err in holding that the cited references would not have rendered the patented design obvious.³⁶

Up until this point, the opinion appears sound as it excludes from protection "general features" of the design (i.e. attributes, purposes or characteristics). Then, in the context of infringement, the *OddzOn* court makes its crucial misstep by stating that "[a] design patent *only protects the novel*, *ornamental features* of the patented design."³⁷ The court followed up that statement by adding: "Where a design contains both functional and non-functional elements, the scope of the claim must be construed in order to identify the non-functional *aspects* of the design as shown in the patent."³⁸

Based on both its statutory functionality and nonobviousness holdings, it appears that the *OddzOn* court clearly appreciated the fundamental distinction between unprotectable functional *attributes* of a claimed design (e.g., the general concept of a football-shaped toy with tailshaft and fins), and protectable overall ornamental appearances (e.g., the specific overall claimed design which is shown in the patent figures). Note, in parts of the opinion, the court, citing *Lee*, rightly refers to the unprotectable functional attributes as "general features." However, the court later uses less qualified terms like "aspects" and "features." As a result of these word choices, courts since *OddzOn* as part of claim construction have been wrongly divvying up design patents into perceived ornamental and functional features, elements and portions.

Bluntly, no matter how many times it is repeated in the case law that "a design patent only protects the novel, ornamental features of the patented design," the OddzOn sound bite is still fundamentally wrong. It is unassailable that a design patent does not protect contitutent elements of a claimed design, but rather protected the patented whole. Further, it is a truism that even if all constituent elements of a design are old, the overall appearance of the assemblage of those old elements can constitute a patentably novel design.³⁹ Similarly, even if all constituent elements of a design are functional (even purely functional), the overall appearance of the assemblage of those functional elements can constitute a patentably ornamental design. Because design patents protect the overall claimed appearance, the individual novelty or ornamentality of the design's elements are irrelevant. An element-by-element assessment of ornamentality is not needed and contrary to the governing principles of design law. The Federal Circuit can make this point clear by clarifying that the word choices "functional aspects" refers to functional attributes, purposes or characteristics and not visual features, elements or portions of a claimed design that possess functional attributes, purposes or characteristics.

Egyptian Goddess v. Swisa (2008)

In Egyptian Goddess, Inc. v. Swisa, Inc., the en banc Federal Circuit made great strides toward improving design patent jurisprudence by eliminating the problematic point of novelty test and laying down a general rule discouraging courts from issuing claim constructions that verbally describe design patent claims.⁴⁰ The specific issue of claim construction functionality was not before the en banc court and was not briefed by the parties or the many amici curiae. Nevertheless, in addressing the general issue of claim construction for design patents, the Egyptian Goddess court, quoting the poorly worded OddzOn passage, suggested ways a trial court might assist the fact finder on issues that bear on patent scope. One suggestion was to distinguish "between those features of the claimed design that are ornamental and those that are purely functional."41 Apparently to track the stringent "dictated solely by" approach for statutory functionality, the en banc court inserted the modifier "purely" before the word "functional."42 While this modifier logically should greatly reduce the amount of so-called functional elements that courts might identify and excise, by citing OddzOn, the problematic point of ornamentality approach, whether intentionally or not, was further engrained in the case law. Significantly, and despite the citation to Oddzon, the point of ornamentality approach was not employed in Egyptian Goddess. In the opinion, there was no effort to exclude from protection the appearance of features of the design patent's claimed design that possess functional attributes, such as the finger nail buffer's buffing pads, square cross-section, and hollow core.

Richardson v. Stanley Works (2010)

A few years later, and picking up on the loose language of *OddzOn* and *Egyptian Goddess*, the Federal Circuit in *Richardson v. Stanley Works, Inc.* more directly addressed the claim construction functionality issue.⁴³ There, the plaintiff-patentee asserted that U.S. Patent No. D507,167 (the '167 patent) was infringed by certain Stanley carpentry tools (see fig. 6). After a bench trial, the district court found that none of the Stanley accused products⁴⁴ infringed the '167 patent.⁴⁵

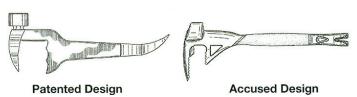


Figure 6

Similar to the holding in *Lee*, the district court, as part of claim construction, concluded that the '167 design patent did not provide a monopoly to the patentee for the general functional concept of combining a hammer-head, jaw, handle, and crow-bar in a single tool. The district court did not eliminate any visual features from the claimed design. To the contrary, all visual features were maintained: "The '167 patent does protect the ornamental aspects of Richardson's design, which include, among other things, the standard shape of the hammer-head, the

diamond-shaped flare of the crow-bar and the top of the jaw, the rounded neck, the orientation of the crow-bar relative to the head of the tool, and the plain, undecorated handle." Thus, the district court rejected a point of ornamentality approach.

On appeal, the Federal Circuit affirmed the district court's claim construction and finding of noninfringement. In explaining its claim construction affirmance, the court used awkward language that some might interpret as endorsing the point of ornamentality approach. Citing *OddzOn* and *Egyptian Goddess*, the *Richardson* court held that as part of design patent claim construction, a court is required to "separate" a design patent's overall design into "purely functional" elements and "ornamental" elements, and then "factor out" (or "discount") the former as unprotectable portions of the claimed design.⁴⁶ Specifically, the *Richardson* court, as part of claim construction, stated: "Richardson's multi-function tool comprises several elements that are driven purely by utility. As the district court noted, elements such as the handle, the hammerhead, the jaw, and the crowbar are dictated by their functional purpose" (see fig. 7).⁴⁷

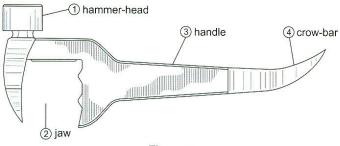


Figure 7

The *Richardson* court stated that these "purely functional" elements were properly "factored out" from the protected design as part of claim construction. On its face, the court's conclusion could be interpreted as leading to a bizarre result. Visually, and using broken lines to depict the "factored out" elements of the design, it can be illustrated by figure 8 (beginning with the USPTO's issued claim on the far left, and ending with the construed claim on the far right). Once factoring out is completed, it is entirely unclear what, if anything, is left. Using the point of ornamentality approach, the scope of the claim is altered to the point that it is effectively unenforceable. As explained below, this approach is wrongheaded.

By affirming the district court's claim construction (which rejected a point of ornamentality approach), but then using words that seemingly endorse a point of ornamentality approach (and that contradict the district court's opinion), the *Richardson* court ramped the confusion up to a fever-pitch.

Point of Ornamentality Approach Should Be Abandoned

In an attempt to curb the cascade of the flawed case law, below are five reasons why the point of ornamentality approach should be abandoned.

It Is Inconsistent with the Principle That Design Protects Overall Appearances

One of the central holdings of *Egyptian Goddess* is that words are ill-equipped to describe design claims, and thus as a general rule verbal descriptions should not be used to define design claims. Instead, the drawings should control. The point of ornamentality approach, however, by requiring a verbal description of the claimed design's protectable ornamental elements, runs directly afoul of this principle; the point of ornamentality approach sends us backward to a pre-*Egyptian Goddess* era where problematic verbal descriptions were the norm. Whether for defining the entire overall appearance as required pre-*Egyptian Goddess*, or for defining those elements deemed ornamental under the point of ornamentality approach, verbal descriptions of visual appearances is problematic.

Verbal descriptions risk placing undue emphasis on those listed elements rather than the overall appearance, which is subject matter of the right granted.⁴⁸ Further, the *Egyptian Goddess* court explained, Verbal descriptions are most often either too broad or too narrow to fully capture design. While words are at times capable of *listing* some, or even all, of the individual *elements* of the drawings, they are simply illsuited for communicating the "controlling consideration" of a design patent claim—the *overall appearance*, including the relative and spatial relationships of each and every solid line in the claim.

Moreover, when verbalizations are employed to capture the claim and a list of elements is set forth, the verbalizations may inaccurately convey that the listed elements all have an equivalent effect on the eye. Even if the court were to include words to emphasize the relative predominance of certain elements of the design (i.e., major, minor, etc.), the court would be improperly substituting its perception for that of the trier of fact. In reality, depending on the fact finder, the eye may very well focus on certain elements of the drawings and minimize others. Thus, inasmuch as design patents are claimed with drawings, the only effective means by which to communicate each and every element of the claimed design are the drawings. The best description of the drawings is the drawings themselves.

As an overarching theme, design patent discourse should move away from element-by-element utility patent speak and

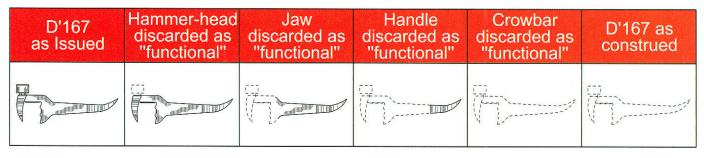


Figure 8

refocus on the actual protected right—the overall appearance of the claimed design. As the U.S. Court of Customs and Patent Appeals succinctly stated: "[A] design is a *unitary thing* and *all of its portions are material* in that they contribute to the appearance which constitutes the design."⁴⁹

Design, in the view of the patent law, is that characteristic of a physical substance which, by means of lines, images, configuration, and the like, taken as a whole, makes an impression, through the eye, upon the mind of the observer. *The essence of a design resides, not in the elements individually, nor in their method of arrangement, but in the tout ensemble—in that inde-finable whole that awakens some sensation in the observer's mind.* Impressions thus imparted may be complex or simple; in one a mingled impression of gracefulness and strength, in another the impression of strength alone. But whatever the impression, there is attached in the mind of the observer, to object observed, a sense of uniqueness and character.⁵⁰

Thus, a design patent protects the *overall effect* of *all* of the depicted design elements, whether such elements are new or old, functional or ornamental, significant or insignificant.⁵¹ Because it is the overall appearance that is protected, the traits and substance of any individual elements are irrelevant. It is a fallacy of the point of novelty approach that functional elements reside in isolation. To the contrary, the visual appearance of every functional element impacts, and interacts with, the remainder of the design.

That a particular portion of a design is functional, even if purely functional, should not matter. Protection should extend to the entire overall appearance (including all contributing elements), so long as the *overall appearance* is not purely functional (i.e., "ornamental"). Indeed, the combination of two functional elements, even two purely functional elements, can yield an ornamental design; ornamentality can reside in the spatial relationships of the elements, the relative sizes of the elements, etc. Whether speaking of infringement or validity, what counts in design patent law is the *overall appearance* of the claimed design. The point of ornamentality approach, by limiting a claimed design to specific elements, runs afoul of this principle.

It Is Unworkable

Moreover, any attempt to dissect and separate an overall design into elements is unworkable. Most often, and particularly with modern day design, the elements of a design are fully integrated into, and inseparable from, the overall design, making fool's errands of the point of ornamentality approach's identification and excision steps. For example, consider a claim covering the ornamental handlebar depicted in figure 9.⁵² The claimed design is an example of the seamless melding of form and function. While a court might go through the point of ornamentality exercise, the reality is that it is impossible to meaningfully identify and surgically separate ornamental and functional elements.⁵³ In short, factoring out and ignoring functional portions is an artificial enterprise that not only can distort the claimed design, but also, practically speaking, is an unworkable approach.

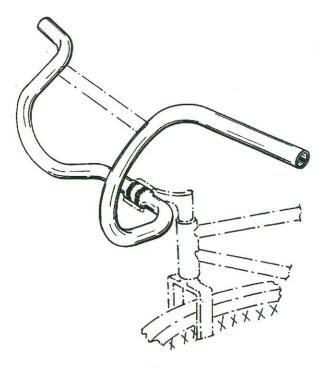


Figure 9

It Undermines the Statutory Presumption of Validity Factoring out functional elements of a claimed design risks undermining both the validity and enforceability of design patents. Once a design patent application emerges from USPTO examination, an issued design patent enjoys a presumption of validity, just like any other patent.⁵⁴

As initial matter, at the USPTO, the patentability determination for a claimed design is premised solely on the *overall appearance* of the depicted design.⁵⁵ Yet, the presumption of validity and its underpinnings easily fall apart under the point of ornamentality approach because a judicially construed claim (with portions of the whole "factored out") may be fundamentally different from the claim examined and issued by the USPTO. This conflict can be illustrated with a simple example (see fig. 10).

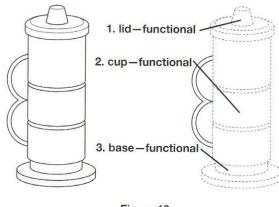


Figure 10

Assume that the image on the left is the design examined during prosecution and ultimately issued as the patented design. During prosecution, the USPTO examines *only the overall appearance* of the design. During claim construction under the point of ornamentality approach, assume a district court determines that certain elements are "functional" and thus must be "factored out." For example, those elements might be the (1) lid, (2) cup, and (3) support base. (See the image on the right with deemed "functional" elements shown in broken lines.) With only the handle remaining after claim construction, questions regarding the patent's validity abound. Has the claim been inadvertently broadened? Is just the remaining handle itself novel? Nonobvious? Ornamental? Should the presumption of validity apply to a construed claim that has so little resemblance to the claim that was before the USPTO? Keep in mind that the USPTO only examined the overall appearance of the entire depicted design for patentability, not just the handle in isolation. This potential disparity in claim scope irreconcilably upsets the presumption of validity and its underpinnings. For this reason alone, the point of ornamentality approach should be abandoned.

It Provides for Unwanted Piecemeal Invalidity Attacks Taken to its logical conclusion, the point of ornamentality approach could yield a result where, upon claim construction, each and every individual element of the design patent is found to be "functional." For instance, and continuing with the same cup example above, what if the district court concludes that the handle is functional as well? Under these facts, the claim is whittled away to nothing, effectively neutering the enforceability of an issued design patent *without an invalidity challenge ever having been mounted*.

Of course, invalidity challenges are confronted with the demanding safeguards that cloak a presumptively valid design patent, including most importantly the "clear and convincing" evidence standard.⁵⁶ The point of ornamentality approach provides an unwanted backdoor validity attack made under the guise of claim construction where the lesser preponderance evidentiary standard applies.

It Takes the Issue Away from the Fact Finder

Whether in the context of infringement or validity, it is the responsibility of the fact finder, not the court through claim construction, to discount the functional attribute, purpose or characteristic of the claimed design.⁵⁷ Placing the analysis with the fact finder is consistent with the Federal Circuit's holdings on the issue of statutory functionality. The Federal Circuit has consistently held that the issue of statutory functionality is a question of fact.⁵⁸ In short, all issues regarding functionality properly reside with the fact finder, not the court as part of claim construction.⁵⁹

Conclusion

Statutory functionality and claim construction functionality are distinct doctrines directed at different objectives that need to be clearly defined for an effective and reliable design patent system.

For statutory functionality, the prevailing multiplicity of forms approach (1) stays true to the language of the statute and spirit of a subject matter eligibility provision, (2) adequately safeguards against using design patents to monopolize functional ideas, and (3) brings reasonable and desirable certainty to an otherwise grey area of the law. To bring even more certainty to the issue, the Federal Circuit should confirm that this test should be used on an exclusive basis.

With respect to claim construction functionality, the point of ornamentality approach is unnecessary, fatally flawed and should be abandoned. The solution is to provide clear authority that design patents do not protect the functional attributes, purposes or characteristics of an article of manufacture, but rather only protect the overall appearance of the claimed design depicted in the drawings. Courts should not as part of claim construction attempt to identify and factor out functional features, elements or portions of the ornamental whole design.

Endnotes

1. Contrast the design patent law's positive requirement that the claimed design be "ornamental" with trademark law's negative requirement that the mark be "nonfunctional." *See* Elizabeth W. King, *The Trademark Functionality Doctrine*, LANDSLIDE, Sept./ Oct. 2012, at 20.

2. *See* Hupp v. Siroflex of Am., Inc., 122 F.3d 1456, 1460 (Fed. Cir. 1997) ("[T]he fact that the article of manufacture serves a function is a prerequisite of design patentability, not a defeat thereof. The function of the article itself must not be confused with 'functionality' of the design of the article." (citing Avia Grp. Int'l, Inc. v. L.A. Gear Cal., Inc., 853 F.2d 1557, 1563 (Fed. Cir. 1988) (distinguishing the functionality of the feature from the design of the feature))).

3. J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc., 534 U.S. 124, 131 (2001) (quoting Diamond v. Chakrabarty, 447 U.S. 303, 315 (1980)).

4. 489 U.S. 141, 148 (1989) (emphasis added).

5. See, e.g., OddzOn Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396 (Fed. Cir. 1997); Best Lock Corp. v. Ilco Unican Corp., 94 F.3d 1563 (Fed. Cir. 1996); Lee v. Dayton-Hudson Corp., 838 F.2d 1186 (Fed. Cir. 1988); Seiko Epson Corp. v. Nu-Kote Int'l, Inc., 190 F.3d 1360, 1368 (Fed. Cir. 1999) ("The ornamental requirement of the design statute means that the design must not be governed solely by function.")

6. *See Hupp*, 122 F.3d at 1460 ("A design or shape that is entirely functional, without ornamental or decorative aspect, does not meet the statutory criteria of a design patent.").

7. See Berry Sterling Corp. v. Pescor Plastics, Inc., 122 F.3d 1452, 1456 (Fed. Cir. 1997) (dicta); PHG Techs., LLC v. St. John Cos., 469 F.3d 1361, 1366 (Fed. Cir. 2006) (quoting Berry Sterling); High Point Design LLC v. Buyers Direct, Inc., 730 F.3d 1301, 1316 (Fed. Cir. 2013) (citing *Berry Sterling* and *PHG Techs.*).

8. *Berry Sterling*, 122 F.3d at 1456; *see also* Cheng v. AIM Sports, Inc., No. CV 10-3814 PSG (PLAx), 2011 U.S. Dist. LEXIS 42462 (C.D. Cal. Apr. 14, 2011).

9. Pursuant to the Patent Law Treaties Implementation Act of 2012, which became effective December 18, 2013, once the Geneva Act of the Hague Agreement Concerning the International Registration of Industrial Designs goes into effect in late 2014 or early 2015, the term for U.S. design patents will be increased from 14 years to 15 years.

10. Rosco, Inc. v. Mirror Lite Co., 304 F.3d 1373, 1378 (Fed. Cir. 2002). While the more recent proclamation by *Rosco* uses a stringent test (i.e., "not the only possible form"), the Federal Circuit at times has articulated a slightly less rigid standard: "When there are *several ways* to achieve the function of an article of manufacture,

the design of the article is more likely to serve a primarily ornamental purpose." L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1123 (Fed. Cir. 1993) (emphasis added) (holding design for shoes was ornamental when there were other ways to perform the function of the shoe). While both the *Rosco* and *L.A. Gear* articulations look to the existence of alternative designs as the tell-tale sign of ornamentality, the *Rosco* approach guards against monopolizing a functional idea via design patent, while the *L.A. Gear* approach guards against oligopolizing a functional idea via design patent. Regardless of what minimum threshold of alternative designs is used, the test for ornamentality is quite permissive.

11. Rosco, 304 F.3d at 1378 (alteration in original) (emphasis added) (citations omitted) (internal quotation marks omitted); see also, Sciko, 190F.3d at 1368 (stating that a design is functional if it is "the only possible form of the article that could perform its function.")

12. The multiplicity of forms theory has been followed by at least German, English, French, and Spanish courts. *See* Adolf Zemann, *Functional Designs and Trademarks—Limits to the Scope of Protection*, ROADMAP 13, http://roadmap2013.schoenherr.eu/ functional-designs-and-trademarks/ (last visited Sept. 4, 2014).

13. The same can be said for many seemingly "functional" items that are the subject matter of issued design patents. *See*, *e.g.*, Tone Bros. v. Sysco Corp., 28 F.3d 1192 (Fed. Cir. 1994) (bottle for spices); KeyStone Retaining Wall Sys., Inc. v. Westrock, Inc., 997 F.2d 1444 (Fed. Cir. 1993) (concrete block for retaining wall); *In re* Klein, 987 F.2d 1569 (Fed. Cir. 1993) (roof or siding shingle); *In re* Webb, 916 F.2d 1553 (Fed. Cir. 1990) (femoral hip stem prosthesis); *In re* Cho, 813 F.2d 378 (Fed. Cir. 1987) (bottle cap); Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423 (Fed. Cir. 1984) (microwave oven); *In re* Koehring, 37 F.2d 421 (C.C.P.A. 1930) (concrete mixing truck).

14. See Best Lock Corp. v. Ilco Unican Corp., 94 F.3d 1563 (Fed. Cir. 1996) (holding that design patent directed at the overall appearance of a key blade was not ornamental and thus the patent was invalid under § 171). Notably, *Best Lock* was a 2–1 panel decision. Judge Newman penned a provocative dissenting opinion challenging the majority's conclusion that the key blade design was dictated by its function: "[T]he panel majority has misapplied 35 U.S.C. § 171 in holding that the arbitrary design of the key profile is 'functional' because it mates with its matching keyway. The design of the key profile is not removed from access to the design statute because the key fits a matching keyway. That two articles are designed in harmony does not deprive the design of access to the design patent law. The design of the key profile is not determined by the function of the key to fit the lock." *Best Lock*, 943 F.3d at 1567 (Newman, J., dissenting).

15. See, e.g., Seiko, 190 F.3d at 1368 (stating that to pass statutory muster a design need not "be aesthetically pleasing"; "an absence of artistic merit does not mean that the design is purely functional").

16. See, e.g., Crocs, Inc. v. Int'l Trade Comm'n, 598 F.3d 1294, 1303 (Fed. Cir. 2010) ("[T]his court will uphold a finding of infringement. In other words, the deception that arises is a result of the similarities in the overall design, not of similarities in ornamental features in isolation. The ordinary observer test applies to the patented design in its entirety, as it is claimed." (citations omitted) (internal quotation marks omitted) (citing Braun, Inc. v. Dynamics Corp. of Am., 975 F.2d 815, 820 (Fed. Cir. 1992))). Contrast this holistic approach with copyright law where, for example, there can be infringement when only one chapter of a 20 chapter book is copied.

17. See, e.g., L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1123 (Fed. Cir. 1993) ("However, the utility of each of the various elements that comprise the design is not the relevant inquiry with respect to a design patent. In determining whether a design is primarily functional or primarily ornamental the claimed design is viewed in its entirety, for the ultimate question is not the functional or decorative aspect of each separate feature, but the overall appearance of the article, in determining whether the claimed design is dictated by the utilitarian purpose of the article.").

18. Whether there are alternative designs available often hinges on how broadly or narrowly the function of the article of manufacture is defined. Here, if it is assumed that the key must engage a specific keyhole, it may very well be that the key blade can take only one form. (i.e. its form is dictated solely by its function). However, if the depicted key's function was to serve as child's toy, then there could be myriad design alternatives to choose from.

19. Pacific Coast Marine Windshields Ltd. v. Malibu Boats, LLC, 739 F.3d 694, 702 (Fed. Cir. 2014) ("We conclude that the principles of prosecution history estoppel apply to design patents as well as utility patents.")

20. See DePaoli v. Daisy Mfg. Co., No. 07-cv-11778-DPW, 2009 U.S. Dist. LEXIS 62057, at *8–9 (D. Mass. July 14, 2009) ("It is not entirely apparent from this passage whether the Federal Circuit advocates resolving prosecution history and functionality issues through formal *Markman* claim construction, jury instructions, or some other means. On the one hand, the court refers to 'guid[ing] the finder of fact' in a manner '[a]part from attempting to provide a verbal description of the design,' which suggests jury instructions may be the best avenue. On the other hand, the court's parenthetical quotation from *OddzOn* suggests that these issues, or at least the question of functionality, may properly be addressed during claim construction." (alterations in original) (citation omitted) (quoting Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 680 (Fed. Cir. 2008) (en banc))).

21. See, e.g., Source Search Techs., LLC v. LendingTree, LLC, 588 F.3d 1063, 1075 (Fed. Cir. 2009) ("As this court has repeatedly instructed in the past, '[i]t is axiomatic that claims are construed the same way for both invalidity and infringement." (quoting Amgen Inc. v. Hoechst Marion Roussel, Inc., 314 F.3d 1313, 1330 (Fed. Cir. 2003))).

22. U.S. Patent No. D430,753 figs. 1–2 (filed Jan. 8, 1999).
23. See Good Sportsman Mktg. LLC v. Li & Fung Ltd., No.
6:07-cv-395, 2010 U.S. Dist. LEXIS 65458 (E.D. Tex. June 29, 2010) ("The utility of individual elements is irrelevant to the question of functionality, as it is the design in its entirety that provides the basis for the patent.").

24. Consider a utility patent claim directed at a resealable container where, among other things, the base is claimed to be cylindrical and the lid frustoconical. While the combination of the claimed shapes of the base and lid yield an ornamental appearance, no attempt is made in the utility patent context to factor out these constituent elements, regardless as to whether they are ornamental or purely ornamental. The same should hold true for design patent claim construction as it related to functional or purely functional elements.

25. For examples where the courts fell into the point of ornamentality trap, see Poly-America, L.P. v. API Indus., Inc., No. 13-693-SLR, 2014 U.S. Dist. LEXIS 49618, at *3 (D. Del. Apr. 10, 2014) ("[W]here a design contains both ornamental and functional features, it is proper to separate the functional and ornamental aspects because the scope of the design claim must be construed in order to identify the non-functional aspects of the design as shown in the patent. . . . [T]o the extent the . . . features identified above are considered functional, they should not be considered design elements that would be observed by the ordinary observer." (internal quotation marks omitted)); Keurig, Inc. v. JBR, Inc., No. 11-11941-FDS, 2013 U.S. Dist. LEXIS 73845, at *22 (D. Mass. May 24, 2013) (dissecting out a "functional aspect of the patented design" and concluding that it "cannot be considered in the [infringement] comparison"); Safco Prods. Co. v. Welcom Prods., Inc., 799 F. Supp. 2d 967, 977 (D. Minn. 2011) (articulating list of ornamental features); Mag Instrument, Inc. v. JS Prods., Inc., 595 F. Supp. 2d 1102, 1108 (C.D. Cal. 2008) ("Assuming, for the sake of argument, that Plaintiff's [patents] contain both functional and non-functional elements, the Court, in the usual course of issuing a claim construction order, will construe the challenged claims to identify the non-functional aspects of the design as shown in the patent." (internal quotation marks omitted)); Hsin Ten Enter. USA, Inc. v. Clark Enters., 149 F. Supp. 2d 60, 64-66 (S.D.N.Y. 2001) (making "determination of whether each element of the ... patent is functional or non-functional"); Butler v. Balkamp, Inc., 2014 U.S. Dist. LEXIS 122464, at *4-5 (S.D. Ind. Sept. 3, 2014) ("[T]he '646 patent does not protect either the front or rear square drives of the tool handle because those aspects of the design are purely functional.")

26. *Egyptian Goddess*, 543 F.3d 665 (abrogating the point of novelty test).

27. As an example of the confusion, in 2006 the Federal Circuit in Amini Innovation Corp. v. Anthony California, Inc., quoted a Supreme Court trademark case as support for the legal principles governing design patent functionality. 439 F.3d 1365, 1371 (Fed. Cir. 2006) (quoting Inwood Labs., Inc. v. Ives Labs., Inc., 456 U.S. 844, 851 (1982)). While the Federal Circuit has never repeated this obvious mistake, district courts have picked up on the language and perpetuated the gaffe. See Keurig, 2013 U.S. Dist. LEXIS 73845, at *19 ("[T]he Federal Circuit defined functionality in the context of design patent interpretation. . . . [holding] '[a]n aspect is functional if it is essential to the use or purpose of the article or if it affects the cost or quality of the article." (quoting Inwood Labs, 456 U.S. at 850 n.10)); Luv N' Care, Ltd. v. Regent Baby Prods. Corp., 898 F. Supp. 2d 650, 654 (S.D.N.Y. 2012) ("An aspect is functional 'if it is essential to the use or purpose of the article or if it affects the cost or quality of the article." (quoting Amini, 439 F.3d at 1371).

28. See Jason J. DuMont & Mark D. Janis, Functionality in Design Protection Systems, 19 J. INTELL. PROP. L. 261 (2012); Frederick L. Medlin, Functionality of Individual Features in Design Patents: A New Role after Egyptian Goddess, 77 PAT. TRADEMARK & COPYRIGHT J. (BNA) 139 (2008); Perry J. Saidman, Functionality and Design Patent Validity and Infringement, 91 J. PAT. & TRADE-MARK OFF. Soc'Y 313 (2009); Perry J. Saidman & John Hintz, The Doctrine of Functionality in Design Patent Cases, 19 U. BALT. L. REV. 352 (1989); Robert G. Oake, Understanding Functionality in Design Patent Law, INTELL. PROP. TODAY, Oct. 2011.

29. 838 F.2d 1186 (Fed. Cir. 1988).

30. Id. at 1188.

31. Id.

32. 67 F.3d 1571 (Fed. Cir. 1995) (Lourie, J.).

33. Id. at 1577.

34. *Id.* (holding that the patentee "effectively limited the scope of its patent claim by including those [functional] features in it").

35. 122 F.3d 1396 (Fed. Cir. 1997) (Lourie, J.).

36. Id. at 1404 (emphasis added).

37. Id. at 1405 (emphasis added).

38. *Id.* (emphasis added) (citing Lee v. Dayton-Hudson Corp., 838 F.2d 1186, 1188 (Fed. Cir. 1988)). Note that identifying the non-functional elements of a design is no different than verbalizing the entire claimed design – a practice later expressly counseled against by the en banc Federal Circuit in *Egyptian Goddess*. See Egyptian Goddess, 543 F.3d at 679–80.

39. The United States Patent and Trademark Office (USPTO) has long granted design patents for novel combinations of old elements that create a nonobvious, ornamental visual appearance. *See, e.g.*, Smith v. Whitman Saddle Co., 148 U.S. 674, 679 (1893) ("If, however, the selection and adaptation of an existing form is more than the exercise of the imitative faculty and the result is in effect a new creation, the design may be patentable."); Gen. Gaslight Co. v. Matchless Mfg. Co., 129 F. 137, 138 (2d Cir. 1904) ("[T]he principle, as applied to design patents, is *unassailable* that whenever ingenuity is displayed in producing something new, which imparts to the eye a pleasing impression, *even though it be the result of uniting old forms and parts*, such production is a meritorious invention and entitled to protections." (emphases added)); *see also* Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423, 1443 (Fed. Cir. 1984).

40. 543 F.3d 665 (Fed. Cir. 2008) (en banc); see Perry J. Saidman, What Is the Point of the Point of Novelty Test for Design Patent Infringement?, 90 J. PAT. & TRADEMARK OFF. Soc'Y 401 (2008) (discussing the systemic problems with the point of novelty test and the implications of Egyptian Goddess).

41. *Egyptian Goddess*, 543 F.3d at 680 (citing *OddzOn*, 122 F.3d at 1405).

42. The Federal Circuit has never provided guidance on what it means by "purely functional" features. See ATI Indus. Automation, Inc. v. Applied Robotics, Inc., No. 1:09CV471, 2014 U.S. Dist. LEXIS 101413, at *3 n.3 (M.D.N.C. July 25, 2014) ("The Federal Circuit has used the language 'dictated solely by function' (or 'governed solely by function') in considering whether patented designs as a whole qualify as invalid as functional, but it has not applied the term when considering individual elements of a design."). Given the absolute nature of "purely functional," it would seem to reconcile with the "dictated solely by" standard. In other words, the "dictated solely by" standard that is employed to assess the overall appearance in statutory functionality (macro context) would also be used on an element-by-element approach in claim construction functionality (micro context). To be clear, while use of this strict standard in an element-by-element analysis might help to contain the reach of the problematic point of ornamentality approach, my proposal as explained herein is to completely refrain from element-by-element analyses.

43. Richardson v. Stanley Works, Inc., 597 F.3d 1288 (Fed. Cir. 2010).

44. U.S. Patent No. D507,167 fig. 2 (filed Jan. 9, 2004).

45. U.S. Patent No. D562,101 fig. 5 (filed Mar. 29, 2006).

46. Richardson, 597 F.3d at 1292-94.

47. *Id.* at 1294. In comparison to the Federal Circuit, the district court in Richardson painted with a much finer brush when opining on claim construction functionality. Specifically, district court excluded only the overall *configuration* of the handle, hammer-head, jaw, and crow-bar. *Richardson v. Stanley Works, Inc.*, 610 F. Supp. 2d 1046, 1050 (D. Ariz. 2009). ("The overall configuration of these four elements is dictated by the functional purpose of the tool and therefore is not protected by his design patent.") The district courts approach is also problematic in that it fails to appreciate that the overall configuration is part and parcel with the overall design. The spatial relationships of the constituent elements, along with their individual shapes and aspect ratios, collectively produce the design. It is entirely unclear how an overall configuration can be dissected out while leaving anything meaningful behind.

48. See Carlini Enters., Inc. v. Paul Yaffe Design, Inc., No. 8:13-cv-01671-ODW(RNBx), 2014 U.S. Dist. LEXIS 113941, at *3 (C.D. Cal. Aug. 15, 2014) ("Yet, the task of distinguishing the ornamental features from the functional ones must be tempereda detailed verbal description of the claimed design may place an undue emphasis on particular features of the design and may hinder examination of the design as a whole." (citing Crocs, Inc. v. Int'l Trade Comm'n, 598 F.3d 1294, 1302 (Fed. Cir. 2010))); DePaoli v. Daisy Mfg. Co., No. 07-cv-11778-DPW, 2009 U.S. Dist. LEXIS 62057, at *14 (D. Mass. July 14, 2009) ("To provide the jury with a verbalized construction of the . . . design patent's claims which directs their attention to the two illustrations in the patent and then describes only those elements that are implicated by prosecution history and functionality would place undue emphasis on those few elements. This is precisely the danger against which the Egyptian Goddess court cautioned.").

49. *In re* Blum, 374 F.2d 904, 907 (C.C.P.A. 1967) (emphasis added); *see also* Elmer v. ICC Fabricating, Inc., 67 F.3d 1571, 1577 (Fed. Cir. 1995) (holding that all solid lines shown in design patent drawings form part of the claimed design).

50. Pelouze Scale Co. v. Am. Cutlery Co., 102 F. 916, 918–19 (7th Cir. 1900) (emphasis added).

51. See Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1246 (Fed. Cir. 2009) (Clevenger, J., dissenting) (criticizing the majority for its "dissection of designs into component parts," namely "significant" and "insignificant" elements, and noting that such dissections "prohibit assessment of designs as a whole, in violation of long-standing law, starting with *Gorham*").

52. U.S. Patent No. D387,316 fig. 1 (filed May 29, 1996).

53. See Carlini Enters., 2014 U.S. Dist. LEXIS 113941 (noting logistical difficulties in trying to separate out ornamental and functional elements in an overall design).

54. See 35 U.S.C. § 282.

55. See U.S. PATENT & TRADEMARK OFFICE, MANUAL OF

PATENT EXAMINING PROCEDURE (MPEP) § 1503.02 (9th ed. Mar. 2014) ("When the inconsistencies are of such magnitude that the *overall appearance* of the design is unclear, the claim should be rejected under 35 U.S.C. 112(a) and (b)." (emphasis added)); *id.* § 1504.01(c) ("ornamentality must be based on the *entire design*" (emphasis added)); *id.* § 1504.03 ("In determining patentability under 35 U.S.C. § 103(a), it is the *overall appearance* of the design that must be considered." (emphasis added)).

56. See, e.g., L.A. Gear, Inc. v. Thom McAn Shoe Co., 988 F.2d 1117, 1123 (Fed. Cir. 1993) (requiring clear and convincing evidence to invalidate design patent on grounds of functionality, and further noting that 35 U.S.C. § 282 includes a presumption of ornamentality).

57. See DePaoli v. Daisy Mfg. Co., No. 07-cv-11778-DPW, 2009 U.S. Dist. LEXIS 62057, at *26-27 (D. Mass. July 14, 2009) (noting the confusion created by Richardson and Egyptian Goddess couching inquiry of functionality of individual features in claim construction as a matter of law) ("Such a construction clearly must occur prior to determining infringement. However, given that functionality is a finding of fact, it may be more reasonable to determine the claim construction on summary judgment or in jury instructions than to attempt it earlier in the proceedings."); Dexas Int'l, Ltd. v. Office Max, Inc., No. 6:07-cv-396, 2009 U.S. Dist. LEXIS 6642 (E.D. Tex. Jan. 30, 2009) (noting that both statutory functionality and claim construction functionality are questions of fact) ("While the Court adopts the aforementioned construction, the Court expresses no opinion as to whether the patented design incorporates functional elements. 'Whether a patented design is functional or ornamental is a question of fact."" (quoting PHG Techs., LLC v. St. John Cos., 469 F.3d 1361, 1365 (Fed. Cir. 2006))).

58. See, e.g., PHG Techs., 469 F.3d at 1365 (statutory functionality is a question of fact); Hupp v. Siroflex of Am., Inc., 122 F.3d 1456, 1460–61 (Fed. Cir. 1997) (same); Avia Grp. Int'l, Inc. v. L.A. Gear Cal., Inc., 853 F.2d 1557, 1563 (Fed. Cir. 1988) (same).

59. While the point of ornamentality approach should not be employed at all, it is interesting to note that several courts have removed the inquiry from the confines of claim construction and ceded the responsibility of determining whether a feature is ornamental or functional to the fact finder. *See, e.g., PHG Techs.*, 469 F.3d at 1365; *Hupp*, 122 F.3d at 1467; Sofpool, LLC v. Intex Recreation Corp., No. 2:07-CV-097, 2007 U.S. Dist. LEXIS 93057, at *5 (E.D. Tex. Dec. 19, 2007) (whether element of design is functional is a question of fact for jury); Five Star Mfg., Inc. v. Ramp Lite Mfg., Inc., 44 F. Supp. 2d 1149, 1155 (D. Kan. 1999) ("[W]hether the features of a design are functional or ornamental is an issue of fact."); Black & Decker (U.S.) Inc. v. Pro-Tech Power Inc., No. 97-1123-A, 1998 U.S. Dist. LEXIS 9162, at *15 (E.D. Va. June 2, 1998) ("[T]he Court will leave the question of whether certain elements of the . . . design patent are functional to the jury.").

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The Origins of American Design Patent Protection

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Many firms invest heavily in the way their products look, and they rely on a handful of intellectual property regimes to stop rivals from producing look-alikes. Two of these regimes—copyright and trademark—have been closely scrutinized in intellectual property scholarship. A third, the design patent, remains little understood except among specialists. In particular, there has been virtually no analysis of the design patent system's core assumption: that the rules governing patents for inventions should be incorporated en masse for designs.

One reason why the design patent system has remained largely unexplored in the literature is that scholars have never explained how and why the system came to exist. This Article seeks to provide that account. We show how technological innovation in early American manufacturing (especially in the cast-iron goods industry) created unprecedented opportunities for creativity in industrial design and a concomitant expansion in design piracy. We analyze manufacturers' lobbying efforts that led to the first American legislative proposals for design protection, and we connect those proposals to antecedents in British copyright and design registration legislation. We also explain how these early proposals were transmuted into design patent proposals, and we explore the idiosyncratic political circumstances that surrounded the eventual passage of the design patent bill. We conclude by reassessing the modern design patent regime in view of insights drawn from our historical account.

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INTRODUCTION

In the space of a few weeks in late 2011, automaker Daimler AG sued an Asian manufacturer for infringing patents on the diminutive "Smart Car";¹ Crocs, maker of the eponymous (and wildly popular) rubber-molded footwear, filed a patent infringement suit against Walgreens;² Kohler sued a rival for infringing patents on stainless steel sinks;³ and Apple and Samsung continued their worldwide battle over smart phones and tablet computers.⁴ High-stakes, high-tech patent lawsuits such as these have become the norm on civil dockets of many federal courts across the country. What differentiates these suits is that they involve patents on designs—that is, patents on a product's visual appearance, not merely on the inventive components that make it work.⁵ There are many other recent examples, and

^{1.} Complaint for Trademark and Trade Dress Infringement, Trademark Counterfeiting, Patent Infringement, Unfair Competition and Trademark Dilution, Daimler AG v. Shuanghuan Auto. Co., No. 2:11-cv-13588-MOB-MAR (E.D. Mich. Aug. 17, 2011).

^{2.} Complaint for Patent Infringement, Crocs, Inc. v. Walgreen, Co., No. 1:11-cv-02954-MSK (D. Colo. Nov. 14, 2011).

^{3.} Complaint, Kohler Co. v. Amerisink, Inc., No. 2:11-cv-00921-WEC (E.D. Wis. Oct. 3, 2011).

^{4.} See, e.g., Apple, Inc. v. Samsung Elec. Co., 678 F.3d 1314 (Fed. Cir. 2012).

^{5.} See, e.g., 1 MANUAL OF PATENT EXAMINING PROCEDURE 1502 (8th ed. rev. 2010) (specifying that, in the context of design patents, design refers to "the visual characteristics

application-filing trends suggest that intellectual property litigation over designs will become increasingly common worldwide.⁶

Design patent cases routinely deal with the products of technological innovation, but they also bring into confluence matters of consumer preference, aesthetics, and even art. For example, litigation between Apple and Samsung over the design of the iPad is as much about Steve Jobs's and Jonathan Ive's obsession with minute aspects of visual aesthetics as it is about touch-screen technology;⁷ and it involves a claim that devices depicted in Stanley Kubrick's 1968 science fiction movie 2001: A Space Odyssey so resemble the iPad that Apple's design protection should be declared invalid.⁸

Herein lies the problem. Intellectual property law has a fetish with categorization; design, by contrast, is holistic, amorphous, and multivariate.⁹ It is little wonder that fitting intellectual property law to design has proven so difficult. After nearly two centuries of effort, there remain fundamental questions about how best to craft legislative schemes that will facilitate innovation in industrial design. The topic perennially appears on the U.S. legislative agenda, most recently in the form of proposals to create special protection for fashion designs.¹⁰ A widerranging reexamination of design protection is underway in the United Kingdom.¹¹ The design protection debate is one of intellectual property law's most intractable,¹²

embodied in or applied to an article").

6. See WORLD INTELLECTUAL PROP. ORG., WORLD INTELLECTUAL PROPERTY INDICATORS 153–80 (2011) (reporting statistics on industrial design protection).

8. Eriq Gardner, *Is Apple's iPad Copied From '2001: A Space Odyssey'?*, HOLLYWOOD REP. (Aug. 25, 2011), http://www.hollywoodreporter.com/thr-esq/is-apples-ipad-copied-2001-227700 (providing a video clip from the movie scene at issue).

9. DISCOVERING DESIGN: EXPLORATIONS IN DESIGN STUDIES xiii, xvi (Richard Buchanan & Victor Margolin eds., 1995) (characterizing design as "the science of the artificial" and as "a new liberal art of industrial and technological culture"); ARTHUR J. PULOS, AMERICAN DESIGN ETHIC: A HISTORY OF INDUSTRIAL DESIGN TO 1940, at vii (1983) (referring to design as "the indispensable leavening of the American way of life"); see also Alice Rawsthorn, What Defies Defining, but Exists Everywhere?; A Hint: It's Two Parts Creation and One Part 'Dastardly Plan,' INT'L HERALD TRIB., Aug. 18, 2008, at 8 (quoting a design historian for the proposition that "[d]esign is to produce a design to design a design.").

10. Innovative Design Protection and Piracy Prevention Act, H.R. 2511, 112th Cong. (2011); BRIAN T. YEH, COPYRIGHT PROTECTION FOR FASHION DESIGN: A LEGAL ANALYSIS OF LEGISLATIVE PROPOSALS IN THE 111TH CONGRESS (2010) (discussing, inter alia, S. 3728, a fashion design protection bill that passed the Senate Judiciary Committee in 2010). On earlier efforts, see David Goldenberg, *The Long and Winding Road: A History of the Fight Over Industrial Design Protection in the United States*, 45 J. COPYRIGHT SOC'Y U.S.A. 21 (1997) (addressing proposals to enact new forms of design protection legislation in the twentieth century).

11. INTELLECTUAL PROP. OFFICE, IPO ASSESSMENT OF THE NEED FOR REFORM OF THE DESIGN INTELLECTUAL PROPERTY FRAMEWORK (2011).

12. See, e.g., J.H. Reichman, Past and Current Trends in the Evolution of Design Protection Law—A Comment, 4 FORDHAM INTELL. PROP. MEDIA & ENT. L.J. 387, 387 (1993) ("[I]ndustrial design has posed the intellectual property world's single most complicated

See, e.g., Nick Bilton, Steve Jobs: Designer First, C.E.O. Second, N.Y. TIMES (Oct. 6, 2011, 1:37 PM), http://bits.blogs.nytimes.com/2011/10/06/steve-jobs-designer-first-c-e-o-second/.

engrossing decades of legislative effort in the United States alone.¹³ This debate has become particularly heated and uncharacteristically mainstream following the massive verdict against Samsung,¹⁴ the size of which may have been largely driven by the presence of the design patents.

In the United States, we have never settled on a satisfactory answer to a basic normative question: why should we use a *patent* system to protect industrial designs? One reason that this question has proven so confounding and persistent is that the antecedent historical question has not been adequately addressed: how (and why) did the United States decide to create a patent system for designs? In this Article, we answer this historical question. In doing so, we seek to provide a foundation for resolving the normative question.

Our historical analysis of the intersection between intellectual property law and design complements recent scholarly debates about design protection, but we have different objectives and a different orientation. First, we do not confine our discussion to the fashion industry, the focal point of recent scholarship.¹⁵ We are more interested in examining how intellectual property regimes affect the industrial design enterprise in the vast majority of industries—literally everything, including the kitchen sink. Second, we orient our discussion around the design patent regime; our chief objective is to understand how that regime should operate as one paradigm among many others in contemporary design intellectual property. Scholars have written very little about the design patent system.¹⁶

In Part I, we describe the existing U.S. design patent system and situate it within the legal landscape of intellectual property protection for designs. We focus on two chief points: (1) the design patent system's traditionally plebeian status among U.S. intellectual property regimes, contributing to a persistent problem that we describe as design patent's identity crisis; and (2) the thesis that the design patent system originated as a historical accident.

In the remaining Parts, we offer a historical analysis of the design patent system's origins, aimed at discerning the role and identity of the design patent system and at critically evaluating the claim that design patent is an accidental intellectual property regime. Part II shows how technological advances in

puzzle.").

^{13.} *E.g.*, *In re* Nalbandian, 661 F.2d 1214, 1218 n.1 (C.C.P.A. 1981) (Rich, J., concurring) ("Fabulous amounts of time and effort have been poured into solving the design protection problem with, to date, no legislative solution.").

^{14.} See, e.g., Leo Kelion, Apple Versus Samsung: Jury Foreman Justifies \$1bn Verdict, BBC NEWS (Aug. 30, 2012), http://www.bbc.co.uk/news/technology-19425052.

^{15.} See, e.g., C. Scott Hemphill & Jeannie Suk, *The Law, Culture, and Economics of Fashion*, 61 STAN. L. REV. 1147 (2009) (advocating a limited anti-copying right for fashion design); *cf.* Kal Raustiala & Christopher Sprigman, *The Piracy Paradox: Innovation and Intellectual Property in Fashion Design*, 92 VA. L. REV. 1687, 1776 (2006) (arguing that "fashion's cyclical nature is furthered and accelerated by a regime of open appropriation" rather than a regime featuring stronger intellectual property protection).

^{16.} Notable exceptions include Dennis D. Crouch, A Trademark Justification for Design Patent Rights (Univ. of Mo. Sch. of Law Legal Studies Research Paper No. 2010-17, 2010), available at http://ssrn.com/abstract=1656590; Jason J. Du Mont, A Non-Obvious Design: Reexamining the Origins of the Design Patent Standard, 45 GONZ. L. REV. 531 (2010); Janice M. Mueller & Daniel Harris Brean, Overcoming the "Impossible Issue" of Nonobviousness in Design Patents, 99 Ky. L.J. 419 (2010–2011).

antebellum American manufacturing created opportunities for manufacturers to incorporate design elements into mass-produced consumer goods and simultaneously triggered a design piracy problem. Part III chronicles the origin and evolution of legislative proposals that eventually matured into the design patent provisions, the first form of American intellectual property protection covering designs. We rely here on newly uncovered archival sources that reveal insights about the lobbying influence of prominent manufacturers, the political agendas of key intellectual property insiders, and connections with a legislative fight that degenerated into one of the most serious political crises in antebellum America, the fight over protectionist tariffs. We conclude in Part IV with some prescriptions for doctrinal change in modern design patent law, informed by our historical analysis.

I. MODERN PERCEPTIONS OF THE AMERICAN DESIGN PATENT SYSTEM

The design patent system has led a long but quiet life. Many observers have regarded it with ambivalence or written it off as an intellectual property lightweight. From the limited commentary about the design patent system, two themes emerge. First, some view the design patent system as having never developed a distinctive identity, a *raison d'être*. Second, some dismiss the design patent system as the product of historical accident. We discuss both views below, arguing that these are two primary obstacles to the development of a more fully theorized design patent system.

A. Design Patent's Identity Crisis

The design patent system is, first, a *patent* system. The U.S. design patent system is based primarily on three brief provisions that comprise Chapter 16 of the general (utility) patent statute.¹⁷ These provisions impose the condition that designs be "ornamental" in order to warrant protection,¹⁸ and they establish a fourteen-year term of protection (measured from the date of grant),¹⁹ rules that are unique to design patents. In most other respects, however, the modern design patent system relies on substantive rules that were developed for patents on inventions—utility patent rules. Indeed, perhaps the most important design patent provision is Section 171's seemingly mundane incorporation clause, incorporating by reference "[t]he provisions of this title relating to patents for inventions"²⁰ That language, applied over the course of more than a century and a half of utility patent law evolution, has the effect of subjecting design patents to modern patent validity conditions such as the requirement for nonobviousness²¹ and to the modern judicial

^{17. 35} U.S.C. §§ 171–73 (2006). A special remedies provision for design patent infringement is codified separately. *See* 35 U.S.C. § 289 (2006).

^{18. 35} U.S.C. § 171.

^{19. 35} U.S.C. § 173; *see also* Patent Law Treaties Implementation Act of 2012, Pub. L. No. 112-211, § 102, 126 Stat. 1527, 1532 (providing for a fifteen-year term).

^{20. 35} U.S.C. § 171; *see* Du Mont, *supra* note 16, at 578–82 (tracing the development and expansion of the incorporation clause from its inception in the 1842 Act to its modern incarnation).

^{21. 35} U.S.C. § 103 (2006).

framework for deciding questions of utility patent infringement.²² It also guarantees that the complex provisions of the America Invents Act of 2011 apply to design patents, even though the policy basis for that legislation emanated entirely from debates over utility patent protection.²³

Beyond its incorporation of substantive patent law rules, the design patent system is also very much a patent system from an institutional perspective. Like their utility patent counterparts, design patent applications are subject to substantive, pre-grant examination administered by the U.S. Patent and Trademark Office.²⁴ Design patent infringement matters are subject to the appellate jurisdiction of the Court of Appeals for the Federal Circuit—again, like utility patents.²⁵

Yet, it would be a mistake to assume that the design patent right resembles the utility patent right in terms of sheer economic power. Even accounting for the recent design patent renaissance,²⁶ design patents as a group have never achieved

23. See Robert A. Armitage, Understanding the America Invents Act and Its Implications for Patenting, 40 AIPLA Q.J. 1 (2012) (cataloguing the provisions of the America Invents Act without mentioning their impact on design patents).

24. See MANUAL OF PATENT EXAMINING PROCEDURE, supra note 5, at ch. 1500.

25. 28 U.S.C. § 1295(a)(1) (2006) (appeals from district courts in cases arising under the patent laws); *id.* § 1295(a)(4)(A) (appeals from the U.S. Patent and Trademark Office with respect to rejected patent applications).

26. When the Federal Circuit reformulated the law of design patent infringement in Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 678 (Fed. Cir. 2008) (en banc), predictions of a renaissance in design patent enforcement quickly followed. See, e.g., James Juo, Egyptian Goddess: Rebooting Design Patents and Resurrecting Whitman Saddle, 18 FED. CIR. B.J. 429, 450 (2009) (predicting that the Egyptian Goddess decision "should strengthen design patents, especially those that have been drafted with careful attention to the novel features to be protected"); Myshala E. Middleton, Egyptian Goddess, Inc. v. Swisa, Inc.: Design Patent Infringement Revolutionized by an Egyptian Goddess, 17 U. BALT. INTELL. PROP. L.J. 179, 185 (2009) (Egyptian Goddess will serve to "streamline future design patent infringement cases."). In the time since *Egyptian Goddess*, the Federal Circuit has handed down important new design patent decisions at an unusual pace. See, e.g., Richardson v. Stanley Works, Inc., 597 F.3d 1288 (Fed. Cir. 2010) (analyzing design patent functionality by assessing the functionality of individual design features rather than the design as a whole); Crocs, Inc. v. Int'l Trade Comm'n, 598 F.3d 1294 (Fed. Cir. 2010) (applying the *Egyptian Goddess* infringement standard and remarking on claim construction); Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233 (Fed. Cir. 2009) (abandoning the point of novelty test as an element of the patentability analysis); Titan Tire Corp. v. Case New Holland, Inc., 566 F.3d 1372, 1384–85 (Fed. Cir. 2009) (debating, but not resolving, whether the standard for design patent obviousness should be modified in view of Supreme Court developments in the law of obviousness for utility patents). Filings for U.S. design patents have increased substantially, and this phenomenon is not confined to the United States. See, e.g., WORLD INTELLECTUAL PROP. ORG., 2012 WORLD INTELLECTUAL PROPERTY INDICATORS 9 (2012), available at http://www.wipo.int/freepublications/en/ intproperty/941/wipo_pub_941_2012.pdf (noting that design applications grew strongly in 2010-2011).

^{22.} That framework requires a construction of the patent's claims, deemed to be a pure question of law, followed by a rigorous comparison of each element of the construed claim to the product accused of infringement. *See, e.g.*, Absolute Software, Inc. v. Stealth Signal, Inc., 659 F.3d 1121, 1129 (Fed. Cir. 2011).

anything like the exclusionary power commonly attributed today to utility patents. In the late 1980s, courts had arguably narrowed design patents so substantially that Judge Rich remarked acerbically that "[d]esign patents have almost no scope."²⁷ Indeed, Jerry Reichman has argued that during the course of the twentieth century, design patents had become trivial, functioning as little more than evidence of title and of priority for filing foreign design applications.²⁸ Courts are likely to treat design patents more generously today—but, in a sense, this only adds to the ambivalence over the design patent's stature. Is it, and should it be, a *real* patent? Notwithstanding the incorporation of the utility patent rules and institutional framework, is the design patent a mysterious intellectual property right that simply wears the patent moniker? A fuller historical analysis of the origin of the design patent system could provide a foundation for answering these questions.

The emergence of copyright and trademark protection for designs has only further complicated the problem of carving out a role for the design patent. As we will discuss, when design patent protection was introduced in 1842, it was the sole form of American intellectual property protection for designs.²⁹ That is no longer true. Under current U.S. law, designers may seek protection for many types of designs under the copyright³⁰ and trademark³¹ regimes and may hold those forms of protection concurrently with design patent protection.³² In addition, vessel hull designers may secure a special form of design protection administered within the copyright system.³³

As these forms of intellectual property protection developed, the domain of design patents became increasingly more difficult to discern. Commentators argued that the design patent system should give way in favor of one or more of these other regimes: that it should be abolished in favor of *sui generis* legislation,³⁴ that it

29. See infra Part III.B–C.

31. Designers may seek to register distinctive and nonfunctional designs as trade dress under the Lanham Act, 15 U.S.C. §§ 1051–1096 (2006), or may claim unregistered trade dress rights using Lanham Act § 43(a), 15 U.S.C. § 1125(a) (2006).

32. See In re Yardley, 493 F.2d 1389, 1394 (C.C.P.A. 1974) (no requirement to elect between design patent protection and copyright protection); In re Mogen David Wine Corp., 372 F.2d 539, 545 (C.C.P.A. 1967) (no requirement to elect between design patent protection and registered trade dress protection); In re Mogen David Wine Corp., 328 F.2d 925, 930 (C.C.P.A. 1964) (same). But cf. Vessel Hull Design Protection Act, 17 U.S.C. § 1329 (2006) (providing that the issuance of a design patent terminates vessel hull design protection).

33. Vessel hull designs may be protected under the provisions of Chapter 13 in 17 U.S.C. GRAEME B. DINWOODIE & MARK D. JANIS, TRADE DRESS AND DESIGN LAW 566–72 (2010) (explaining the relevant provisions).

34. Daniel H. Brean, Enough is Enough: Time to Eliminate Design Patents and Rely on More Appropriate Copyright and Trademark Protection for Product Designs, 16 TEX.

^{27.} In re Mann, 861 F.2d 1581, 1582 (Fed. Cir. 1988).

^{28.} J.H. Reichman, *Design Protection After the Copyright Act of 1976: A Comparative View of the Emerging Interim Models*, 31 J. COPYRIGHT SOC'Y U.S.A. 267, 298 (1983).

^{30.} Designers may be able to secure copyright protection for designs as pictorial, graphic, or sculptural works. 17 U.S.C. § 102(a)(5) (2006) (identifying pictorial, graphic, and sculptural works as a category of protectable work); 17 U.S.C. § 101 (2006) (supplying relevant definitions).

should be converted to a copyright model,³⁵ and that it should be governed by unfair competition principles.³⁶

This has not occurred; instead, the design patent system has lingered. In the copyright and trademark jurisprudence, the design patent system has become a handy foil. For example, in *Wal-Mart v. Samara Bros.*,³⁷ the Supreme Court cited the theoretical availability of design patent protection as one rationale for adopting an elevated standard of distinctiveness for product design trade dress protection.³⁸ Similarly, some judges hold up design patent protection as a preferred alternative to trade dress protection when invalidating trade dress protection on functionality grounds.³⁹ Earlier, in *Mazer v. Stein*,⁴⁰ the Court declared that the existence of design patent protection posed no obstacle to recognizing copyright protection for designs of useful articles because design patent protection was so uncertain.⁴¹

36. Rudolf Callmann, *Style and Design Piracy*, 22 J. PAT. OFF. SoC'Y 557 (1940) (arguing that courts need to apply common law unfair competition law in design cases); *see also* Cameron K. Wehringer, *Two for One: Trademarks and Design Patents*, 50 TRADEMARK REP. 1158 (1960) (discussing the overlap between trademarks and design protection).

37. 529 U.S. 205 (2000).

38. *Id.* at 215–16 (holding that product design trade dress cannot qualify as inherently distinctive as a matter of law). Similarly, Judge Easterbrook upheld the denial of a trade dress claim on the grounds that the table leg design at issue was not distinctive, commenting that the table manufacturer could have resorted to design patent or copyright protection to attempt to thwart copying. Bretford Mfg., Inc. v. Smith Sys. Mfg. Corp., 419 F.3d 576, 580 (7th Cir. 2005); *see also* Amy B. Cohen, *Following the Direction of TrafFix: Trade Dress Law and Functionality Revisited*, 50 IDEA: INTELL. PROP. L. REV. 593, 696 (2010) (arguing that design patent and copyright alone suffice to provide adequate protection for designs, and that design protection as trade dress under the Lanham Act should be eliminated). Additionally, aesthetic and utilitarian functionality doctrines can create insurmountable hurdles for those claiming trade dress protection. *See* Industria Arredamenti Fratelli Saporiti v. Charles Craig, Ltd., 725 F.2d 18, 19–20 (2d Cir. 1984).

39. See, e.g., Jay Franco & Sons, Inc. v. Franek, 615 F.3d 855, 861 (7th Cir. 2010) ("Franek chose to pursue a trademark, not a design patent, to protect the stylish circularity of his beach towel. He must live with that choice." (citation omitted)); see also Jason J. Du Mont & Mark D. Janis, *Functionality in Design Protection Systems*, 19 J. INTELL. PROP. L. 261, 281–82 (2012) (comparing the use of the functionality doctrine in design patent law to its use in trade dress law).

40. 347 U.S. 201 (1954).

41. Id.; see also BARBARA RINGER, DRAFT: SECOND SUPPLEMENTARY REPORT OF THE

INTELL. PROP. L.J. 325, 379–81 (2008) (arguing that the design patent system should either be abolished or should be phased out and replaced with a system more akin to community design protection); Note, *Design Protection—Time to Replace the Design Patent*, 51 MINN. L. REV. 942, 959–61 (1967).

^{35.} See, e.g., Roy V. Jackson, A New Approach to Protection for the Designs of New Products, 38 J. PAT. OFF. SoC'Y 448, 449 (1956) (arguing that design patent protection should be converted to a system of "engineering copyright" or "copyright-design"); Henry D. Williams, Copyright Registration of Industrial Designs, 7 J. PAT. OFF. SoC'Y 540, 540 (1924) (arguing that the design patent laws are a "misfit" and have been "altogether insufficient"). But cf. Frank W. Dahn, Designs—Patents or Copyrights, 10 J. PAT. OFF. SoC'Y 297, 297 (1927) (discussing industrial design protection under the copyright and design patent systems, noting that "it is immaterial in a broad sense whether this be done by a copyright system or a patent system, so long as it is well done").

Decisions and commentary that attempt to capture the design patent system's purpose by articulating its incentives rationale likewise leave us with many questions about the nexus between the design and utility patent systems. The most venerable comments—those of the Supreme Court in 1870 in *Gorham Co. v. White*⁴²—assert merely that the design patent provisions "were plainly intended to give encouragement to the decorative arts,"⁴³ a reference to the Constitution's intellectual property clause,⁴⁴ with a slight adaptation for designs.⁴⁵ This strikes us as a placeholder recitation that reveals very little about whether the design patent system was intended to be robustly patent-like, since analogous constitutional language would be used to justify a design copyright scheme. Yet more recent rulings merely absorb the *Gorham* incantation without question. Indeed, in its recent landmark ruling on design patent infringement, the en banc Court of Appeals for the Federal Circuit declared that the *Gorham* decision was "[t]he starting point for any discussion of the law of design patents."

More recently, some scholars have shifted the focus to trademarks, exploring the connections between design patent protection and trademark incentive rationales. For example, Dennis Crouch has argued that design patents should be understood as an "alternative rule of evidence" for establishing trade dress rights.⁴⁷ Similarly, Barton Beebe has suggested that the primary purpose of design patents is to incentivize product differentiation—to encourage producers to create and maintain distinctiveness, which is reminiscent of the trademark system's function.⁴⁸ In the case of high-technology consumer goods, as Beebe points out, consumers cannot readily evaluate whether the components of the goods provide superior technological utility, so consumers rely instead on the visual characteristics of the products as symbols of the product's relative utility.⁴⁹ The *Gorham* Court hints at a

44. U.S. CONST. art. I, § 8, cl. 8 (authorizing Congress to create systems that would "promote the Progress of Science and useful Arts").

45. Gorham, 81 U.S. at 525 (further suggesting that "[t]he law manifestly contemplates that giving certain new and original appearances to a manufactured article may enhance its salable value, may enlarge the demand for it, and may be a meritorious service to the public"). The Court did cite a prior British design copyright case in support of its design patent infringement standard. *Id.* at 526 (citing McCrea v. Holdsworth, [1866] 1 Q.B. 263 (Eng.)). We discuss the significance of British antecedents to American design patent law *infra* Part III.

46. Egyptian Goddess, Inc. v. Swisa, Inc., 543 F.3d 665, 670 (Fed. Cir. 2008) (en banc).

47. Crouch, *supra* note 16, at 48.

48. Barton Beebe, *Intellectual Property Law and the Sumptuary Code*, 123 HARV. L. REV. 809, 862–64 (2010). Beebe sees much in common doctrinally between design patent and trademark. *Id.* at 863.

49. *Id.* at 864 (asserting that "[d]esign patents enable the designers of [high-technology consumer] products to convert the absolute utility that they have created into clearly demonstrable (and protectable) forms of relative utility, which may be the primary form of utility that high-technology consumers ultimately desire").

REGISTER OF COPYRIGHTS ON THE GENERAL REVISION OF THE U.S. COPYRIGHT LAW 186 (1975) (indicating that design patents were believed to be "inadequate as a practical form of protection" at the time of *Mazer* due to perceived judicial hostility, high cost, and delay encountered in the examination process).

^{42. 81} U.S. (14 Wall.) 511, 524 (1871).

^{43.} *Id*.

product differentiation rationale, asserting that the law presumes that the designer's act of "giving certain new and original appearances to a manufactured article may enhance its salable value, may enlarge the demand for it, and may be a meritorious service to the public."⁵⁰ Beebe goes further, asserting that design protection laws, including design patent laws, "are probably the clearest examples we have of the 'functional transformation' of intellectual property law into a body of law being used not simply to 'promote the Progress,' but also, and in tension with that goal, to preserve our system of consumption-based differentiation in the face of copying technology that threatens to undermine it."⁵¹ For Beebe, this illustrates a broader distinction between "progressive" intellectual property (denoting intellectual property systems that seek to promote "progress" in the sense of advances in absolute utility) and sumptuary intellectual property (which merely strive to preserve differentiation among products).⁵²

We have some sympathy for Beebe's argument, but for us it warrants closer historical scrutiny. Did the proponents of the original design patent system presume that industrial designers would supply "not so much beauty as distinction?"⁵³ Or is it more likely that designers historically have sought to supply both beauty and distinction, a combination that is very difficult to disaggregate? ⁵⁴ And, if so, what does this tell us about shaping incentives through a design patent system?⁵⁵ Historical analysis has something to contribute here, even if it does not yield tidy answers.

- 51. Beebe, *supra* note 48, at 862.
- 52. Id. at 840.
- 53. Id. at 865.

54. In addition, as Beebe sees it, progressive intellectual property is oriented towards preventing substitutive copying, while sumptuary intellectual property seeks to prevent dilutive copying. *Id.* at 866–67. That may be true for high-end fashion designs, where, as Beebe points out, it seems unlikely that purveyors of luxury fashion items actually lose sales because ordinary consumers choose cheap counterfeits instead. *Id.* at 867. But we are not confident that this same generalization would have extended across many types of consumer goods manufacturers historically, where mimicry could plausibly have been both substitutive and dilutive.

55. For an argument that design patent rights and trademark rights supply comparable incentives, see Crouch, *supra* note 16, at 44 (asserting that design patent scope is so narrow that it could only provide low-level investment in design innovation and that consumer demand alone might extract this level of innovation). But these observations could point towards copyright incentives just as readily as they could point towards trademark incentives.

^{50.} Gorham, 81 U.S. at 525. Further strands of this rationale can be seen in the Court's description of the substantial similarity test for infringement—finding infringement where, "in the eye of an ordinary observer, giving such attention as a purchaser usually gives, . . . the resemblance is such as to deceive such an observer, inducing him to purchase one [(i.e., the allegedly infringing design)] supposing it to be the other [(i.e., the patented design)]." *Id.* at 528.

B. The "Historical Accident" Thesis

Lastly, on the rare occasions when courts and commentators have focused directly on the design patent system's genesis, they have tended to accept the proposition that the design patent system came about without deliberation. The eminent commentator Stephen Ladas dismissively characterized the passage of American design patent legislation as a "historical accident,"⁵⁶ and others seem to have accepted this view.⁵⁷ One historical commentary—and, until recently, the only account directed to the history of the design patent system—goes only a bit deeper. Thomas B. Hudson's *A Brief History of the Development of Design Patent Protection in the United States*⁵⁸ posits that the original design patent legislation passed because the Commissioner of Patents, Henry Ellsworth, recommended it in an annual Commissioner's Report to Congress presented in early 1842,⁵⁹ and, a few months later, Congress dutifully adopted Ellsworth's recommendation.⁶⁰ Hudson no doubt drew upon design patent treatises tracing back to the nineteenth century, which, likewise, presented the creation of the design patent system as an Ellsworth-inspired *fait accompli*, or simply cited the 1842 Act without any background.⁶¹

These summary explanations intrigued us. We sensed that there was more to be $told^{62}$ and that telling it would be important in light of the ultimate normative

58. 30 J. PAT. OFF. SOC'Y 380 (1948). In fairness to Hudson, his account aimed primarily at describing the evolution of the design patent system in the late nineteenth and early twentieth centuries, not at the factors that originally motivated Congress to enact design patent legislation.

59. See infra notes 182–93 and accompanying text. As we discuss, Ellsworth's report referred to the existence of design protection in "other nations," undoubtedly meaning the 1839 British copyright and design legislation. See infra note 185 and accompanying text.

60. Act of Aug. 29, 1842, ch. 263, § 3, 5 Stat. 543, 543–44 (1842) [hereinafter Act of Aug. 29, 1842]; Hudson, *supra* note 58, at 381. Hudson does augment this account by briefly speculating why design patent protection took the form of patent protection, but he cites no support. *Id.* at 381–83. We analyze Hudson's conjectures *infra* Part III.B, questioning some but agreeing with others.

61. See, e.g., HECTOR T. FENTON, THE LAW OF PATENTS FOR DESIGNS 1–2 (1889) (referencing the 1842 Act as the first design patent act without additional background); WILLIAM EDGAR SIMONDS, THE LAW OF DESIGN PATENTS 173 (1874) (same); WILLIAM LEONARD SYMONS, THE LAW OF PATENTS FOR DESIGNS 5 (1914) (same).

62. Here we found particularly important the work by Brad Sherman and Lionel Bently, showing that, in British law, early design legislation served as a prominent but little-appreciated prototype for the eventual crystallization of modern notions of property rights in intangibles and modern structures of intellectual property laws. BRAD SHERMAN & LIONEL BENTLY, THE MAKING OF MODERN INTELLECTUAL PROPERTY LAW: THE BRITISH EXPERIENCE,

^{56.} STEPHEN P. LADAS, II PATENTS, TRADEMARKS, AND RELATED RIGHTS: NATIONAL AND INTERNATIONAL PROTECTION 830 (1975).

^{57.} See, e.g., Orit Fischman Afori, Reconceptualizing Property in Designs, 25 CARDOZO ARTS & ENT. L.J. 1105, 1142 (2008); Richard W. Pogue, Borderland—Where Copyright and Design Patent Meet, 52 MICH. L. REV. 33, 62 (1953); Kenneth B. Umbreit, A Consideration of Copyright, 87 U. PA. L. REV. 932, 934 (1939) (asserting that "[t]he fact that the law of design patents is following the precedents of mechanical patents rather than of copyrights is an accident of administration" and urging that "[i]t is due to their name and to their subjection to the jurisdiction of the Patent Office").

problem of defining a role for the design patent system in future debates about intellectual property protection for designs. We attempt to provide more lucid and more fully contextualized explanations in the analysis presented in the following Parts.

II. TECHNOLOGICAL INNOVATION, DESIGN PIRACY, AND THE ROOTS OF AMERICAN DESIGN PROTECTION

As we will show in this Part, the design patent regime emerged in response to the imperatives of technological innovation. We focus on the technological change in a leading antebellum American industry, the manufacture of cast-iron goods. We explain how technological innovation made it feasible for manufacturers to incorporate design features into mass-produced consumer goods, ushering in both the enterprise of American industrial design and the concomitant enterprise of American domestic design piracy.

A. Innovation and Design Piracy in American Antebellum Manufacturing

In the 1830s, American manufacturers produced cast-iron goods⁶³ directly from iron ore using large blast furnaces located near iron ore sources and navigable waterways.⁶⁴ Blast iron furnaces produced goods that were usually very coarse, heavy, and unrefined.⁶⁵ Furnace operators did not specialize in particular products, so they had little interest in developing ornamentation or aesthetically pleasing configurations for particular products.⁶⁶ Indeed, blast furnace operators were more concerned with the composition of the iron than the casting's aesthetics.

Jordan L. Mott, a leading New York manufacturer,⁶⁷ revolutionized the processes for producing cast-iron goods, and, in short measure, became a principal lobbyist for expanding American intellectual property protection, particularly with regard to designs.⁶⁸ Mott deserves mention as one of antebellum America's foremost entrepreneurs, and as one of its consummate patent system insiders— credentials that he sought to preserve for posterity by commissioning a painting that depicts him in the Great Hall of the Patent Office in imaginary conversation

^{1760-1911,} at 63-76 (1999).

^{63.} An iron "cast" or "casting" is the actual shape or product that is created by pouring refined molten iron into a mold and allowing it to cool and solidify. *See* HUGH PHILIP TIEMANN, IRON AND STEEL 44–45 (1910).

^{64.} See generally FREDERICK OVERMAN, THE MANUFACTURE OF IRON, IN ALL ITS VARIOUS BRANCHES 145–51 (1850) (depicting a typical blast furnace, fig. 49).

^{65.} *See* IV JOHNSON'S NEW UNIVERSAL CYCLOPEDIA: A SCIENTIFIC AND POPULAR TREASURY OF USEFUL KNOWLEDGE 585 (Frederick A. P. Barnard & Arnold Guyot eds., 1878) [hereinafter JOHNSON'S NEW UNIVERSAL CYCLOPEDIA].

^{66.} See David R. Meyer, Networked Machinists: High-technology Industries in Antebellum America 110 (2006).

^{67.} At one time, Mott's sprawling real estate holdings encompassed most of Brooklyn. *See* PROMINENT FAMILIES OF NEW YORK 420 (BiblioLife ed., 2009) (Lyman H. Weeks ed., 1897).

^{68.} See infra Part II.

with Morse, Colt, Goodyear, and other legendary American inventors.⁶⁹ His vanity was not in question.

In the 1830s, Mott had begun producing the first practical coal-fired, cast-iron stoves and had sold them to customers in New York City.⁷⁰ At first, he did not make his own castings; instead, he bought them from blast furnace operators who produced them and shipped them to him for assembly.⁷¹ Seeking to end his dependence on the blast furnace operators,⁷² Mott built a small-scale cupola furnace in the city⁷³ and, after some experimentation, determined how to produce his own castings using pig iron.⁷⁴ Compared to cast-iron plates made directly from ore by blast furnaces, cupola furnaces produced thinner, lighter castings, but they were more susceptible to cracking when heated.⁷⁵ To overcome this problem, he incorporated curves, fluting, and other features aimed at enhancing heat dissipation.⁷⁶

According to one account, Mott's innovative process "gained the attention of iron men, and before the close of the year cupola furnaces began to be erected, and

69. The painting is *Men of Progress* by Christian Schussele, circa 1857. For background, see Henry Petroski, *Men and Women of Progress*, 82 AM. SCIENTIST 216, 216–17 (1994). At about that same time, President Buchanan asked Mott to become the Commissioner of Patents, but Mott ultimately declined. PROMINENT FAMILIES OF NEW YORK, *supra* note 67, at 420.

70. Mott had secured utility patent protection for an anthracite-burning coal, and he had determined how to use "pea-sized" coal (previously considered to be scrap) as stove fuel. 4 AMERICAN SUPPLEMENT TO ENCYCLOPEDIA BRITANNICA: A DICTIONARY OF ARTS, SCIENCES, AND GENERAL LITERATURE 606 (J.M. Stoddart ed., 1889); Stoves, U.S. Patent No. 7,096X (issued May 30, 1832). This innovation revolutionized the stove industry. JOHNSON'S NEW UNIVERSAL CYCLOPEDIA, *supra* note 65, at 585.

71. See 2 J. LEANDER BISHOP, A HISTORY OF AMERICAN MANUFACTURES FROM 1608 TO 1860, at 576–77 (3d ed. 1868) [hereinafter AMERICAN MANUFACTURES].

72. Mott became dissatisfied with the prices that blast furnace operators were charging him, according to at least one account. *Id.* at 577.

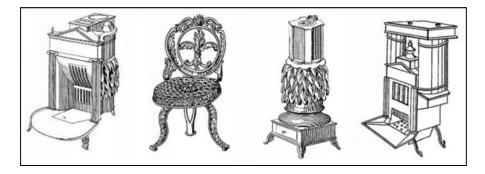
73. See William Dundas Scott-Moncrieff, *The Cupola Furnace and "Castings," in* GREAT INDUSTRIES OF GREAT BRITAIN 111 (Cassell & Co. ed., 1884) (describing the cupola furnace); AMERICAN MANUFACTURES, *supra* note 71, at 577 (describing the location of Mott's cupola furnace).

74. See AMERICAN MANUFACTURES, supra note 71, at 577.

75. Id. at 576–77.

76. *Id.* at 577 ("Mr. Mott made his plate patterns 'from edge to edge longer than a straight line,' by pannelling, curving, fluting, or other device."); Conversational Meeting of the Mechanics Institute, Reported for the American Repertory, Subject Stoves (Feb. 1840) (unpublished manuscript) (on file with the Columbia University Rare Book & Manuscript Library, Mott Family Papers, Box 2). Signed "Ed's Notes," this manuscript appears to have been produced during an interview with Jordan Mott while a member of the Mechanic's Institute. It notes that Mott's insight concerning the stove's surface area improved the iron's heat radiation properties to the point where they no longer had to line the stoves with brick. For an example of one of Mott's designs utilizing these techniques, see Stove & Fireplace, U.S. Patent No. 50 (issued Oct. 11, 1836) (Figs. 1–3) (utilizing separate concentric rings in scalloped, notched, and leaf patterns in order to dissipate heat but noting that their "ornament" was "merely a thing of fancy, or taste").

soon spread over the cities and villages of the Union."⁷⁷ Mott and others could now cast their own stoves on a commercial scale.⁷⁸ Subsequent advances in thin-casting techniques, among other factors,⁷⁹ facilitated explosive growth in the production of a wide array of additional cast-iron goods, including "kitchen utensils, sugar-kettles, bath-tubs, . . . cast-iron railings, fountains, and lawn ornaments."⁸⁰ Some of Mott's innovative stove and chair designs are depicted below.⁸¹



Once they adopted thin-casting techniques, Mott and other manufacturers suddenly found that a new and unexpected opportunity for innovation had opened to them. They could now add value to cast-iron consumer goods on a commercial scale by crafting innovative, distinctive designs. That is, by incorporating ornamentation, or by adopting daring new geometries for their products, they might lend their products aesthetic appeal and simultaneously provide consumers a basis for differentiating between competing products.

Iron goods manufacturers employed pattern makers who carved new patterns using soft woods, plaster, or soft metals;⁸² casting molds were then made from the

77. AMERICAN MANUFACTURES, *supra* note 71, at 577. Some evidence suggests that others in addition to Mott were experimenting with the use of cupola furnaces at the same time. *See* Jeremiah Dwyer, *Stoves and Heating Apparatus*, *in* 2 ONE HUNDRED YEARS OF AMERICAN COMMERCE 357, 361 (Chauncy M. Depew ed., 1895) (stating that Mott was "one of the first to use a cupola for remelting iron for stove manufacture").

78. See, e.g., RUTH SCHWARTZ COWAN, MORE WORK FOR MOTHER: THE IRONIES OF HOUSEHOLD TECHNOLOGY FROM THE OPEN HEARTH TO THE MICROWAVE 60 (1983) (crediting Mott as the first to actually "make" stoves, instead of just assembling them).

79. See Charles Huston, *The Iron and Steel Industry*, *in* 1 ONE HUNDRED YEARS OF AMERICAN COMMERCE 320, 323 (Chauncey M. Depew ed., 1895) (noting that the growth of the railroad network profoundly affected the growth of the iron industry); F.W. TAUSSIG, THE TARIFF HISTORY OF THE UNITED STATES 57 (6th ed. 1914) (attributing U.S. iron industry growth in the 1830s principally to the introduction of anthracite coal-based smelting, replacing charcoal smelting).

80. VICTOR S. CLARK, HISTORY OF MANUFACTURES IN THE UNITED STATES: 1607–1860, at 504 (1916).

81. The featured design diagrams and their corresponding citations are listed from left to right: Stove & Fireplace, U.S. Patent No. 50 fig. 3 (issued Oct. 11, 1836); Cast-Iron Chair, U.S. Patent No. 5,317 fig. 1 (issued Oct. 2, 1847); Stove & Fireplace, U.S. Patent No. 50 fig. 2 (issued Oct. 11, 1836); and Parlor-Stove, U.S. Patent No. 508 fig. 1 (issued Dec. 7, 1837).

82. See Alonzo Potter, The Principles of Science Applied to the Domestic and

patterns.⁸³ According to contemporary observers, the pattern maker's design work was "almost entirely executed by hand, entailing a heavy expense and the consumption of considerable time."⁸⁴ Once made, the patterns could be used repeatedly, so they were of great value, so much so that some firms created fire-resistant "pattern houses" for their storage.⁸⁵ Advertisements began to emphasize the ornamental attributes of cast-iron goods,⁸⁶ and, for the first time, some cast-iron goods came to be perceived as works of art.⁸⁷

The phenomenon was not confined to the cast-iron goods market. A more general enterprise of American industrial design was beginning to emerge. As Arthur Pulos points out, a consumer "could always depend on what his senses told him" about a product even if he found the mechanics of the product to be baffling.⁸⁸ Many manufacturers "began to pay particular attention to the notion that artistic values applied to utilitarian manufactures might also increase their saleability."⁸⁹

Still, American cast-iron goods designers had no apparent, formal intellectual property mechanism available for capturing the value attributable to design. Copyright protection was an obvious candidate (at least as viewed in retrospect), but copyright protection did not embrace industrial creations, entirely omitting protection for three-dimensional useful articles until many decades later⁹⁰ and only affording protection in limited instances for surface ornamentation applied to two-

84. 4 AMERICAN SUPPLEMENT TO ENCYCLOPEDIA BRITANNICA, supra note 70, at 606.

85. Ellen Marie Snyder, Victory over Nature: Victorian Cast-Iron Seating Furniture, 20 WINTERTHUR PORTFOLIO 221, 224 (1985).

86. See, e.g., Priscilla J. Brewer, "We Have Got a Very Good Cooking Stove": Advertising, Design, and Consumer Response to the Cookstove, 1815–1880, 25 WINTERTHUR PORTFOLIO 35, 43 (1990) (identifying an 1844 stove advertisement illustrating that the stove's appearance had become an important consideration in stove marketing); Snyder, *supra* note 85, at 227 (noting that trade catalogues for cast-iron products extolled their visual appearance and finding that even Mott's catalogue grandly boasted that it contained nothing that did "not possess some artistic merit").

87. Snyder, *supra* note 85, at 226 (referring to a perception of cast-iron's "aesthetic elevation" to art).

MECHANIC ARTS, AND TO MANUFACTURES AND AGRICULTURE 214 (1860).

^{83.} See generally Babbage on the Economy of Manufactures, 2 AM. RAILROAD J. & ADVOC. INTERNAL IMPROVEMENTS 353, 359 (1833) ("Patterns of wood or metal made from drawings are the originals from which the moulds for casting are made: so that, in fact, the casting itself is a copy of the mould, and the mould is a copy of the pattern."); 2 SUPPLEMENT TO SPONS' DICTIONARY OF ENGINEERING 618–72 (Ernest Spon ed., 1880) (detailing the casting process).

^{88.} PULOS, *supra* note 9, at 133.

^{89.} Id.

^{90.} The Act of July 8, 1870, defined copyrightable subject matter to include "statuary, and . . . models or designs intended to be perfected as works of the fine arts." Act of July 8, 1870, ch. 230, § 86, 16 Stat. 198, 212. In 1909, Congress amended the provision substantially, deleting the "fine arts" language and providing that copyright protection could extend to all works of authorship. *See* Act of March 4, 1909, ch. 320, § 4, 35 Stat. 1075, 1076. Eventually, in *Mazer v. Stein*, 347 U.S. 201 (1954), the Supreme Court concluded that these changes extended copyright beyond the traditional fine arts to industrial designs such as the statuettes at issue in *Mazer*, which were intended to be used as bases for lamps. *Id.* at 213–14.

dimensional objects.⁹¹ No federal trademark regime existed, and common law unfair competition precedents, which were sparse at the time, offered no clear basis for the protection of designs as trade dress.⁹² Lastly, utility patent law protected industrial creations but not their visual aspects.⁹³ Indeed, writing with the benefit of hindsight, William Edgar Simonds averred that the classes of "intellectual productions" divided neatly into three: "books, maps, charts, cuts, engravings, prints, and musical compositions" (all protected by copyright at the time); "new and useful arts, machines, manufactures, and compositions of matter, and improvements thereon" (protectable under the utility patent regime); and "a third class to which no protection had been given, comprising . . . patterns, figures, or pictures to be woven into, or printed or impressed upon textile fabrics, as carpets, shawls[,] and dress goods."⁹⁴

Our research suggests that, prior to 1836, some entrepreneurs were attempting to use the utility patent regime to obtain design protection *sub rosa*. From 1793 to 1836, the utility patent system did not subject patent applications to substantive examination prior to grant,⁹⁵ so patents could issue without ever having been scrutinized for compliance with substantive patentability requirements—including requirements for eligible subject matter. While stove makers were certainly using the utility patent system to protect technological innovations embodied in their

93. Act of Feb. 21, 1793, ch. 11, § 1, 1 Stat. 318, 319 [hereinafter Patent Act of 1793] (providing that utility patent protection extended to "any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter"). We have found no evidence of any argument to extend this language to ornamental design, except for a somewhat cryptic remark from the treatise writer Willard Phillips. Phillips claimed that the French Patent Law of 1791 rejected protection for "mere ornaments" as not the proper subject for utility patents and then asserted:

[T]his appears to be a very questionable position, for it would never be contended in case of an invention of which a part was ornamental merely, that this part might be infringed with impunity; and there appears to be no more ground for yielding any more protection to ornamental parts in an original invention, than in an improvement, or in a case where a part of the invention was ornamental, than one which should be wholly confined to ornament.

WILLARD PHILLIPS, THE LAW OF PATENTS FOR INVENTIONS 135 (1836).

94. WILLIAM EDGAR SIMONDS, THE LAW OF DESIGN PATENTS 183 (1874). According to Simonds, design patent protection was intended for the benefit of this third, unprotected class. *Id.* at 184. As we have suggested throughout this paper, the creation of the design patent system was not quite so conceptually pure.

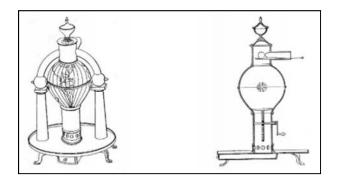
95. See Edward C. Walterscheid, To Promote the Progress of Useful Arts: American Patent Law and Administration, 1798–1836, at 427 (1998).

^{91.} In particular, Congress extended copyright protection to engravings and etchings in 1802. *See* Act of Apr. 29, 1802, ch. 36, § 2, 2 Stat. 171, 171 (extending copyright protection to "who[ever] shall invent and design, engrave, etch or work, or from his own works and inventions, shall cause to be designed and engraved, etched or worked, any historical or other print or prints").

^{92.} See, e.g., 1 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS AND UNFAIR COMPETITION § 7:62 (4th ed. 2009) (identifying the 1917 crescent wrench decision, *Crescent Tool Co. v. Kilborn & Bishop Co.*, 247 F. 299 (2d Cir. 1917), as the first true American product design trade dress case).

cast-iron stoves, at least one stove maker attempted to use the utility patent regime to obtain the equivalent of design protection. Walter Hunt, one of the nineteenth century's most prolific inventors,⁹⁶ developed a globe-shaped heating stove that was said to permit radiated heat to be distributed equally in all directions.⁹⁷ Hunt filed a utility patent application that not only detailed the construction and functional advantages of the globe-shaped stove body but also included a drawing in which the stove's body was adorned with depictions of the continents (below, left).⁹⁸

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Hunt included three claims in the application, the first of which suggests that he may have been asserting exclusive rights over both the functional and the visual aspects of the stove:

I claim the *style*, *general arrangement* and *fashion* of the above described Radiator or Globe Stove believing the peculiar advantages of said arrangement in the generating and equal diffusion of heat exclusively confined to the globe or spheroid form as a reservoir of fuel... which cannot be effected by the regular or cylindrical stove.⁹⁹

An early advertisement for the stove not only highlights its useful features but also indicates that "[p]atterns may be seen at the [Globe Stove] office."¹⁰⁰ The patent drawings depict additional ornamentation, likewise suggesting that the Globe Stove was about more than merely functional advantages.¹⁰¹ Hunt's example

^{96.} See generally JOSEPH NATHAN KANE, NECESSITY'S CHILD: THE STORY OF WALTER HUNT, AMERICA'S FORGOTTEN INVENTOR (1997). Hunt's pioneering work on sewing machines later figured prominently in massive patent litigation in that industry. See Adam Mossoff, The Rise and Fall of the First American Patent Thicket: The Sewing Machine War of the 1850s, 53 ARIZ. L. REV. 165, 187–90 (2011).

^{97.} KANE, supra note 96, at 63.

^{98.} Heating Stove, U.S. Patent No. 8,006X fig. 1 (issued Feb. 8, 1834) (Fig. 1, depicted on the left). The drawing on the right is Figure 2 from the patent, a partial cutaway view depicting the stove's interior construction.

^{99.} Id. at 84-85 (claim 1) (emphasis added); see also KANE, supra note 96, at 63.

^{100.} KANE, *supra* note 96, at 61 (reprinting an advertising sheet dated Nov. 1833 for "Hunt's Patent Radiator, or Globe Stove").

^{101.} See '006X Patent fig.1; see also The Globe Stove, N.Y. COM. ADVERTISER, Nov. 7,

is particularly noteworthy because he eventually joined Mott in lobbying for design protection legislation, as we discuss in more detail below.¹⁰²

The appropriability problem that was developing in the cast-iron goods industry was also plaguing the New England textile industry in America.¹⁰³ Design piracy became particularly widespread in the American textile industry in the 1830s.¹⁰⁴ Ornate calico prints produced at the New England factories of Francis Lowell (and fellow Boston Associates) had become so popular that they had "displace[d] the linseys, checks, and homespun plaids" that local artisans had traditionally sold.¹⁰⁵ As firms came to produce calico design patterns on an ever-expanding scale, competitors inevitably sought to mimic those patterns.¹⁰⁶ However, American intellectual property law provided no apparent recourse.

Intellectual property scholars will find this narrative familiar. It is a classic exemplar of the public goods problem of intellectual property lore.¹⁰⁷ Predictions of an intellectual property law response would fit amicably within Harold Demsetz's thesis for the emergence of private property rights.¹⁰⁸ An intellectual property response was predictable for another reason: an analogous situation had developed in Great Britain.

B. Design Piracy in Great Britain and the Intellectual Property Law Response

As American manufacturers came to realize, a similar saga of technological advance had spurred a legislative response in Great Britain. Cotton textile manufacturers in northern England and Scotland had adopted technological

^{1833,} at 2 ("[F]rom the beauty and perfection of some of the castings we have seen, it can be made as ornamental as need be desired.").

^{102.} See infra Part III. Like Mott, Hunt manufactured stoves in New York City. See KANE, supra note 96, at 66 (noting that Hunt identified himself in city directories as a stove maker in New York City). Mott, in turn, was apparently familiar with Hunt's work on the globe-stove. See, e.g., Coal-Stove, U.S. Patent No. 4,247 (issued Nov. 1, 1845) (noting his awareness of Hunt's globe-stove).

^{103.} Indeed, the problem fits a classic pattern; it has been duplicated in many settings and has driven much intellectual property policy over the decades. *See, e.g.*, ADRIAN JOHNS, PIRACY (2009).

^{104.} See PAUL E. RIVARD, A NEW ORDER OF THINGS: HOW THE TEXTILE INDUSTRY TRANSFORMED NEW ENGLAND 68–69 (2002) (characterizing design copying as standard practice).

^{105.} CLARK, supra note 80, at 547.

^{106.} Copying textile print patterns did require some skill. A would-be copyist had to be capable of decoding the pattern's elements, engraving them for rollers, and then determining the proper blend of dyes. RIVARD, *supra* note 104, at 68–69.

^{107.} Indeed, analogous problems in the British textile industry had generated design legislation that took its cue from copyright law, and American lobbyists drew on the British experience to formulate their proposals, as we discuss further *infra* Part III.

^{108.} See Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 350 (1967) (positing that changes in technology or markets stimulate the creation and capture of emerging economic value through private property rights). We do not mean to suggest that the Demsetzian account provides a comprehensive explanation for the creation of the design patent system. As we show *infra* Part III, a number of domestic political factors also contributed to the enactment of the design patent provisions.

innovations in printer cylinders that enabled them to print patterns over continuous lengths of cloth, on a large scale, and at previously unheard-of rates.¹⁰⁹ However, these manufacturers quickly found that consumers preferred the patterns they associated with London-based manufacturers,¹¹⁰ so they copied those patterns and used them to produce calico prints in quantities far exceeding their originators.¹¹¹ Not surprisingly, by the late 1700s, the London calico manufacturers were complaining to Parliament.¹¹² Because contemporary English copyright law protected engravers and authors but not textile pattern makers,¹¹³ Parliament enacted new legislation, the Calico Printers' Act of 1787,¹¹⁴ which conferred protection on persons "who shall invent, design, and print . . . any new and original pattern . . . for printing linens, cottons, callicos, or muslins."¹¹⁵ By the early 1800s, an active debate in England about expanding the Act culminated in a radical new design protection system beginning in 1839.¹¹⁶ We discuss its details below and explain how it came to be used as a model for American law.

III. DESIGN PATENT LAW'S AMBIVALENT LEGISLATIVE ANCESTRY

In view of the technological context that we have explored in Part II, we now turn to an analysis of the design patent system's legislative ancestry. Relying on newly uncovered source material, we describe the first proposal for American design protection legislation, which was styled as copyright legislation and borrowed heavily from British design copyright law. We then recount the disappearance of the first proposal and the emergence of a second—newly

114. An Act for the Encouragement of the Arts of designing and printing Linens, Cottons, Callicoes, and Muslins, by vesting the Properties thereof in the Designers, Printers, and Proprietors, for a limited Time, 27 Geo. 3, c. 38 (1787) (Eng.) [hereinafter Calico Printers' Act].

115. Id. § 1. Protection endured only for two months, a reflection of the staunch opposition that the northern cotton factories mounted. SHERMAN & BENTLY, supra note 62, at 63 n.3. Parliament initially enacted the Calico Printers' Act for only one year, see Calico Printers' Act § 3, but extended it successively. See An Act for continuing an Act made in the twenty-seventh Year of the Reign of his present Majesty, initiuled [sic], An Act for the Encouragement of the Arts of designing and printing Linens, Cottons, Callicoes, and Muslins, by vesting the Properties thereof in the Designers, Printers, and Proprietors for a limited Time, 29 Geo. 3, c. 19 (1789) (Eng.), made perpetual by An Act for amending and making perpetual an Act made in the twenty-seventh Year of the Reign of his present Majesty, initiuled [sic], An Act for the Encouragement of the Arts of Designing and Printing Linens, Cottons, Calicoes, and Muslins, by vesting the Properties, and Muslins, by vesting the Properties, and Proprietors for a limited Time, 20 Geo. 3, c. 19 (1789) (Eng.), made perpetual by An Act for amending and making perpetual an Act made in the twenty-seventh Year of the Reign of his present Majesty, initial [sic], An Act for the Encouragement of the Arts of Designing and Printing Linens, Cottons, Calicoes, and Muslins, by vesting the Properties thereof in the Designers, Printers, and Proprietors, for a limited Time, 34 Geo. 3, c. 23 (1794) (Eng.).

116. See infra Part III.

^{109.} See, e.g., Lara Kriegel, Culture and the Copy: Calico, Capitalism, and Design Copyright in Early Victorian Britain, 43 J. BRIT. STUD. 233, 238–39 (2004).

^{110.} See id. at 239–40.

^{111.} Id. at 240.

^{112.} SHERMAN & BENTLY, *supra* note 62, at 63 n.3.

^{113.} See Engraving Copyright Act, 1734, 8 Geo. 2, c. 13 (Eng.), amended by Engraving Copyright Act, 1766, 7 Geo. 3, c. 38 (Eng.), amended by Prints Copyright Act, 1777, 17 Geo. 3, c. 57 (Eng.).

characterized as patent legislation. We show why this new proposal likely sprang from considerations of bureaucratic self-interest, not from any perceived distinction between the relative merits of copyright and patent protection for designs. We conclude by showing that the ultimate passage of the design patent legislation likely resulted from external political forces—specifically, a protectionist surge advocated by the Whig Party and bitterly opposed by the Jacksonian Democrats.

A. The Mott and Ruggles Proposals: Design Patent's Genesis in British Design Copyright¹¹⁷

Stove manufacturer Jordan L. Mott set in motion the proposals that eventually grew into the design patent legislation. In February 1841, Mott, on behalf of himself and numerous signatories, petitioned Congress for design protection.¹¹⁸ Noting that designs were not eligible for utility patent protection, Mott's petition argued that "improvements... in articles of manufacture ha[d] rendered necessary a *registration* of new designs and patterns."¹¹⁹ These designs "require[d] a considerable expenditure of time and money, and c[ould] be ... use[d] ... by any person so disposed, in such a manner as to undersell the inventor or proprietor."¹²⁰ Above all, the petitioners did not call for copyright or patent protection but for a registration.¹²¹

119. MANUFACTURERS' PETITION, *supra* note 118, at 1 (emphasis added).

120. *Id.* (estimating that it only cost the copier "one-hundredth of the expense which it has cost the original manufacturer"). Intellectual property scholars will recognize this as a classic invocation of the public goods problem. *See, e.g.*, WILLIAM M. LANDES & RICHARD A. POSNER, THE ECONOMIC STRUCTURE OF INTELLECTUAL PROPERTY LAW 19–20 (2003) (providing a general discussion).

121. MANUFACTURERS' PETITION, *supra* note 118, at 1.

^{117.} To our knowledge, scholars have never previously analyzed the Ruggles bill discussed in this section. Ruggles's introduction of both the petition on February 3, 1841, and the bill on February 27, 1841, were misclassified in the Congressional Globe's index under the heading "Patent Office, report of the Commissioner, showing operations of, for the past year," *see* CONG. GLOBE, 26th Cong., 2d Sess. index at 6 (1841), which may explain why previous researchers have not uncovered it.

^{118.} See JORDAN L. MOTT ET AL., PETITION OF A NUMBER OF MANUFACTURERS AND MECHANICS OF THE UNITED STATES, PRAYING THE ADOPTION OF MEASURES TO SECURE TO THEM THEIR RIGHTS IN PATTERNS AND DESIGNS, S. DOC. NO. 26-154 (2d Sess. 1841) [hereinafter MANUFACTURERS' PETITION]. It is not clear whether Jordan Mott was a Whig, or whether he was otherwise in a position to harness Whig political forces to press his proposal forward. We do know that Mott was not shy about lobbying prominent Whigs about intellectual property matters. In an 1851 debate over utility patent legislation, Mott corresponded with the nation's most prominent Whig, Henry Clay, receiving a polite but peremptory response. See Letter from Jordan L. Mott to Henry Clay (Jan. 24, 1851), *in* 10 THE PAPERS OF HENRY CLAY 848 (Melba Porter Hay ed., 1991). One year later, Mott was chosen to serve as an aid in the grand procession in New York City in observance of Henry Clay's death, see Programme of Arrangements for the Funeral Ceremonies of the Late Hon. Henry Clay, N.Y. DAILY TIMES, July 19, 1852, at 1, though we cannot say whether this indicates Mott's Whiggish tendencies or merely his substantial prominence in New York.

Moreover, after noting that fabric designers faced similar obstacles, the petitioners were quick to point out that Great Britain had recently passed such rights for their citizens.¹²² They argued:

Your petitioners believe that the manufacturers and mechanics of the United States are not surpassed by those of any other country, in the durability and utility of the articles manufactured by them; and they confidently affirm that the articles manufactured by them would equal any others in beauty, if new designs and patterns were secured by registration.¹²³

Thus, design protection was cast not only as a problem of domestic free riding, but also as an international trade problem.¹²⁴

Although the copy of Mott's petition reprinted in the U.S. Congressional Serial Set¹²⁵ includes only the text of the petition itself, additional archival research turned up a reproduction of the original that included the petitioners' signatures, including that of Walter Hunt, the inventor of the Globe Stove.¹²⁶ Some signatories also listed their occupations. A study of these signatories provides a rare glimpse into the grassroots politics of early American lobbying efforts in intellectual property. They were all male (not surprisingly) and all from the Northeast: predominantly New York and New Jersey, along with Connecticut, and the cities of Philadelphia and Boston. A few appear to have been Whigs,¹²⁷ but we are unable to determine whether the petitioners originated predominantly from Whig party rolls. Most who identified their occupation appear to have been tradesmen: a manufacturer, an engineer, a "designer in mechanics," three "mechanists," and various others.¹²⁸

It is perhaps significant that some of the listed professions involved subject matter that lay at the margins of traditional copyright and patent regimes—and still

^{122.} *Id.* (citing An Act to secure to Proprietors of Designs for Articles of Manufacture the Copyright of such Designs for a limited Time, 2 Vict., c. 17 (1839) (Eng.) [hereinafter Designs Registration Act, 1839]).

^{123.} Id.

^{124.} See supra Part II (discussing this aspect of design patent's origins).

^{125.} See MANUFACTURERS' PETITION, *supra* note 118, at 2 (identifying signatories only as "JORDAN L. MOTT and others").

^{126.} Our appreciation to Kenneth Kato, Center for Legislative Archives, National Archives and Records Administration, for assistance in procuring the signature pages. Scans of the signature pages are on file with authors.

^{127.} For example, J.W. Warren of Boston appears to have been a newspaper editor and Whig party member. *See* CHRISTIAN WATCHMAN, Mar. 3, 1837, § 18, at 9 (reporting on Warren's editorship of the *Christian Witness*); *Public Meeting*, N.Y. DAILY TIMES, Mar. 5, 1852, at 2 (listing Warren as a supporter of the Whig nomination of Daniel Webster for President). Andrew Anderson of Jersey City likewise may have been involved in Whig politics, at least as of the 1850s. *See Jersey City: Whig Primary Meeting*, N.Y. DAILY TIMES, Apr. 6, 1854, at 3.

^{128.} One signatory was Joseph Priestley—not the famous scientist credited with the discovery of oxygen, who passed away in 1804, but perhaps an heir. For biographical background on the famous Priestley, see STEVEN JOHNSON, THE INVENTION OF AIR (2008).

does. For example, Isaac Edge, Jr., of Jersey City, was a renowned designer of fireworks displays.¹²⁹ Joseph E. Ebling of New York was a confectioner.¹³⁰

Another signatory, Samuel Loomis of Connecticut, was probably from the famed Loomis family of furniture designers.¹³¹ If so, this shows good foresight. Design protection (including by design patent) has proven especially important for furniture designers over the years.¹³² Yet another signatory appears to have been an inventor of prosthetic limbs, which eventually obtained utility patent protection.¹³³

Senator John Ruggles from Maine,¹³⁴ former chair of the Senate's Committee on Patents and the Patent Office,¹³⁵ presented Mott's petition to Congress¹³⁶ and, within weeks, followed up with a legislative proposal.¹³⁷ Ruggles was a logical sponsor for the legislation given his reputation as a leader in Congress on intellectual property matters, but he also may have had a family interest in the bill. John Ruggles's brother, Draper Ruggles,¹³⁸ was a partner in the largest cast-iron plow and agricultural implement company in the United States—Ruggles, Nourse & Mason.¹³⁹ In addition, the firm apparently had business connections with Mott, acting as a distributor for Mott's famous agricultural furnace.¹⁴⁰

129. See Classified Advertisement, *Edge's First Premium Fireworks*, N.Y. DAILY TIMES, June 29, 1854, at 5 (representative advertisement of the Edge family's displays); *Independence Day: Celebration of the "Glorious Fourth,"* N.Y. TIMES, July 5, 1854, at 1 (reporting that the Edge family had been hired by New York City for the July 4th fireworks celebration).

130. MANUFACTURERS' PETITION, *supra* note 118 (signature page).

131. Loomis furniture is on display in the Wadsworth Atheneum Museum of Art as examples of the Colchester/Norwich furniture style. *See American Decorative*, WADSWORTH ATHENEUM MUSEUM ART, http://www.thewadsworth.org/american-decorative/.

132. For a recent example from the design patent area, see *Amini Innovation Corp. v. Anthony California, Inc.*, 439 F.3d 1365 (Fed. Cir. 2006).

133. William Selpho of New York. *See* Construction of Artificial Hands, U.S. Patent No. 18,021 (issued Aug. 18, 1857); Construction of Artificial Legs, U.S. Patent No. 14,836 (issued May 6, 1856).

134. For general biographical information on Ruggles, see 12 THE NATIONAL CYCLOPÆDIA OF AMERICAN BIOGRAPHY 230 (1904). Regarding the family's political prominence, see FRANCES COWLES, THE FAMILY OF RUGGLES 8–9 (1912).

135. CONG. GLOBE, 25th Cong., 1st Sess. 16 (1837) (noting Ruggles's position as Committee chair).

136. See CONG. GLOBE, 26th Cong., 2d Sess. 139 (1841). The petition was ordered for printing and referred to the Committee on Patents and the Patent Office. Id.

137. For promoting the progress of the useful arts, by securing the right of invention and copy-right to proprietors of new designs for manufactures, for limited times, S. 269, 26th Cong. (1841) [hereinafter Ruggles Design Bill]; CONG. GLOBE, 26th Cong., 2d Sess. 212 (1841) (reporting that Senator Ruggles "asked and obtained leave to introduce a bill granting copy-rights to inventors of designs, &c., which was read twice and referred to the Committee on Patents and the Patent Office").

138. HENRY RUGGLES, ANCESTRY OF JUDGE THOMAS RUGGLES, OF COLUMBIA FALLS, MAINE, AND JUDGE JOHN RUGGLES OF THOMASTON, MAINE 36–37 (1924) (Maine Historical Society). We are especially indebted to Jamie Kingman Rice, public services librarian at the Maine Historical Society, and Maribel Nash, reference librarian at the Pritzker Legal Research Center at Northwestern School of Law, for this point.

139. See Charles G. Washburn, Industrial Worcester 132–33 (1917). See generally 2 J. Leander Bishop, A History of American Manufactures from 1608 to 1860, at 701–

The bill was styled as a design *copyright* proposal. It proposed a "sole and exclusive copy-right" for the proprietor of any "new and original design"¹⁴¹ for specified articles of manufacture.¹⁴² The list of specified articles explicitly responded to the wishes of the iron and textile industries. It included "linen, cotton, calico, muslin, or other textile fabric,"¹⁴³ ornamentation on any article other than a textile fabric,¹⁴⁴ and the shape or configuration of any article not falling into the

140. See Mott's Agricultural Furnace, ME. FARMER, Jan. 8, 1846, at 1 (explaining that Mott's furnace could be purchased at the Ruggles, Nourse & Mason warehouse in Boston and including a drawing of a 22 gallon model); Advertisement, *Mott's Agricultural Furnace*, ME. FARMER, Oct. 15, 1846, at 1.

141. Although these terms were eventually adopted by the legislature, and even developed into the same novelty and originality standards that we think of today as distinguishing patent and copyright law, it is not clear what Senator Ruggles meant by "new and original." See infra note 164 and accompanying text (discussing their contemporary meanings under British law). Indeed, it took over a quarter of a century for this distinction to develop in U.S. law, and their meanings under both regimes were in flux during this time. See Kenneth J. Burchfiel, Revising the "Original" Patent Clause: Pseudohistory in Constitutional Construction, 2 HARV. J.L. & TECH. 155, 181-209 (1989) (tracing the novelty standard); Joseph Scott Miller, Hoisting Originality, 31 CARDOZO L. REV. 451, 469-82 (2009) (tracing the originality standard); see also Baker v. Selden, 101 U.S. 99, 102 (1879) (distinguishing patent and copyright, in part, by novelty and one component of the modern originality standard, independent creation). Although the requirements have different meanings today, contemporary courts often used them interchangeably and across both regimes—broadly requiring the combined elements of a copyrightable work or a patentable invention to be produced by the author or inventor's intensive labor or creativity. See Miller, supra, at 469–75. Joseph Miller points out that "[t]he contemporary taboo against comparing originality [in copyright] to nonobviousness[, invention, or novelty (in patent)] is just that contemporary." Id. at 471. The modern design patent act's retention of these terms (new and original) stands as one of the few fossilized reminders of patent and copyright's common history.

142. Ruggles Design Bill, S. 269, 26th Cong. § 1 (1841).

143. *Id.* (offering protection "[f]or the pattern or print to be either worked, stamped, printed, or painted, into or on any article of manufactured linen, cotton, calico, muslin, or other textile fabric").

144. *Id.* (offering protection "[f]or the modelling [sic], or the casting, or the embossment, or the chasing, or engraving, or for any other kind of impression or ornament, on any article of manufacture not being a textile fabric").

^{02 (1864) (}providing some background on the partnership and their successor Oliver Ames & Sons' Agricultural Implement Manufactory). Draper Ruggles also figured in an important early utility patent infringement case. *See* Prouty v. Ruggles, 41 U.S. (16 Pet.) 336, 341 (1842) (espousing an all-elements rule for utility patent infringement). Draper Ruggles was likely the unnamed "brother" continually referred to in the Select Committee's investigation into Senator John Ruggles's activities with Henry C. Jones. *See* Hugh L. White, Senate Select Committee Report, S. Doc. No. 25-377, at 9, 12, 16, 17, 19, 56, 68 (1838). According to the report, Ruggles allegedly sought to secure patent rights for a brother who lived in Worcester, Massachusetts, and who already had a half interest in a patented plough. *See id.* at 9. Although the exact plough is unknown, Draper Ruggles's iron manufactory in Worcester owned the patents to numerous ploughs and agricultural implements during this time, and the report is probably referring to Ruggles's ownership of Jethro Wood's patented plough. *See* WASHBURN, *supra*, at 132.

previously mentioned categories.¹⁴⁵ The copyright term was one year,¹⁴⁶ except where the design was for ornamentation on an article "made of metal," the term was three years.¹⁴⁷

Ruggles's bill provided that the proposed design copyright would only come into force upon registration.¹⁴⁸ However, registration would be issued only if, "on examination" by the Patent Office,¹⁴⁹ the design appeared to be "new and original,"¹⁵⁰ assuming that the applicant also paid the requisite filing fee¹⁵¹ and complied with other formalities.¹⁵² The registered rights-holder received a right to institute an infringement action against anyone who "shall adopt and use" the registered design during the term of the registration.¹⁵³

Most of the concepts in Ruggles's bill, and even many of the key passages, were not original. They had been borrowed from Britain's dual copyright system for designs, enacted scarcely two years earlier.¹⁵⁴ One component of the dual system, the British Copyright of Designs Act (1839), extended copyright protection to new and original¹⁵⁵ patterns for printing "Linens, Cottons, Calicoes, or Muslins,"¹⁵⁶ the same list that later appeared in Ruggles's proposal.¹⁵⁷ The other component, the Design Registrations Act (1839), protected three categories of subject matter: (1) any "Pattern or Print, to be either worked into or worked on, or printed on or painted on, any Article of Manufacture"; (2) designs "[f]or the Modeling, or the Casting, or the Embossment, or the Chasing, or the Engraving, or for any other Kind of Impression or Ornament, on any Article of Manufacture, not being a Tissue or textile Fabric"; and lastly (3) "the Shape or Configuration of any Article of Manufacture."¹⁵⁸ Ruggles borrowed this three-part structure and substituted the list of fabrics into the first category, converting the British dual system into a unified

150. *Id.*; *see also supra* note 141 and accompanying text (discussing the "new and original" requirement).

151. Ruggles Design Bill, S. 269, 26th Cong. § 6 (1841).

152. Id. § 4.

153. *Id.* § 3. Recovery for infringement ranged from \$20 to \$200 and was contingent on marking. *Id.* Unfortunately, this innovation did not make its way into the 1842 Act. *See* Act of Aug. 29, 1842, *supra* note 60. Because of the palpable difficulty of proving that a defendant's profits from an infringing product were attributable to the protected design—and not other things like marketing or functionality—Congress eventually provided a minimum recovery for willful infringement in 1887. *See* Act of Feb. 4, 1887, ch. 105, § 1, 24 Stat. 387; *see also* Frederic H. Betts, *Some Questions Under the Design Patent Act of 1887*, 1 YALE L.J. 181, 182–83 (1892).

154. Designs Registration Act, 1839, 2 Vict., c. 17, § 1 (Eng.); An Act for Extending the Copyright of Designs for Calico Printing to Designs for Printing other Woven Fabrics, 2 Vict., c. 13 (1839) (Eng.) [hereinafter Calico Act, 1839].

155. See infra note 164.

156. Calico Act, 1839, 2 Vict., c. 13, §§ 1, 3 (Eng.) (additionally extending protection to "other Fabrics of a similar Nature," which included fabrics composed of wool, silk, or hair, and any mixture thereof).

157. Ruggles Design Bill, S. 269, 26th Cong. § 1 (1841).

158. Designs Registration Act, 1839, 2 Vict., c. 17, § 1 (Eng.).

^{145.} Id.

^{146.} *Id*.

^{147.} Id.

^{148.} *Id*.

^{149.} *Id.* § 4.

system of protection.¹⁵⁹ The British Design Registrations Act (1839) also served as Ruggles's source for the requirement of registration,¹⁶⁰ the duration (one to three years, depending on the subject matter),¹⁶¹ the mandated range of damages,¹⁶² and the exclusive right to use the design during its respective term of protection.¹⁶³ However, both acts notably required the design to be "new and original"¹⁶⁴—a requirement that can be traced to embryonic British design protection from 1787.¹⁶⁵

Thus, the earliest American design protection proposal was a direct descendant of British copyright and design registration law.¹⁶⁶ The one variation—and it is a

159. See Ruggles Design Bill, S. 269, 26th Cong. § 1 (1841) (providing the relevant language of the Ruggles bill).

160. Designs Registration Act, 1839, 2 Vict., c. 17, §§ 1, 8 (Eng.). The British had settled on a dual-component system because the British textile industry vehemently objected to a requirement for registration, claiming (among other things) that manufacturers were already printing identifying information on their textile products, rendering registration (and its associated costs) unnecessary. SHERMAN & BENTLY, *supra* note 62, at 67–69. Accordingly, the Copyright of Designs Act, applicable to textiles, called for no registration, in contrast to the Designs Registration Act. Apparently, American textile manufacturers made no similar plea to Ruggles.

161. Both the British legislation and Ruggles's proposal protected castings, models, chasings, and engravings made of metal or mixed metals for three years and all other designs for only one year. *Compare* Designs Registration Act, 1839, 2 Vict., c. 17, § 1 (Eng.), *with* Ruggles Design Bill, S. 269, 26th Cong. § 1 (1841).

162. *Compare* Designs Registration Act, 1839, 2 Vict., c. 17, § 3 (Eng.) (guaranteeing £5.00 to £30.00 per offense), *with* Ruggles Design Bill, S. 269, 26th Cong. § 3 (1841) (guaranteeing \$20 to \$200 per offense and potentially including costs of suit).

163. *Compare* Ruggles Design Bill, S. 269, 26th Cong. § 1 (1841) (granting "the sole and exclusive *copy-right* to use" (emphasis added)), *with* Designs Registration Act, 1839, 2 Vict., c. 17, § 1 (Eng.) (granting the "sole Right to use"). However, both Ruggles's bill and the British Designs Registration Act arguably granted broader protection than the corresponding British Calico Act for fabrics. *See* Calico Act, 1839, 2 Vict., c. 13, § 1 (Eng.) (limiting protection to the "sole Right and Liberty of printing and re-printing").

164. Unfortunately, their common origins shed little light on Ruggles's bill. Although the terms "new and original" can be found in numerous British copyright acts, similar to their U.S. development, they were often loosely interpreted synonymously. *See* LEWIS EDMUNDS, THE LAW OF COPYRIGHT IN DESIGNS 24 (1895) (noting that "[w]hether any distinction was intended to be made between these terms does not seem clear"); MICHAEL FYSH, RUSSELL-CLARKE ON COPYRIGHT IN INDUSTRIAL DESIGNS 36 (5th ed. 1974) (noting that even as of the 1970s, "[a]s to what distinction, if any, is to be drawn between the words new and original is doubtful"). Yet contrary to the United States, as these terms began to take on distinct meanings, contemporary British design acts were amended in a manner that reflected their pseudo-*copyright* origins—requiring the design to be new *or* original. Patents and Designs Act, 1907, 7 Edw. 7, c. 29, § 49 (Eng.) [hereinafter Patent and Designs Act]; *see also* EDMUNDS, *supra*, at 24 (pointing out that these terms should be construed without analogy to patents).

165. Calico Printers' Act, 1787, 27 Geo. 3, c. 38, § 1 (Eng.) (granting protection to "every person who shall invent, design, and print, or cause to be invented, designed, and printed, and become the proprietor of any *new and original* pattern or patterns for printing linens, cottons, callicoes [sic], or muslins" (emphasis added)). *See generally* HENRY L. ELLSWORTH, REPORT FROM THE COMMISSIONER OF PATENTS, H.R. DOC. No. 27-74 (1842) [hereinafter Ellsworth Report for 1841].

166. Ruggles may have been familiar with British copyright law as a result of his

crucial one—is that Ruggles's bill not only contemplated registration but also required that applications for protection be subjected to pre-grant examination, reminiscent of the procedures in place for American utility patents.¹⁶⁷

The inclusion of an examination requirement was pure Ruggles. In his capacity as chair of the Senate's Select Committee on the affairs of the Patent Office,¹⁶⁸ Ruggles had championed the idea of establishing a system of pre-grant, substantive patent examination in the utility patent system. Under his guidance, the committee had produced the 1836 Patent Act,¹⁶⁹ still the most significant legislative reform in the history of the American patent system largely due to its implementation of pre-grant examination. It is no surprise that Ruggles, perhaps reflexively, would have included an examination requirement in his design protection proposal.

Moreover, in the 1836 Patent Act, Ruggles also laid the administrative foundation for a modern patent office that would carry out that pre-grant examination.¹⁷⁰ He was venerated, with considerable justification, as the "Father of the Patent Office."¹⁷¹ He had worked closely on the 1836 Patent Act with Henry Ellsworth, the superintendent of the Patent Office who became the first Commissioner of Patents under the new administrative structure that the 1836 act provided,¹⁷² and Charles Keller, the model room keeper who became the first examiner under the new act.¹⁷³ Indeed, Ruggles had been, and remained, intimately

167. Ruggles Design Bill, S. 269, 26th Cong. §§ 1, 4 (1841).

168. CONG. GLOBE, 24th Cong., 1st Sess. 64 (1835). He was joined on the committee by Samuel Prentiss (Vermont) and Isaac Hill (New Hampshire). *Id.* The select committee was an ad hoc patent law reform committee formed at Ruggles's request. Ruggles had applied for a patent under the then-existing 1793 act and had become sufficiently frustrated over the act's delays and other deficiencies that he made a speech on the Senate floor calling for reform. *The Father of the Patent Office*, SCI. AM., May 9, 1891, at 295–96 (describing the speech based on Ruggles's notes).

169. Act of July 4, 1836, ch. 357, 5 Stat. 117 (1836).

170. See generally JOHN RUGGLES, REPORT WITH SENATE BILL NO. 239, S. REP. NO. 24-338 (1836) [hereinafter 1836 Patent Act Report]. Indeed, Ruggles similarly played a unique role laying the Patent Office's *physical* foundation after its destruction. *See* JOHN RUGGLES, REPORT WITH SENATE BILL NO. 107, S. REP. NO. 24-58 (1837).

171. The Father of the Patent Office, supra note 168, at 295.

172. We imagine that it is no coincidence that the first utility patent under the 1836 act regime was issued to Ruggles. Locomotive Steam-Engine for Rail and Other Roads, U.S. Patent No. 1 (issued July 13, 1836).

173. Charles Keller was appointed to the first examiner's role under the new act at the request of both Ellsworth and Ruggles and also served as the Patent Office's model room keeper. *See* Thaddeus Hyatt, *Charles M. Keller and the American Patent Office*, SCI. AM., May 21, 1859, at 310. While many commentators credit Ruggles and Ellsworth as the originators of the 1836 Patent Act, the two likely received a considerable amount of input from Keller. *Id.* Keller inherited the position from his father and had been advising patent applicants informally since Superintendent Pickett's administration. *Id.* Not only was

involvement in a debate over whether to extend U.S. copyright protection to British authors. *See* S. 32, 25th Cong. (1838) (extending U.S. copyright protection to residents of the United Kingdom, Ireland, and France upon print and publication in the U.S. simultaneously with its foreign issue, or within one month of its requisite deposit in any U.S. district court); S. REP. No. 25-494, at 3–4 (1838) (report to accompany S. 32, recording Ruggles's views). In any event, few in Washington at the time could have claimed greater expertise with American intellectual property laws than Ruggles.

involved with the Patent Office.¹⁷⁴ When he left the Senate shortly after presenting Mott's petition and the proposed legislation, Ruggles was angling for an appointment as the next Commissioner of Patents.¹⁷⁵ The requirement for examination, which surely could best be carried out at the Patent Office, reflected Ruggles's past alliances and served his future aspirations.

Ruggles's proposed bill passed the Committee on Patents without amendment.¹⁷⁶ The committee's chairman and Ruggles's longtime colleague,¹⁷⁷ Senator Samuel Prentiss, reported it on March 3, 1841. Unfortunately for Ruggles, this was the last day of the congressional session. Likely a victim of its timing, the bill was tabled and ordered to be printed.¹⁷⁸ More importantly, because Ruggles had failed to win his reelection campaign two years earlier, this was also his last session in the Senate.¹⁷⁹

175. Letter from John Ruggles, U.S. Senator, to Daniel Webster, U.S. Sec'y of State (Apr. 24, 1841) (on file with Robert D. Farber University Archives & Special Collections Department, Brandeis University) (containing Ruggles's rather lavish recitation of his qualifications for the position, including, among other things, that "[i]n reconstructing a code of [American] patent law, I introduced new principles of acknowledged usefulness & importance; which have since been adopted in England"). We are indebted to Sarah Shoemaker, special collections librarian at Brandeis University, and Maribel Nash, reference librarian at the Pritzker Legal Research Center at Northwestern School of Law, for helping us unearth the letter. Ruggles procured several letters of recommendation and no doubt was surprised when the position went to Henry Ellsworth instead. *Id.* (containing the letters of recommendation).

176. CONG. GLOBE, 26th Cong., 2d Sess. 226 (1841).

177. Senator John Ruggles and Senator Samuel Prentiss served together intermittently since the first select committee was formed in 1835 to reform the existing patent registration system. *See, e.g.*, CONG. GLOBE, 25th Cong., 1st Sess. 16 (1837); CONG. GLOBE, 24th Cong., 1st Sess. 64 (1835).

178. CONG. GLOBE, 26th Cong., 2d Sess. 226 (1841) (noting that Ruggles's bill "was laid on the table and ordered to be printed").

179. Ruggles's departure from the Jacksonian Democrats likely played a key role in his failed reelection bid. *See Maine Senator*, THE PITTSFIELD SUN, Feb. 4, 1841, at 3 (citing

Ellsworth's letter to the Secretary of State (John Forsyth) full of recommendations from Keller, but Ruggles also worked directly with Keller while drafting the bill. *See id.*; KENNETH W. DOBYNS, THE PATENT OFFICE PONY 99 (1997); Robert C. Post, "*Liberalizers*" *Versus "Scientific Men" in the Antebellum Patent Office*, 17 TECH. & CULTURE 24, 27 (1976); *see also* Letter from Henry Ellsworth, Superintendent of the Patent Office, to John Forsyth, Sec'y of State (Jan. 29, 1836) *reprinted in* 8 MECHANIC'S MAG. no. 4, Oct. 1836 at 175–82 (response to Senator Ruggles's questions from the select committee). Regardless of Keller or Ellsworth's impact on the act, Senator Ruggles is universally recognized as its tireless political sponsor.

^{174.} Ruggles was even credited with being the first person on the scene attempting to save the Patent Office building when it caught fire in 1836. JOHN RUGGLES, REPORT WITH SENATE BILL NO. 107, S. REP. NO. 24-58 (1837) (providing a very detailed account of the destruction at the Patent Office); DOBYNS, *supra* note 173, at 107. If anything, Ruggles's involvement with the Patent Office may have been a bit too intimate. *See* HUGH L. WHITE, SENATE SELECT COMMITTEE REPORT, S. REP. NO. 25-377 (1838) (investigating whether Ruggles used undue influence to procure a reissued patent, explaining that Ruggles frequented the Patent Office and had close connections with Charles Keller, and hinting that he may have occasionally accessed the office's secret archives where caveats were held).

B. 1842 Ellsworth Report and Proposed Legislation: The Emergence of Quasi-Patent Concepts

Mott's lobbying efforts, however, continued into 1842. His petition was presented again in the Senate in March 1842,¹⁸⁰ and Ruggles's former colleague Senator Prentiss introduced legislation in April 1842.¹⁸¹ The 1842 legislation, however, still bore indications of Ruggles's original conception of a design copyright regime with substantive pre-grant examination. Yet, it also had become infused with more patent law rhetoric, undoubtedly as a result of suggestions made by the man who had been granted the appointment that Ruggles so assiduously sought—Patent Commissioner Henry Ellsworth.

In his annual Commissioner's Report to Congress for the year 1841,¹⁸² published and referred to the Senate Committee on Patent and the Patent Office on March 8, 1842,¹⁸³ Ellsworth included three paragraphs recommending the protection "of new and original designs for articles of manufacture, both in the fine and useful arts."¹⁸⁴ After pointing out that other nations had granted such protection,¹⁸⁵ Ellsworth reiterated the rationale for protection that had been offered in Mott's petition:

180. CONG. GLOBE, 27th Cong., 2d Sess. 272 (1842) (petition presented in March 1842 by Senator Daniel Sturgeon (Pennsylvania) from the Committee on Patents).

181. S. 220, 27th Cong. (1842).

184. *Id.* at 2.

BOSTON POST). While Ruggles was elected to the senate as a Jacksonian Democrat, he split ways with his party on several key issues. See LOUIS CLINTON HATCH, MAINE: A HISTORY (1919) 218 (noting that "[h]e served but one term as Senator, broke from his party on the sub-treasury question, and was retired from political life"); David J. Russo, The Major Political Issues of the Jacksonian Period and the Development of Party Loyalty in Congress, 1830-1840, 62 TRANSACTIONS AM. PHIL. SOC'Y, no. 5, at 3, 18, 41, 46 (1972) (describing Ruggles as a renegade Democrat and noting his departure from the party on the issues of slavery and the sub-treasury). By 1840, both Whigs and Conservatives were claiming Ruggles as a loyalist. See A POLITICAL REGISTER FOR 1840 4 (1840) (Whig); United States Senator, CHRISTIAN SECRETARY, Aug. 21, 1840, at 2 (Conservative); Harrison or Whigs, NEW WORLD, Jan. 23, 1841, at 61 (Harrison or Whigs); Senator Ruggles, JEFFERSONIAN REPUBLICAN, May 16, 1840, at 2 (noting that Ruggles "now goes for [Whig President] Harrison and reform"). In the end, however, it appears that he ultimately sided with the Conservatives and might have earned the moniker "Benedict Arnold" in return. Maine Senator, supra, at 3 (stating, "Ruggles must know that the English never respected or trusted Arnold much, after his treason, and now, in their retirement, they may have leisure to make some reflections upon that fact").

^{182.} Ellsworth Report for 1841, H.R. DOC. NO. 27-74 (1842). Hudson claims that the report is dated February 8, 1841, Hudson, *supra* note 58, at 380, but this appears to be an error—Ellsworth's annual report covered Patent Office operations in 1841 and therefore would not have been circulated until sometime in 1842. *See* Ellsworth Report for 1841, S. REP. NO. 27-169, at 1 (dated January 1842 by Ellsworth, referred for printing on February 7, 1842, and later referred to the Patent Committee on March 8, 1842).

^{183.} See Ellsworth Report for 1841, S. REP. No. 27-169, at 1.

^{185.} *Id.* (asserting that "[o]ther nations have granted this privilege, and it has afforded mutual satisfaction alike to the public and to individual applicants").

Competition among manufacturers for the latest patterns prompts to the highest effort to secure improvements, and calls out the inventive genius of our citizens. Such patterns are immediately pirated, at home and abroad. A patent [sic, pattern] introduced at Lowell,¹⁸⁶ for instance, with however great labor or cost, may be taken to England in 12 or 14 days, and copied and returned in 20 days more.¹⁸⁷

To address this situation, Ellsworth asserted, legal protection should be extended to "new and original designs for a manufacture of metal or other material, or any new and useful design for the printing of woollen, silk, cotton, or other fabric,"¹⁸⁸ an adaptation of Ruggles's and Mott's language and a nod to the lobbying influence of the iron and textile industries. Ellsworth also suggested that protection be available for "a bust, statue, or bas-relief, or composition in alto or basso-relievo."¹⁸⁹ But this was not language from Ruggles's proposal, it was copyright language—specifically, language from British copyright law.¹⁹⁰

However, the copyright language notwithstanding, Patent Commissioner Ellsworth made clear that he was not styling his proposal as a copyright proposal. Instead, he posited that the proposed protection "could be effected by simply authorizing the Commissioner to issue patents for these objects, under the same limitations and on the same conditions as govern present action in other cases."¹⁹¹ The patent term could be seven years (half of the fourteen-year duration for utility patents),¹⁹² and the application fee correspondingly could be half that charged for utility patent applications.¹⁹³

From a modern vantage point, Ellsworth's allusion to patents may seem to be a dramatic shift away from Ruggles's copyright proposal. However, differences between the substantive rules in the respective regimes were slight at the time of Ellsworth's report. Even the respective terms of patent and copyright had been comparable until only a few years prior.¹⁹⁴

191. Ellsworth Report for 1841, H.R. Doc. No. 27-74, at 2.

192. *Contra* Act of July 4, 1836, ch. 357, § 18, 5 Stat. 117, 124–25 (1836) (extending protection for another seven years, beyond the initial fourteen years, where the patentee failed to obtain reasonable remuneration through no fault of their own).

193. Ellsworth Report for 1841, H.R. Doc. No. 27-74, at 2.

194. Until 1831, both initial terms were fourteen years; however, by renewal authors could double their copyright term. *Compare* Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124,

^{186.} See generally RIVARD, supra note 104, at 59–65 (discussing the importance of Lowell, MA, to the textile industry).

^{187.} Ellsworth Report for 1841, H.R. Doc. No. 27-74, at 2.

^{188.} Id.

^{189.} Id.

^{190.} An Act for Encouraging the Art of Making New Models and Casts of Busts, 1798, 38 Geo. 3, c. 71, § 1 (Eng.) (protecting any "new Model, Copy, or Cast, or any such new Model, Copy or Cast in Alto or Basso Relievo" of human or animal figures). Analogous protection for three-dimensional objects in U.S. copyright law did not come into effect until 1870. Act of July 8, 1870, ch. 230, § 86, 16 Stat. 198, 212 (specifically including "any book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph or negative thereof, or of a painting, drawing, chromo, *statue, statuary, and of models or designs intended to be perfected as works of the fine arts*" (emphasis added)).

Moreover, other evidence suggests that Ellsworth's nonchalant reference to patents was motivated more by pragmatic political considerations than any perception that patent rules were preferable to copyright rules for protecting designs.¹⁹⁵ Under Ellsworth's proposal, fees of fifteen dollars for design protection would be paid into the Patent Office.¹⁹⁶ By contrast, antebellum copyright protection involved a mere fifty-cent fee, payable to the federal court in the district where the applicant resided and collected when the author deposited a copy of the work with the court before publication, prepublication deposit being a prerequisite of copyright protection at the time.¹⁹⁷

Against the backdrop of a recessionary economy,¹⁹⁸ not to mention construction costs for a newly completed Patent Office building that ran four times higher than its appropriation,¹⁹⁹ a new revenue stream for the Patent Office would have been especially attractive. The *Congressional Globe*'s notation regarding floor commentary on the proposed legislation highlights the bill's revenue effects, reporting that the bill's sponsor (Kerr) "explained, at great length, that the bill was intended to apply the rights of patents to new objects, and thereby bring additional revenue into the patent department, and to protect rights of patentees."²⁰⁰ Indeed, Senator Kerr would have been especially attuned to these revenue issues—he had previously chaired the Committee on Public Buildings,²⁰¹ which had oversight responsibility for the Patent Office rebuilding project and, as current chairman of

^{124 (1790),} with Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 318-21 (1793).

^{195.} Likewise, pragmatic considerations apparently motivated design protection proponents in Britain to *avoid* placing British design protection under the auspices of the patent system. The bureaucracy of the British patent system was notoriously byzantine, and it was considered undesirable to subject design protection to those idiosyncrasies. SHERMAN & BENTLY, *supra* note 62, at 81–83.

^{196.} Ellsworth's proposal suggested charging "*one half* of the present fee charged to citizens and foreigners, respectively." Ellsworth Report for 1841, H.R. DOC. NO. 27-74, at 2 (emphasis in original). Per contemporary utility patent fees (minimum \$30), a granted design patent cost American citizens \$15. *See* U.S. PATENT OFFICE, INFORMATION TO PERSONS HAVING BUSINESS TO TRANSACT AT THE PATENT OFFICE 7 (1836), *reprinted in* RULES OF PRACTICE: U.S. PATENT OFFICE (1899) (compilation held by Cornell University Library). Because of the 1836 Patent Act's discriminatory pricing, it would have been much more expensive for foreigners—\$500 for the British and \$300 for everybody else. *Id.*

^{197.} See Act of Feb. 3, 1831, ch. 16, § 4, 4 Stat. 436, 437.

^{198.} See supra Part II.

^{199.} SCIENTIFIC AMERICAN REFERENCE BOOK 247 (Albert A. Hopkins & A. Russell Bond eds., 1905) (noting that Congress had appropriated about \$100,000 for the construction in 1836 and that the building, completed in 1840, had cost over \$400,000); *see also* S. 296, 24th Cong. (1836) (pertinent legislation proposed by John Ruggles).

^{200.} CONG. GLOBE, 27th Cong., 2d Sess., at 833 (1842) (remarks of Senator Kerr). *See infra* note 226 (explaining Kerr's involvement). Of course, Ellsworth might have been able to achieve these revenue goals irrespective of the form of protection he proposed by providing that fees would be paid to the Patent Office even if the protection were more akin to copyright. For example, Ruggles's proposal would have given the Patent Office authority over the proposed design copyright system, and applicants would have paid \$10 in application fees. Ruggles Design Bill, S. 269, 26th Cong. § 6 (1841).

^{201.} CONG. GLOBE, 27th Cong., 2d Sess. 15 (1842).

the Patent Committee,²⁰² he had just two days prior to this commentary reported a bill proposing to expand the new Patent Office building.²⁰³

In addition, it is no surprise that Ellsworth, as Commissioner of Patents, would make a proposal to expand his own department's jurisdiction nor that he would do so in the context of his annual report.²⁰⁴ And Ellsworth would have reasonably expected enormous deference from Congress.²⁰⁵ The Senate committee on patents frequently solicited Ellsworth's recommendations²⁰⁶ and frequently acted on them. The two pieces of patent legislation that passed between 1836 (when Ellsworth became Commissioner) and 1845 (when Ellsworth left the post) can be traced to recommendations he made in his annual reports.²⁰⁷ These reports had a wide audience around the country, albeit probably for the agricultural statistics included in the report rather than the patent policy matters.²⁰⁸

One commentator, Thomas B. Hudson, has offered additional reasons purporting to explain why design protection was effectuated by patent rather than

205. Ellsworth came from a family of great prominence in early American society. His father had been a Chief Justice of the U.S. Supreme Court, and his twin brother was a formidable judge and politician. *See* William I. Wyman, *Henry L. Ellsworth, The First Commissioner of Patents*, 1 J. PAT. OFF. SOC'Y 524, 524 (1919). But Ellsworth did not simply rest on his family's reputation. By the time that President Jackson made him Commissioner at the age of forty-five, he had already been a mayor in Connecticut (Hartford), run a large insurance company (Aetna), and even helped Jackson as one of his chief commissioners of Indian Affairs (overseeing the vast displacement of Native Americans in what many historians refer to as the "Trail of Tears"). *See* KURSH, *supra* note 204, at 26.

206. *See, e.g.*, Letter from Henry Ellsworth, U.S. Comm'r of Patents, to John Ruggles, U.S. Senator (Feb. 23, 1838), *reprinted in* H.R. REP. No. 25-797, at 3–5 (1838) (responding to Ruggles's inquiry into whether further legislation was necessary for business at the Patent Office).

207. The design patent legislation was part of a larger 1842 Patent Act, and in that bill, five of the six sections were proposed in Ellsworth's report. *Compare* HENRY L. ELLSWORTH, REPORT FROM THE COMMISSIONER OF PATENTS, H.R. DOC. NO. 27-74, at 2 (1842), *with* Act of Aug. 29, 1842, ch. 263, §§ 1, 3–6, 5 Stat. 543, 543–45. Likewise, eleven of the thirteen sections of the 1839 act derive from one of Ellsworth's annual reports. *Compare* Act of Mar. 3, 1839, ch. 88, 5 Stat. 353, *with* HENRY L. ELLSWORTH, REPORT FROM THE COMMISSIONER OF PATENTS, H.R. DOC. NO. 25-80, at 2–4 (1839), *and* HENRY L. ELLSWORTH, REPORT FROM THE COMMISSIONER OF PATENTS, S. DOC. NO. 25-105, at 2–6 (1838).

208. RICHARD R. JOHN, NETWORK NATION: INVENTING AMERICAN TELECOMMUNICATIONS 47 (2010) (arguing that the agricultural statistics ultimately drove the popularity of Ellsworth's annual reports); *The Commissioner of Patents*, OHIO CULTIVATOR, May 1, 1845, at 9 (lauding the importance of Ellsworth's annual reports and noting that it "makes a volume of greater interest than any other volume published periodically, in this country").

^{202.} S. Journal, 27th Cong., 2d Sess. 399 (1842).

^{203.} S. 290, 27th Cong. § 1 (1842); S. Journal, 27th Cong., 2d Sess. 524 (1842).

^{204.} By 1839, Ellsworth had already successfully lobbied for the expansion of the Commissioner's evidentiary powers and pushed the Patent Office into the business of collecting agricultural statistics. Act of Mar. 3, 1839, ch. 88, §§ 9, 12, 5 Stat. 353, 354–55. Before leaving the Commissioner's role in 1845, Ellsworth even managed to help Samuel Morse obtain a large appropriation for further experimentation on the telegraph. HARRY KURSH, INSIDE THE U.S. PATENT OFFICE 26 (1959).

copyright, but these, too, strike us as unpersuasive. Hudson postulated that manufactured articles were closer to the subject matter of patents than the "intellectual products" of copyright law (e.g., books, maps, etc.).²⁰⁹ But this explanation is incomplete; Ellsworth's proposal (and the design patent legislation as ultimately enacted) covered works of fine art (statues, for example), in addition to traditionally manufactured goods.²¹⁰ Hudson also speculates that the copyright system lacked a central depository at the time, unlike the patent system.²¹¹ However, design legislation could have provided for a centralized depository at the Patent Office even if design protection took on the form of copyright protection. Indeed, the Patent Office had long been used as a repository of various copyrighted works during its tenure,²¹² and this is essentially what Ruggles's proposal had done.²¹³

In sum, the proposals that ultimately resulted in the first American design patent statute veered from a quasi-copyright proposal to a patent proposal for extrinsic reasons. Our research uncovered no evidence of any debate over the wisdom of the core idea that substantive utility patent law rules should govern a new design protection regime and no indication that drafters of the design patent statute were sufficiently prescient to foresee that copyright and utility patent jurisprudence would evolve along divergent paths in the decades to come.

Our historical analysis also demonstrates that claims that the design patent system originated as an historical accident are misleading. Design protection legislation came about in large part because Jordan Mott persisted in his lobbying efforts. And Ellsworth's adept maneuvering of the design protection scheme onto the Patent Office's turf was no accident.

On the other hand, the final chapter in the legislative odyssey of the 1842 design patent provisions does provide some support for the historical accident thesis. The design patent provisions passed during a political firestorm. The political forces that appear to have converged to make the design patent provisions a reality were transient and anomalous. We analyze these peculiar political circumstances below.

^{209.} Hudson, supra note 58, at 383.

^{210.} Ellsworth Report for 1841, H.R. Doc. No. 27-74 (1842), at 2.

^{211.} Hudson, supra note 58, at 383.

^{212.} Pamphlet from William Thornton, U.S. Superintendent of the Patent Office (Mar. 5, 1811), *reprinted in* AM. FARMER, Jan. 27, 1826, at 357–58 (explaining the process of acquiring a patent or copyright and noting that specimens of copyrighted works, like paper hangings and ornaments for rooms, could be deposited directly with the Patent Office or the Secretary of State in order to fulfill the deposit requirement). *See generally* R. Anthony Reese, *Innocent Infringement in U.S. Copyright Law: A History*, 30 COLUM. J.L. & ARTS 133, 137 (2007) (describing copyright protection formalities from 1790 to 1909); John Y. Cole, *Ainsworth Spofford and the Copyright Law of 1870, in* A CENTURY OF COPYRIGHT IN THE LIBRARY OF CONGRESS 3 (1970) (noting that storing the copies of these works was a point of frustration for numerous patent commissioners, since space was such a premium at the Patent Office).

^{213.} See supra Part III.A.

C. Passage of the 1842 Act: Design Patent Protection and the Protectionist Surge

The Twenty-Seventh Congress received Commissioner Henry Ellsworth's report recommending design patent protection in March, and in April 1842 Senator Samuel Prentiss, a Whig from Vermont, introduced legislation.²¹⁴ It had no chance of progressing through the legislative process for a simple reason: the Twenty-Seventh Congress was utterly in deadlock.

The crisis in Congress in the spring of 1842 had its roots in a long-running feud between the Jacksonian Democrats and their emergent rivals, the American Whigs. Just over a year earlier, the Whig Party had gained a majority of seats in Congress and had finally captured the White House. The Whigs had won on a platform favoring aggressive protectionist tariffs,²¹⁵ arguing successfully that the free trade policies of the Jacksonian Democrats had triggered the Panic of 1837, a severe economic recession whose effects extended into the 1840s.²¹⁶ In early 1841, it appeared certain that the Whig legislative agenda, including the tariff legislation, would swiftly be enacted.²¹⁷

Then, after only a month in office, President William Henry Harrison died. His successor, John Tyler of Virginia, was nominally a Whig but refused to cooperate

^{214.} S. 220, 27th Cong. (1842). We do not mean to suggest that the design patent system was purely the product of Whig partisanship. For example, both Ruggles and Ellsworth were (at one point) Jacksonian Democrats. FRANKLIN BOWDITCH DEXTER, 6 BIOGRAPHICAL SKETCHES OF THE GRADUATES OF YALE COLLEGE WITH ANNALS OF THE COLLEGE HISTORY 309–12 (1912) (offering brief biographical information); *supra* note 179.

^{215.} The Whigs had been arguing for many years that "free trade was always linked with depression, while protection brought prosperity." Samuel Rezneck, *The Social History of an American Depression 1837–1843*, 40 AM. HIST. REV. 662, 670 (1935). Nevertheless, the Jacksonians maintained a policy of trade liberalization during their time in power, including much of the 1830s. Scott C. James & David A. Lake, *The Second Face of Hegemony: Britain's Repeal of the Corn Laws and the American Walker Tariff of 1846*, 43 INT'L ORG. 1, 9 (1989) (identifying four periods of antebellum tariff policy: increased protectionism from 1824–33; trade liberalization from 1833–42; a "brief but decided return to protection" from 1842–46; and the "political triumph of free trade principles" from 1846–61).

^{216.} For background on the recession, see, e.g., Edward J. Balleisen, *Vulture Capitalism in Antebellum America: The 1841 Federal Bankruptcy Act and the Exploitation of Financial Distress*, 70 BUS. HIST. REV. 473, 479 (1996) (referring to two discrete economic downturns during this period, the Panic of 1837 and the Panic of 1839); PETER TEMIN, THE JACKSONIAN ECONOMY 148–55 (1969) (analyzing the causes of both crises). The Whigs succeeded— albeit temporarily—in blaming the recession in part on Jacksonian banking policies, which were unpopular in the West, and on British trade practices, which had caused cotton prices to plummet and had generated resentment in the South. *See* Rezneck, *supra* note 215, at 669; *The Protective Policy*, S. LITERARY MESSENGER, Apr. 1842, at 4 (offering an Anglophobic polemic for high tariffs). Whatever the cause, the consequences were severe: banks failed and early stock markets crashed, Peter L. Rousseau, *Jacksonian Monetary Policy, Specie Flows, and the Panic of 1837*, 62 J. ECON. HIST. 457, 457 (2002), and the U.S. Treasury was nearly bankrupted. 1 JERRY W. MARKHAM, A FINANCIAL HISTORY OF THE UNITED STATES 150 (2002).

^{217.} MICHAEL F. HOLT, THE RISE AND FALL OF THE AMERICAN WHIG PARTY 69, 121 (1999).

with Whig legislative initiatives,²¹⁸ particularly the tariffs, which had long been unpopular in the South.²¹⁹ Incensed, the Whig congressional leadership dismissed Tyler from the party and settled in for a monumental power struggle with the administration, "contemptuously" dismissing Tyler's legislative proposals and bringing Washington to the verge of paralysis.²²⁰

For a time, Tyler refused to capitulate. The Whigs passed a legislative package that included tariff legislation; Tyler immediately vetoed it.²²¹ However, Tyler's position was unsustainable. The tariffs were a major source of federal government revenue, and the tariff deadlock had the potential to shut down the government.²²² Meanwhile, sectional differences were threatening to unravel the Whigs' fragile political coalition, and there were already signs that the electorate was growing impatient with Whig promises to pull the nation out of the recession.²²³

By August 1842, the sheer enormity of the threat to the government's fiscal stability convinced Tyler that he had no choice but to support a tariff program. For their part, the Whigs began to split up their legislative package, uncoupling the tariff proposal from another controversial proposal relating to the distribution of land revenues. While the disappearance of the land bill caused southern Whigs to withdraw support, the Whig tariff was sufficiently popular in depressed northern manufacturing areas that the Whigs were able to cobble together a flimsy coalition with some northern Democrats (for example, Pennsylvania Democrats whose constituents operated iron foundries, among others). On August 30, 1842, Congress passed the Whig tariff legislation, characterized by one historian as the Whigs' sole legislative triumph of the session.²²⁴

224. See id. at 148.

^{218.} For a concise recitation of events leading to Tyler's rupture with Clay and the Whig program, see SEAN WILENTZ, THE RISE OF AMERICAN DEMOCRACY 523–29 (2005).

^{219.} Jacksonian Democrats had traditionally resisted high tariff rates on the ground that the tariffs harmed southern agrarian interests. Southern resistance to proposed tariffs in the early 1830s had precipitated the Nullification Crisis, in which South Carolina threatened to secede if the tariffs were not adjusted. *See* Adrienne Caughfield, *Tariff of 1828 (Tariff of Abominations), in* 1 ENCYCLOPEDIA OF TARIFFS AND TRADE IN U.S. HISTORY 363, 363–64 (Cynthia Clark Northrup & Elaine C. Prange Turney eds., 2003); Robert Tinkler, *Tariff of 1832, in* 1 ENCYCLOPEDIA OF TARIFFS AND TRADE IN U.S. HISTORY, *supra,* at 365; *see also* Douglas A. Irwin, *Antebellum Tariff Politics: Regional Coalitions and Shifting Regional Interests,* 51 J.L. & ECON. 715, 730 (2008) (discussing the impact of the Tariff of 1832 on the South). The 1833 Compromise Tariff Act provided a tariff regime that was only slightly more favorable to the South. *See* TAUSSIG, *supra* note 79, at 110. For a concise discussion of the Nullification Crisis, see DANIEL WALKER HOWE, WHAT HATH GOD WROUGHT 395–410 (2007).

^{220.} HOLT, supra note 217, at 137, 140.

^{221.} Id. at 147.

^{222.} See *id.* at 146–47. Adding further to the urgency of the situation, tariff reductions promulgated several years earlier during the Jackson administration were scheduled to come into effect in 1842. *Id.*

^{223.} *Id.* at 140. Indeed, the Whigs fared so badly in state elections in the fall of 1841 that by December 1841, prominent Senator John Calhoun (South Carolina) chortled that "I now regard the Whigs as destroyed." *Id.*

In fact, there had been one other. The design patent legislation had lain dormant through the summer,²²⁵ but Mott's petition returned to the Senate again in early August,²²⁶ courtesy of Prentiss's replacement as chair of the Patent Committee, Whig Senator John L. Kerr from Maryland.²²⁷ Senator Kerr also moved for the Senate to take up the Prentiss bill for consideration.²²⁸ After two days of debate,²²⁹ the Senate passed the bill and reported it to the House,²³⁰ where it passed without discussion²³¹ the day before the passage of the tariff bill.

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Although the historical evidence is largely circumstantial, we think it likely that, but for the momentum of the great tariff debate, the design patent legislation would have been shunted aside, another casualty of the partisan stalemate. It was the tariff debate that brought together northern industrial interests, and these happened to be the very same constituencies that stood to benefit most immediately from design patent legislation.²³² Senator Kerr, who had moved the Senate to consider Prentiss's design bill on August 3, 1842,²³³ had also presented a petition a few months earlier from numerous manufacturers seeking increased iron tariffs.²³⁴

225. In addition to the obstacles that resulted from the Whigs' fight with the Tyler administration, Senator Prentiss had resigned from the Senate a few days after introducing the design patent legislation in the spring. *See* CHARLES J.F. BINNEY, MEMOIRS OF JUDGE SAMUEL PRENTISS OF MONTPELIER, VT., AND HIS WIFE LUCRETIA (HOUGHTON) PRENTISS 12 (1883), *available at* http://archive.org/details/memoirsofjudgesa00binn.

226. CONG. GLOBE, 27th Cong., 2d Sess. 826 (1842) (petition presented in August 1842). Kerr's reintroduction of the petition was likely done for symbolic reasons (since it had been five months since Sturgeon's presentation to the same congressional session and he would ask Congress to take up consideration of Prentiss's bill the following day) or because of changes in the Senate's petition rules that also took place during this session. *See* Daniel Wirls, "*The Only Mode of Avoiding Everlasting Debate*": *The Overlooked Senate Gag Rule for Antislavery Petitions*, 27 J. EARLY REPUBLIC 115, 128–29 (2007) (discussing the Senate's evolving gag rules during this era that were intended to deal with the onslaught of antislavery petitions during this time). *See generally* Stephen A. Higginson, *A Short History of the Right to Petition Government for the Redress of Grievances*, 96 YALE L.J. 142, 156–58 (1986) (discussing the typical Congressional reception and consideration of petitions via committees during this gag rule era).

227. After Samuel Prentiss's abrupt retirement from the Senate, Kerr was appointed chair of the Senate's Patent Committee in June 1842. S. JOURNAL, 27th Cong., 2d Sess. 399 (1842).

228. CONG. GLOBE, 27th Cong., 2d Sess. 832-33 (1842).

230. See CONG. GLOBE, 27th Cong., 2d Sess. 911-12 (1842).

231. *Id.* at 960.

232. The sentiment for protectionism dissipated almost as quickly as it arose. By 1844, the Democrats regained the White House, and President Polk immediately attacked the Whig tariff regime. *See* Robert P. Sutton, *Tariff of 1846 (Walker's Tariff), in* 1 ENCYCLOPEDIA OF TARIFFS AND TRADE IN U.S. HISTORY, *supra* note 219, at 368–69; *see also* ROBERT W. MERRY, A COUNTRY OF VAST DESIGNS 205–07 (2009) (recounting Polk's first annual message to Congress).

233. CONG. GLOBE, 27th Cong., 2d Sess. 832–33 (1842). Prentiss had resigned from the Senate a few days after introducing the design legislation. Senator Kerr had been appointed

^{229.} Our research suggests that a provision imposing a citizenship requirement, and another relating to renewals for utility patents, were the only provisions debated. *See infra* note 243–44.

The political circumstances also suggest that it would have been expedient to characterize the design patent legislation itself as a protectionist measure.²³⁵ There was some precedent for this characterization in existing elements of antebellum American intellectual property law.²³⁶ For example, U.S. copyright protection at the time extended only to authors who were U.S. citizens,²³⁷ and the 1790 Copyright Act expressly stated that the copying of foreign works was not forbidden.²³⁸ The patent system likewise had included some discriminatory provisions—citizenship restrictions between 1793 and 1836²³⁹ and discriminatory fees,²⁴⁰ working requirements,²⁴¹ and prior art provisions afterwards.²⁴²

234. CONG. GLOBE, 27th Cong., 2d Sess. 381 (1842) (presenting a "memorial from citizens of Maryland, asking that the tariff of duties on imported iron might be restored to what it was in 1839, with a view to protection: [which was] referred to the Committee on Manufactures" on April 1, 1842).

235. We use the term "protectionism" here in its nineteenth century sense: advocates of "protectionism" sought to use domestic legal regimes, including domestic intellectual property laws, to insulate domestic producers from foreign competition, while "free trade" adherents tended to lash out at the propagation and expansion of intellectual property regimes. Mark D. Janis, Patent Abolitionism, 17 BERKELEY TECH. L.J. 899, 941-48 (2002) (citing free trade principles as the main ideological influence underlying a movement in England in the 1860s to abolish patent protection). The modern dialectic of intellectual property and protectionism is just the opposite: countries that recognize and enforce intellectual property rights regimes at or above TRIPS-mandated minimums are frequently said to be acting in accord with free trade principles, while countries that derogate from those minimums engage in "protectionism." See, e.g., Yiqiang Li, Evaluation of the Sino-American Intellectual Property Agreements: A Judicial Approach to Solving the Local Protectionism Problem, 10 COLUM. J. ASIAN L. 391 (1996) (using "protectionism" to describe the refusal of local Chinese government authorities to enforce intellectual property rights); see also Rochelle Cooper Dreyfuss & Andreas F. Lowenfeld, Two Achievements of the Uruguay Round: Putting TRIPS and Dispute Settlement Together, 37 VA. J. INT'L L. 275, 280 (1997) (noting that the GATT agreement generally disfavors "protectionism" but that GATT-TRIPS promotes intellectual property protection that itself may be deemed "protectionist," and concluding that even the modern vocabularies of intellectual property and international trade "sit in uneasy contrast").

236. There were also arguably some British precursors. For a suggestion that protectionist trade policy and intellectual property rights were intertwined in an earlier era in English law, see Thomas B. Nachbar, *Monopoly, Mercantilism, and the Politics of Regulation*, 91 VA. L. REV. 1313 (2005).

237. Act of May 31, 1790, ch. 15, § 1, 1 Stat. 124, 124 (limiting copyright protection to U.S. citizens and residents); *id.* § 6 (limiting copyright infringement actions to those brought by U.S. citizens or residents). Congress eliminated the citizenship restriction in 1891, but imposed requirements for publication and manufacture in the United States. *See* Act of Mar. 3, 1891, ch. 565, 26 Stat. 1106.

238. Act of May 31, 1790, ch. 15, § 5, 1 Stat. at 125 (specifying that "nothing in this act shall be construed to extend to prohibit the importation or vending, reprinting or publishing within the United States, of any map, chart, book or books, written, printed, or published by any person not a citizen of the United States"). *See generally* B. ZORINA KHAN, THE DEMOCRATIZATION OF INVENTION 261 (2005) (discussing the provision).

239. Patent Act of 1793, ch. 11, § 1, 1 Stat. 318, 318–21; *cf.* Act of July 4, 1836, ch. 357, § 6, 5 Stat. 117, 119 [hereinafter Patent Act of 1836] ("any person or persons").

chair of the Senate's patent committee on June 15, 1842. S. JOURNAL, 27th Cong., 2d Sess. 399 (1842).

If design protection legislation was to be sold as a protectionist measure, what mattered was whether the legislation privileged American firms over foreign firms—and it did. Consistent with protectionist ambitions, the Senate amended the pending 1842 design patent legislation in order to limit design patent protection to citizens or aliens who resided in the United States and intended to become citizens.²⁴³ In fact, the only amendment recorded in the *Congressional Globe* that we can tie directly to the design patent provisions involved the suggestion to restrict design patent protection to citizens.²⁴⁴

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Viewed in its proper political context, Congress's decision to enact design patent legislation can be understood as an exercise implementing the Whig protectionist agenda, not a mere accident or a mere passive congressional response to Commissioner Ellsworth's proposal to incorporate utility patent rules. The citizenship provision was likely far more important to the ultimate passage of the legislation than the suggestion to incorporate patent law rules.²⁴⁵

243. Predecessor proposals lacked a citizenship restriction. *Compare* S. 220, 27th Cong. § 3 (1842) ("person or persons"), *with* Act of Aug. 29, 1842, ch. 263, § 3, 5 Stat. 543, 543–44 ("citizen or citizens, or alien or aliens, having resided one year in the United States and taken the oath of his or their intention to become a citizen or citizens").

244. CONG. GLOBE, 27th Cong., 2d Sess. 840 (1842) (recording that Senator Wright presumably Silas J. Wright, a Van Buren Democrat from New York—suggested the citizenship restriction, and that Senator Huntington—apparently Jabez W. Huntington, a Whig from Connecticut—commented on the suggested amendment). The legislative package also included some utility patent provisions, and the relatively brief debate as recorded in the *Congressional Globe* appears to contain some erroneous references to bill section numbers, so it requires some careful reconstruction to determine whether certain aspects of the debate related to the design patent proposal. *See id.* (referring to citizenship amendments in "2d section," which should read "3d section").

245. Indeed, in 1870, when Congress lifted the citizenship restriction, *Scientific American* characterized the amendment as a great victory for the "advocates of the free trade system." *The New Patent Laws—Important Changes Affecting American and Foreign Manufacturers—Free Trade in Patents Now Fully Established*, 23 SCI. AM. 87, 87 (1870) (referring to Act of July 8, 1870, ch. 230, § 71, 16. Stat. 198, 209–10). During the subsequent (Forty-Second) Congress, the Senate even passed a bill that would have again restricted design patents to citizens. S. 583, 42d Cong. (1872) (reincorporating the citizenship restriction for design patents only). Describing the amendment, Senator Morrill (Vermont) bluntly stated, "The effect of this change is to allow Americans to copy any designs that are brought here from abroad, if they choose." CONG. GLOBE, 42d Cong., 2d Sess. 1036 (1872). The Senator also repeatedly referred to the design patent regime as copyright and even a design registration system while championing the bill. *See, e.g., id.* at 817, 1036; *see also id.* at 1427 (recording Mr. Cox's attempt to refer the bill to the House's

^{240.} *See* Patent Act of 1836, § 9, 5 Stat. at 121 (imposing a \$30 application fee for U.S. citizens, a \$300 fee for most foreigners, and a \$500 fee for British applicants).

^{241.} *Id.* § 15 (allowing a defense against infringement in cases where the patentee was a foreigner and had "failed and neglected for the space of eighteen months from the date of the patent, to put and continue on sale to the public, on reasonable terms, the invention or discovery for which the patent issued").

^{242.} Compare id. § 7, with Patent Act of 1793, § 1, 1 Stat. at 318–21, and Act of Apr. 10, 1790, ch. 7, § 1, 1 Stat. 109, 109–10. See generally Margo A. Bagley, Patently Unconstitutional: The Geographic Limitation on Prior Art in a Small World, 87 MINN. L. REV. 679, 684, 696–700, (tracing the limitation's legislative history).

IV. RETHINKING THE USE OF MODERN UTILITY PATENT RULES FOR DESIGN PATENTS

The American design patent system has had abundant time to establish itself since the era of Mott, Ellsworth, and Ruggles, but, as we have noted, it has never developed a clear identity. The cast-iron stove industry used the system heavily at the outset.²⁴⁶ However, industry leaders quickly grew disenchanted with design patent protection and pressed for alternative forms of protection, ultimately without success.²⁴⁷

We do not prescribe the abolition of design patent protection, but we do advocate close scrutiny of its core assumption about the feasibility of incorporating utility patent rules. The starting point, then, should be the language in 35 U.S.C. § 171: the mandate that the "provisions of this title relating to patents for inventions shall apply to patents for designs, except as otherwise provided."²⁴⁸ It is the modern statutory language responding to Ellsworth's rather cavalier pronouncement that the design patent system could be implemented "by simply authorizing the Commissioner to issue patents for these objects, under the same limitations and on the same conditions as govern present action in other cases."249 This ostensibly lucid and often misunderstood provision has undergone very little change since its formulation in 1842.²⁵⁰ As we discuss below, a comprehensive reevaluation of design patents' patent character might start with a reconsideration of design patent claiming practices and the concept of patentability of designs over the prior art. By retaining the incorporation clause as utility patent law diverged from copyright law, Congress has forced blind obedience to a principle that even Ellsworth might not have supported.

247. We examine this debate in forthcoming work.

248. 35 U.S.C. § 171 (2006). This section is commonly referred to as an incorporation clause or more colloquially as a catchall.

249. *See* Du Mont, *supra* note 16, at 541 (citing HENRY L. ELLSWORTH, REPORT FROM THE COMMISSIONER OF PATENTS, H.R. DOC. NO. 74, at 2 (1842)).

Committee on the Library—which handled copyright reform—and Congressman Myers's rejoinder that the bill did not refer to copyright and should be referred to the House's Committee on Patents). Although the House might have similarly supported the bill, the citizenship restriction was thrown into a much larger bill with several amendments that did not emerge from the House's Committee on Patents in time for regular order before the end of the session. *See* CONG. GLOBE, 42d Cong., 2d Sess. 4329–30 (1872); To amend an act entitled, "An act to revise, consolidate, and amend the statutes relating to patents and copyrights," approved July eighth, eighteen hundred and seventy, H.R. 2857, 42d Cong. (1872) (line 105–07).

^{246.} Indeed, the first reported design patent litigation involved stoves. Root v. Ball, 20 F. Cas. 1157 (D. Ohio 1846) (No. 12,035); see also Howell J. Harris, "The Stove Trade Needs Change Continually": Designing the First Mass-Market Consumer Durable, c. 1830-1900 (working manuscript on file with authors).

^{250.} Du Mont, *supra* note 16, at 541–43, 547–48, 564, 578–82, 587–88, 591, 596 (discussing this section's legislative history from the 1842 act through its modern embodiment and how it was used as the principal vehicle for justifying the application of the contemporary invention requirement and other utility patent standards).

A. Design Patent Claiming Practices

The patent claim shapes much of modern utility patent analysis.²⁵¹ Claim interpretation is the threshold step in all patentability and infringement analyses and has generated perhaps the most vibrant debates in contemporary patent law.²⁵² A synthesis of the canons of patent claim construction literally fills multiple volumes.²⁵³ By virtue of the Section 171 incorporation clause, and cultural cross-fertilization between utility patent and design patent practices, each design patent includes a claim.²⁵⁴ Accordingly, a mechanism exists for the deep inculcation of the utility patent claiming jurisprudence into design patent law.

Nonetheless, while design patent law is superficially indebted to utility patent law's claiming conventions, its commitment has been ad hoc. The concept of peripheral claiming has never quite penetrated design patent law. Design patent claims conventionally refer to the disclosure²⁵⁵ (using language such as "as shown and described"²⁵⁶); that is, they resemble central claims as opposed to the peripheral claims of the present-day utility patent.²⁵⁷ Since utility patent law has moved to peripheral claiming and design patent law seemingly has not, this raises a fundamental question about whether claim interpretation and infringement rules typically associated with peripheral claiming systems should carry over to the design patent regime.

Unfortunately, no coherent approach to this question has emerged from the case law. In *Gorham*, the Supreme Court adopted an infringement rule that is consistent with the notion of central claiming, in that it permitted infringement to be found when the claimed and accused designs were "substantially the same" as viewed from the perspective of the ordinary observer.²⁵⁸ Over a period of decades, courts,

254. 37 C.F.R. § 1.153(a) (2010).

255. Although design patents formerly included more detailed claims that resembled utility patents, advances in photography and the Supreme Court's decision in *Dobson v. Dornan*, 118 U.S. 10, 14 (1886) (emphasizing that a design patent's scope is best represented by its drawings), cemented a shift in design patent claiming towards the simple reference to the drawings that we see today.

256. 37 C.F.R. § 1.153(a) (requiring the claim to be "in formal terms to the ornamental design for the article (specifying name) as shown, or as shown and described"). For a modern example, the design patent covering Apple's iPad includes the following claim: "The ornamental design for a portable display device, as shown and described." Portable Display Device, U.S. Patent No. D-627,777, at [57] (filed Jan. 6, 2010).

257. Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 U. PA. L. REV. 1743, 1776 (2009); Jeanne C. Fromer, *Claiming Intellectual Property*, 76 U. CHI. L. REV. 719, 796 (2009).

258. Gorham Co. v. White, 81 U.S. (14 Wall) 511, 528 (1871). There was no controversy over the substantial similarity formulation; the main issue was whether the ordinary observer

^{251.} See William Redin Woodworth, Definiteness and Particularity in Patent Claims, 46 MICH. L. REV. 755, 764 (1948).

^{252.} See, e.g., Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996); Phillips v. AWH Corp., 415 F.3d 1303 (Fed. Cir. 2005) (en banc).

^{253.} *See, e.g.*, ANTHONY W. DELLER, PATENT CLAIMS (2d. ed. 1971); *see also* RIDSDALE ELLIS, PATENT CLAIMS (1949); ROBERT C. FABER, FABER ON MECHANICS OF PATENT CLAIM DRAFTING (6th ed. 2010).

including the Federal Circuit, added a separate inquiry to the *Gorham* analysis,²⁵⁹ requiring a showing that the accused design appropriated the "points of novelty" of the claimed design²⁶⁰—arguably bringing the design patent infringement analysis closer to the strict element-by-element analysis associated with literal infringement in peripheral claiming systems.²⁶¹ The Federal Circuit also held that the doctrine of equivalents—whose value is most evident in a peripheral claiming system—does apply to design patents,²⁶² although harmonizing it with the point of novelty test

261. See Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29–30 (1997). *But see* Amini Innovation Corp. v. Anthony California, Inc., 439 F.3d 1365, 1372 (Fed. Cir. 2006) (holding that the district court did not err by factoring out the protected design's elements that it deemed functional, but that it committed a procedural error by discounting the design's functional elements in a manner that "convert[ed] the overall infringement test [(i.e., *Gorham*)] to an element-by-element comparison").

262. Minka Lighting, Inc. v. Craftmade Int'l, Inc., 93 Fed. App'x 214, 217 (Fed. Cir. 2004) (noting that *Gorham*'s "substantial similarity test by its nature subsumes a doctrine of equivalents analysis" (citing Lee v. Dayton-Hudson Corp., 838 F.2d 1186, 1190 (Fed. Cir. 1988) (recognizing that "it has long been recognized that the principles of equivalency are applicable under *Gorham*," but noting the inapplicability of *Graver Tank*'s function-way-

ordinary designer should be the putative viewer of the respective designs. Id. at 527.

^{259.} See Egyptian Goddess, Inc. v. SWISA, Inc., 543 F.3d 665, 671 (Fed. Cir. 2008) (noting that the court had switched from treating the point of novelty inquiry conjunctively with *Gorham*, to treating it as a separate test). In support of the Federal Circuit's "conjunctive" approach, the *Egyptian Goddess* court cited *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1125 (Fed. Cir. 1993), and *Shelcore, Inc. v. Durham Indus., Inc.*, 745 F.2d 621, 628 n.16 (Fed. Cir. 1984). *Id.* For examples of its application as a separate test, the court cited *Lawman Armor Corp. v. Winner Int'l, LLC*, 437 F.3d 1383, 1384 (Fed. Cir. 2006), *Contessa Food Prods., Inc. v. Conagra, Inc.*, 282 F.3d 1370, 1377 (Fed. Cir. 2002), *Sun Hill Indus., Inc. v. Easter Unlimited, Inc.*, 48 F.3d 1193, 1197 (Fed. Cir. 1995), and *Unidynamics Corp. v. Automatic Prods. Int'l*, 157 F.3d 1311, 1323–24 (Fed. Cir. 1988). *Id.*

^{260.} The point of novelty test required courts to identify the elements of the patented design that distinguished it from the prior art. See Lawman Armor Corp. v. Winner Int'l, LLC, No. CIV.A.02-4595, 2005 WL 354103, at *4-5 (E.D. Pa. Feb. 15, 2005) (identifying eight points of novelty from the prior art), aff'd, 437 F.3d 1383 (Fed. Cir. 2006). Infringement could only be found where the accused article included the protected design's point of novelty (or many points of novelty, as in Lawman). See Litton Sys., Inc. v. Whirlpool Corp., 728 F.2d 1423, 1444 (Fed. Cir. 1984). It operated as a separate inquiry from Gorham's substantial similarity test for infringement. See Gorham, 81 U.S. at 528. In tandem, these tests created an odd scenario where courts, on the one hand, viewed infringement as a generalist or ordinary observer when judging overall or substantial similarity, and on the other hand, then focused like an expert on its elements during a point of novelty analysis. See Winner Int'l Corp. v. Wolo Mfg. Corp., 905 F.2d 375, 376 (Fed. Cir. 1990) (asserting that "[t]o consider the overall appearance of a design without regard to prior art would eviscerate the purpose of the 'point of novelty' approach, which is to focus on those aspects of a design which render the design different from prior art designs"). For background on the Federal Circuit's pre-Egyptian Goddess approach to the point of novelty test, see Christopher V. Carani, The New "Extra-Ordinary" Observer Test for Design Patent Infringement—On a Crash Course with the Supreme Court's Precedent in Gorham v. White, 8 J. MARSHALL REV. INTELL. PROP. L. 354 (2009); Perry J. Saidman, What Is the Point of the Point of Novelty Test for Design Patent Infringement?, 90 J. PAT. & TRADEMARK OFF. SOC'Y 401 (2008).

presented certain additional challenges.²⁶³ However, more recently, the Federal Circuit ruled en banc in *Egyptian Goddess* that the *Gorham* analysis should govern design patent infringement, shorn of any point of novelty prong or as a separate test.²⁶⁴ The court has not returned to the question of whether design patentees are entitled to invoke the doctrine of equivalents.

This vacillation between peripheral and central claiming orientations has not been confined to the law of infringement. In the wake of its *Egyptian Goddess* decision, the Federal Circuit revised its test for design patent anticipation, eliminating the point of novelty prong that it had added only a few years previously.²⁶⁵ On the other hand, notwithstanding its newfound distaste for points of novelty, the Federal Circuit also quixotically reaffirmed²⁶⁶ that it is proper to dissect a claimed design into its individual features—by vainly parsing the design's functional and ornamental elements—and to analyze them serially before applying *Gorham*'s test for infringement to the remaining ornamental elements,²⁶⁷ a decision that perhaps is influenced by an orientation towards patent claiming and the tendency to conceive of claims as combinations of elements.²⁶⁸

The design patent system's awkward embrace of utility patent claiming concepts has also been evident in the Federal Circuit's approach to design patent claim construction. After a period during which the Federal Circuit routinely invoked

265. Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1240 (Fed. Cir 2009) (concluding, in light of *Egyptian Goddess*, that the ordinary observer test was the sole test for anticipation); *id.* at 1239 (citing Peters v. Active Mfg. Co., 129 U.S. 530, 537 (1889) (invoking the axiom, "'[t]hat which infringes, if later, would anticipate, if earlier''')).

266. For pre-*Egyptian Goddess* Federal Circuit cases affirming *Richardson*'s approach, see, for example, OddzOn Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396, 1405 (Fed. Cir. 1997); Read Corp. v. Portec, Inc., 970 F.2d 816, 825–26 (Fed. Cir. 1992); *Lee*, 838 F.2d at 1188.

267. Richardson v. Stanley Works, Inc., 597 F.3d 1288, 1294, 1295 (Fed. Cir. 2010) (noting that if the district court had not parsed out the design's ornamental aspects during claim construction that it would have erroneously given the patentee's "Stepclaw" design a claim scope that included "the utilitarian elements of his multi-function tool," but then attempting to reconcile this approach with *Amini*'s caution that "the deception that arises is a result of the similarities in the overall design [(*i.e.*, infringement)], not of similarities in ornamental features in isolation" (citing Amini Innovation Corp. v. Anthony California, Inc., 439 F.3d 1365, 1371 (Fed. Cir. 2006)). While the elimination of the point of novelty test removed a substantial hurdle for design patentees, functionality's role in claim construction—as distinguished from a de jure functionality or validity inquiry—will likely emerge as the design patentee's new roadblock. *See* Brief of Amicus Curiae for Apple Inc. in Support of Plaintiff-Appellant's Petition for Rehearing En Banc, *Richardson*, 597 F.3d 1288 (No. 08-CV-1040); Brief of Amicus Curiae American Intellectual Property Law Association in Support of the Petition for Rehearing En Banc, *Richardson*, 597 F.3d 1288 (No. 08-CV-1040).

268. *Cf. Int'l Seaway Trading Corp.*, 589 F.3d at 1244–45 (Clevenger, J., dissenting in part) (noting how the majority's piecemeal application of the anticipation doctrine improperly focuses the fact finder on the design's individual elements, as opposed to its mandated comparison as a whole).

result test to design patents))).

^{263.} See, e.g., Sun Hill Indus., 48 F.3d at 1199 (refusing to apply the doctrine of equivalence where the point of novelty test had not been met).

^{264.} *Egyptian Goddess*, 543 F.3d at 678 (abandoning the point of novelty test as an element of the infringement analysis).

claim interpretation as a threshold analysis in design patent cases,²⁶⁹ the court came to recognize the difficulties associated with calling for judges to translate design patent drawings into words as part of a claim construction exercise.²⁷⁰ In *Egyptian Goddess*, the Federal Circuit discouraged courts from rendering verbal claim constructions in design patent cases,²⁷¹ a theme that it has reiterated more recently.²⁷² Yet the Federal Circuit did not wish to discard the entire panoply of claim construction tools, so it advised courts that they might still provide "guidance" to the fact finder by explaining the significance of statements made during the prosecution of the design patent, for example,²⁷³ leaving open the question of which claim construction canons might likewise be retained under the rubric of "guidance."

Herculean efforts such as these to stuff design patents into a utility patent box look mildly ridiculous against the backdrop of the historical analysis that we have offered in prior sections of this paper. As we have shown, at the outset of the debates over U.S. design protection, there was no commitment whatsoever to a model of substantive patent rules, and at the close of the 1842 session, when the design patent legislation passed, there was virtually no indication that its passage represented a congressional judgment of the inherent superiority of substantive patent rules for designs. In any event, many of the claiming practices discussed above did not exist in 1842. A suggestion that the design patent system avoid the use of claims and associated claiming rules altogether would not have raised eyebrows in 1842 and perhaps should not today either.

B. Design Patentability Standards

Another distinguishing feature of modern utility patent jurisprudence is its heavy reliance on comparisons between the claimed invention and the prior art as the focus of the patentability analysis. This comparison is implemented through an elaborate rule set that defines conditions of both novelty and nonobviousness. These rules, as they operate today, would be virtually unrecognizable to those who originally pressed for design protection.

Nothing in the historical record commands that demonstrating differences from the prior art be the focal point of a protectability analysis for designs. If anything, the stove industry narrative suggests that Mott and fellow lobbyists would have objected to a design patent regime had they understood that it would come to entail patentability requirements in the nature of nonobviousness. One of us has detailed in other work the circuitous path by which obviousness analysis infiltrated the design patent regime; we need not reiterate those arguments here.²⁷⁴ For the

^{269.} See, e.g., Contessa Food Prods., Inc. v. Conagra, Inc., 282 F.3d 1370, 1376 (Fed. Cir. 2002); Elmer v. ICC Fabricating, Inc., 67 F.3d 1571, 1577 (Fed. Cir. 1995).

^{270.} *See* Crocs, Inc. v. Int'l Trade Comm'n, 598 F.3d 1294, 1302–03 (Fed. Cir. 2010) (noting the commission's overemphasis on its written claim construction caused it to improperly focus on the designs' elements, instead of their appearance as a whole).

^{271.} Egyptian Goddess, Inc. v. SWISA, Inc., 543 F.3d 665, 679-80 (Fed. Cir. 2008).

^{272.} Crocs, Inc., 598 F.3d at 1302–03.

^{273.} *Egyptian Goddess*, 543 F.3d at 680.

^{274.} Du Mont, supra note 16.

purposes of this paper, we need merely observe that the Federal Circuit has not yet come to grips with the incorporation of the obviousness concept into the assessment of designs.²⁷⁵ An argument that the entire exercise is conceptually flawed is consistent with the historical record of design patent's nonpatent origins.

The Federal Circuit's commentary in International Seaway Trading Corp.²⁷⁶ may provide another illustration of the need to rethink design patentability standards in view of the historical record. Section 171 requires not only that designs be new, but also that they be "original," a requirement that has been included in design patent legislation since the outset²⁷⁷ but was rapidly swamped by the novelty and nonobviousness requirements. In a rare commentary on the originality requirement, the court speculated that the requirement "likely was designed to incorporate the copyright concept of originality-requiring that the work be original with the author."²⁷⁸ Yet, as the court acknowledged, the originality requirement was not codified in U.S. copyright law until 1909, whereas the design patent legislation was enacted in 1842.²⁷⁹ In seeming resignation, the court concluded that the overriding analogy was to utility patents after all: "the courts have not construed the word 'original' as requiring that design patents be treated differently than utility patents."²⁸⁰ Providing further credence to the Federal Circuit's frustration, our historical analysis provides reason to question the wisdom of keeping design patent protection in the thrall of modern patentability standards developed under utility patent law.

CONCLUSION

What should come next for the design patent system? We do not argue here that the design patent regime should be dismantled in favor of a *sui generis* design protection regime. We do conclude that the way forward for the modern design patent system is to ease the design patent system back towards its mixed heritage. Our historical analysis persuades us that modern policy debates about the design patent system have exaggerated utility patent law's grip on design patent jurisprudence. We conclude that Congress's decision to enact design patent legislation in 1842 (1) was not an implicit rejection of other (non-patent) forms of design protection, such as design registration, and (2) was not an endorsement of using modern utility patent rules to protect designs. Arguments for shifting design

279. Id.

^{275.} Int'l Seaway Trading Corp. v. Walgreens Corp., 589 F.3d 1233, 1243–44 (Fed. Cir. 2009); Durling v. Spectrum Furniture Co., 101 F.3d 100, 103 (Fed. Cir. 1996) (setting forth an obviousness standard requiring a primary reference that has "basically the same" appearance as the claimed design, combinable with secondary references only if they are closely related to the primary reference).

^{276. 589} F.3d at 1239.

^{277. 35} U.S.C. § 171 (2006); Ruggles Design Bill, S. 269, 26th Cong. § 1 (1841) (granting protection to "new and original designs"). As discussed above, contemporary British design protection similarly required the design be new and original. *See supra* Part III.A.

^{278.} Int'l Seaway, 589 F.3d at 1238.

^{280.} Id.

patent rights away from the frame of modern substantive patent law, and towards other frameworks such as copyright or trademark, are in no way as radical as they might seem on first blush. Indeed, they are arguments that would, ironically enough, return the design patent debate to its original roots. In addition to the attached paper, the following books and articles may be relevant to the topics being discussed by the design patent panel:

Jason Du Mont and Mark D. Janis, AMERICAN DESIGN PATENT PROTECTION – A COMPARATIVE LEGAL HISTORY (Cambridge Univ. Press forthcoming 2016) (providing an historical narrative on the origins and evolution of the design patent system)

Jason Du Mont and Mark D. Janis, *Disclosing Designs*, -- VAND. L. REV. - (forthcoming 2016) (addressing how Section 112's disclosure requirements apply in modern design patent law; comparing rules and drafting traditions that existed in early design patent law)

Jason Du Mont and Mark D. Janis, *Virtual Designs*, 17 STANFORD TECH. L. REV. 107 (2013) (empirical study of prosecution data on design patents for graphical user interface designs; analysis of subject matter eligibility and other issues)

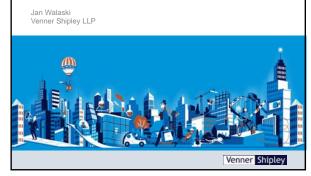
Jason Du Mont and Mark D. Janis, *Functionality in Design Protection Systems*, 19 J. INTELL. PROP. L. 261 (2012) (addressing U.S. design patent functionality and arguing that the court should distinguish between validity and scope functionality; addressing approaches to functionality under European design law)

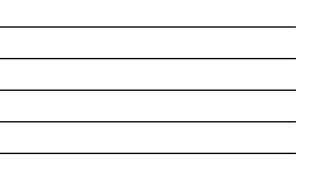


THE EUROPEAN UNIFIED PATENT COURT

Peter Yu, Professor, Texas A&M School of Law Jan Walaski, Managing Partner, Venner Shipley Dr. Thomas Gniadek, Partner, Noerr Richard Ebbink, Partner, Brinkhof

The Unitary Patent Package

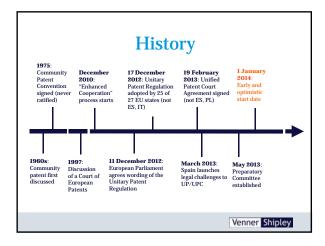




Overview

- Unitary Patent Package: Regulation creating Unitary Patent, Regulation establishing Language Regime and Agreement establishing Unified Patent Court
- Overview of the History
- Current Status
- Comparison with Present System
- Focus on the Unitary Patent (UP) element of the package
- Advantages/Disadvantages

Venner Shipley





Current Status (1)

- All formal legal challenges now overcome system will come into force when 13 countries have ratified, including UK, France and Germany
- 8 countries have ratified so far (including France) and progress being made in others
- UK and Germany expected to be among last to ratify
- Administrative implementation well under way
 (establishing courts, recruiting judges, setting fees etc.)

Venner Shipley

Current Status (2)

- Preparatory Committee expect preparations to be completed by mid-2016
- Subject to ratifications being in place, 6 month provisional application period will follow, in which UPC Agreement can provisionally come into force and Court become operational
- Realistic start date 2017

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Present System - EPC

- "Classical" European Patent
- 38 contracting states, including the 28 members of the EU
- Single prosecution process via the EPO
- Once granted, European patent
 application can be validated in any of
 the EPC contracting states + extension
 states + Morocco
- Validation formalities differ between countries: after validation, there is a bundle of national patents that are individually enforceable and in which individual renewal fees are payable



Venner Shipley

Unitary Patent System

- Single granted patent for at least 25 of the 28 members of the EU (not, at present, Poland, Spain, Croatia)
- Single prosecution process via EPO
 <u>Coexists</u> with existing EPC procedures and existing national procedures
- Once granted, European patent application can be converted to Unitary patent, with a single renewal fee due each year to EPO: can also be validated in non-EU or nonparticipating states as normal eg. Spain, Norway, Switzerland, Turkey

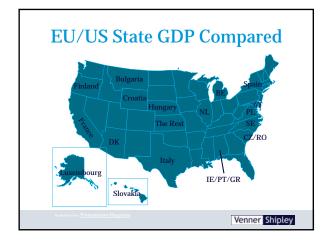


UP/EP/National Patent Unitary EPO Request Patent Application EP Grant Classical EP Patent Validate ŝ EP(UK) xxxxxx National Application ----> GB xxxxxx Grant GB/FR/DE ... Venner Shipley

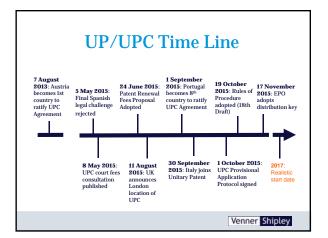


EU Ma	rket Size
Country	GDP (2014) - trillion
EU Total	€13.90
Germany	€2.90
UK	€2.20
France	€2.10
Italy	€1.60
Spain	€1.10
Netherlands	€0.65
Sweden	€0.43
Poland	€0.41
Belgium	€0.40
Austria	€0.33
Denmark	€0.26
Finland	€0.20
	Venner







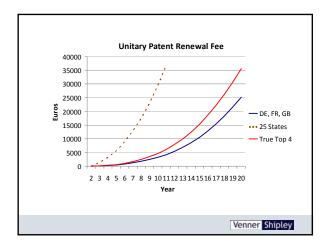




Unitary Patent

- Same as classical European patent up to grant
- Convert to unitary patent within one month of grant, and separately validate in other EU non-participating or non-EU countries
- Translations not required (except in transitional period)
- Single renewal fee payable to EPO
- Renewal fee proposals now adopted: known as "True Top 4" and based on the renewal fees payable for the top 4 countries in which validation is currently carried out: UK, France, Germany and the Netherlands
 - Significantly cheaper for applicants who normally validate in many countries
 - More expensive for applicants who normally validate in 3 countries, but additional coverage for whole of EU may be considered to compensate

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Advantages/Disadvantages of UP

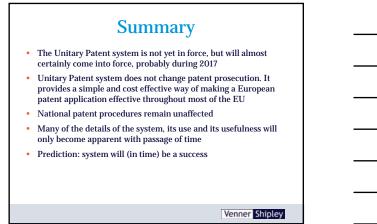
- Unitary Patent will be a single patent for all participating EU states which is much cheaper to obtain than applying for patent protection in all the countries separately (by validating EP or through national routes)
- Applicants will need to trade extent of protection against not only the risk of central revocation through the Unified Patent Court, but against the quality of decision making in the courts
- Advantages and disadvantages are not absolute but depend on many factors

Venner Shipley

Factors for/against UP

- More likely to be Enforcing Patent or Defending it?
- Type of Applicant (Large Company/SME/NPE)
- Type of Industry and Risk of Litigation (eg. Pharmaceutical/Electronics/ Consumer products). Generally considered that pharmaceutical companies less likely to risk unitary patents for blockbuster products, while electronics/consumer products companies may prefer to extend scope of protection to whole of EU
- Strength of Patent: strong patent may mean less concern about central revocation
- Desired Geographical Scope of Protection
- Value of Patent

Venner Shipley









One Court for infringement, validity, and DNI suits For all contracting states (Europe minus ES, PO, CH, NO) For all patents: Unitary Patents and European Patents, except, for a transition period of 7 or 14 years, if EP is timely opted-out (sunrise; before suit). Opted-out EPs may be opted back in National patents remain outside EPO opposition remains available, concurrent with UPC revocation

2

EPLAW

Brinkhof

One Court First Instance, Appeal, CJEU, but

- Many Local, one Regional, and three Central Divisions
- Central Division split: Pharma: London; Electronics: Paris; Mechanical: Munich
- Regional so far only one: Sweden and Baltic (Stockholm)
 Local so far at least 12 Divisions mostly North-Western Europe, Italy
- One Court of Appeal (Luxembourg)
- One Supreme Court, on issues of EU law only (Luxembourg)

3

- Like US District Courts, CAFC, and Supreme Court?

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1

One Court Expected to go live in 2017

- If Britain does not leave the EU this year
- If there will be six more ratifications this year
- If the multilingual IT infrastructure will be ready in time
- If there will be agreement on payment/pensions for judges
- Debate about court fees and recovery of legal cost continues

4

- Debate about SME access and SME exposure continues
- Germany will ratify when these issues are resolved

EPLAW

Brinkhof

One Court Central versus Local - Infringement suits almost always before a Local Division - Nullity suits must be brought before a Central Division -Counterclaims for nullity may be brought before Local Divisions - In case of counterclaim the Local Divisions may either - handle the counterclaim concurrent with infringement, or - send the counterclaim to the Central Division and stay or continue infringement ('bifurcation'). Declaration of non-infringement must be brought before a Central Division. Brinkhof EPLAW 5

One Court Many languages; English dominant

- Central Divisions: Proceedings in language of the patent (70% EN, 20% DE, 10% FR)
- Local Divisons: Proceedings in the language of the land.
- But, in North-Western Europe, also in English.
- Plaintiff's choice.
- But: in Germany and in France oral proceedings and judgment in German, French
- Court of Appeal: Proceedings in language of the first instance

EPLAW 6 Brinkhof

2

One Court Many different compositions

- Central Division: two legal judges, one technical judge; no nationality specified (possible in Paris: two non-French legal judges, one non-French technical judge)
 three
- Local Divisions in North-Western Europe: two national legal judges and one foreign (reality in The Hague: two Dutch legal judges, one non-Dutch legal judge)
 three
- Local Division may upon request of party or panel itself add one technical judge to the panel (no nationality specified) four
- Court of Appeal: three legal judges from different countries, and two technical judges, unspecified. (Luxembourg example: one Dutch, one English and one French legal judge, one German and one Czech technical judge) - five

7

EPLAW

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Enforcement and defence strategies Forum Shopping Galore

- UPC or present (national) system? Opt-out required to remain in present system.
- Infringement: which Local Division to go to and why? Composition, Language, Record: Quality, Duration, Cost
- Revocation: UPC revocation and/or EPO opposition? If UPC: technology controls location of Central Division.
- Declaration of non-infringement: technology controls location of Central Division.
- Cost: Court Fees and Recovery of Legal Cost based on assessment of value of the case.

8

EPLAW

Brinkhof

	2017 there will be many new litiga ents in Europe.	tion options for your
	vill be up to you to consider and d de them.	ecide where in Europe to
Ric	hard Ebbink,	
An	sterdam/Naples,	
7 F	ebruary 2016	
9		Brinkhof

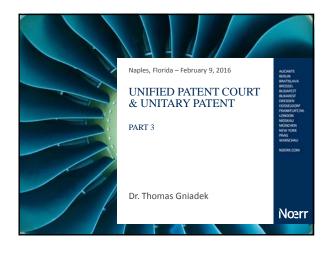


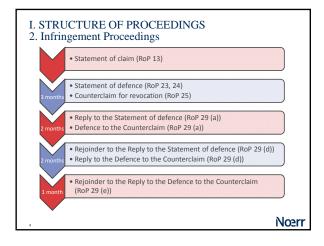


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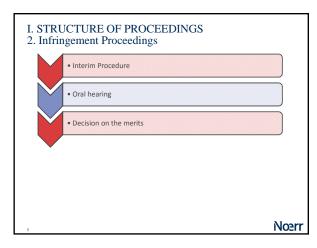
- I. STRUCTURE OF PROCEEDINGS
 - 1. Overview (Art. 52 (1) UPCA)
 - 2. Infringement Proceedings
 - 3. Interim procedure (RoP 101-110) / Judge-Rapporteur
- II. BIFURCATION
- III. PRESERVATION OF EVIDENCE
- IV. REMEDIES
 - 1. Injunction
 - 2. Preliminary Injunction
 - 3. Corrective Measures
 - 4. Damages
 - 5. Communication of Information
- v. COSTS
 - 1. Court Fees, Art. 36 (3) UPCA
 - 2. Cost Reimbursement

 directed by judge-rapporteur interim conference (optional) preparation for the oral hearing duration: not longer than three months
(RoP 101)
 oral hearing held before the panel duration of the oral hearing: one day (RoP 113) decision on the merits: (in writing) not longer than 6 weeks after the oral hearing







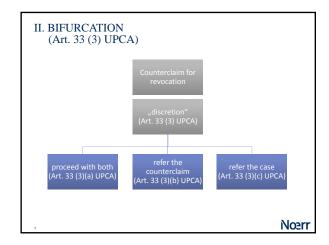


I. STRUCTURE OF PROCEEDINGS 3. Interim procedure (RoP 101-110) / Judge-Rapporteur

Purpose of the interim procedure:

 RoP 101: "the judge-rapporteur shall make all necessary preparations for the oral hearing"

- RoP 103: judge-rapporteur may order the parties to provide further clarification on specific points, answer specific questions, produce evidence and lodge specific documents
- holding of an interim conference
- Purpose of the interim conference (held by judge-rapporteur):
 - RoP 104: clarification of open issues, discussion of settlement, preparing of the oral hearing
 - Art. 52 (2) UPCA: the judge "[...] shall in particular explore with the parties the possibility for a settlement, including through mediation, and/or arbitration, by using the facilities of the Centre [...]."
- RoP 105: Interim conference should be held by telephone conference or video conference





II. BIFURCATION (Art. 33 (3) UPCA)

- Currently, Germany: bifurcation dealing with infringement and validity in separate proceedings; infringement proceedings may only be stayed at the discretion of infringement court if it sees high likelihood of revocation in pending nullity action
- Currently, inter alia UK: no bifurcation
- UPC: If counterclaim for revocation is raised before local or regional division, it has the discretion either to
 - proceed with both the infringement action and the counterclaim for revocation (in such case it will request the allocation of a further technically qualified judge)
 - refer the counterclaim for revocation to the central division (in such case it has the discretion to stay infringement proceedings or not)
 - with the agreement of the parties, refer the whole case to the central division
- same options for local and regional divisions in case revocation action is already pending with central division

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III. PRESERVATION OF EVIDENCE

- Art. 60 (1) UPCA: "At the request of the applicant which has presented reasonably available evidence to support the claim that the patent has been infringed or is about to be infringed the Court may, even before the commencement of proceedings on the merits of the case, order prompt and effective provisional measures to preserve relevant evidence in respect of the alleged infringement, subject to the protection of confidential information."
- RoP 197: "The Court may order measures to preserve evidence without the defendant having been heard, in particular
 - where any delay is likely to cause irreparable harm to the applicant or
 - where there is a demonstrable risk of evidence being destroyed or otherwise ceasing to be available."

III. PRESERVATION OF EVIDENCE

- RoP 192: Application for preserving evidence may be lodged
 at the division where the applicant has commenced infringement proceedings on
 - the merits
 if lodged before proceedings on the merits have been started at the division where the applicant intends to start the proceedings on the merits
- Order to preserve evidence possible
 - prior to the proceedings on the merits
 - during the proceedings on the merits

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III. PRESERVATION OF EVIDENCE

RoP 196 (1): Court may order

- a) preserving evidence by **detailed description**, with or without the taking of samples
- b) physical seizure of allegedly infringing goods
- c) physical seizure of the materials and implements used in the production and/or distribution of these goods and any related document
- d) the preservation and disclosure of digital media and data and the disclosure od any password necessary to access them
- Further, Art. 60 (3) UPCA: inspection of premises

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III. PRESERVATION OF EVIDENCE

- If applicant does not bring action leading to a decision on the merits of the case before the Court within 31 calendar days or 20 working days (whichever is longer), the measures to preserve evidence shall be revoked (Art. 60 (8) UPCA).
- In case of revocation, lapse or non-infringement / no threat of infringement, Court may
 order the applicant to compensate any damage of the defendant which resulted of the
 measures to preserve evidence (Art. 60 (9) UPCA).

(both subject to defendant's request)

IV. REMEDIES 1. Injunction

- Art. 63 (1) UPCA: "Where a decision is taken finding an infringement the Court may grant an injunction [...]"
- Art 56 (2) UPCA: "The Court shall take due account of the interest of the parties [...]"





IV. REMEDIES

2. Preliminary Injunction

- RoP 205 et seq.: Provisional measures
 Court may, subject to an Application for provisional measures (RoP 206), order provisional measures (RoP 211)
 - Provisional measure can inter alia be an injunction against a defendant (RoP 211)
- RoP 212: "The Court may order provisional measures without the defendant having been heard, in particular
 - where any delay is likely to cause irreparable harm to the applicant or
 where there is a demonstrable risk of evidence being destroyed."

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IV. REMEDIES

2. Preliminary Injunction

- Defendant may file a Protective letter (RoP 207)
- If applicant does not start proceedings on the merits of the case within 31 calendar days or 20 working days (whichever is longer) from the date specified in the Court's order, the provisional measures shall be revoked (RoP 213).
- In case of revocation, lapse or non-infringement / no threat of infringement, Court may
 order the applicant to compensate any injury caused by the provisional measures
 (RoP 213).

IV. REMEDIES 3. Corrective Measures

- Art. 64 (1) UPCA: "Without prejudice to any damages due to the injured party by reason
 of the infringement, and without compensation of any sort, the Court may order, at the
 request of the applicant, that appropriate measures be taken with regard to products
 found to be infringing a patent and, in appropriate cases, with regard to materials and
 implements principally used in the creation or manufacture of those products."
- Art. 64 (2) UPCA: "Such measures shall include
 - a) a declaration of infringement;
 - b) recalling the products from the channels of commerce;
 - c) **depriving** the product of its infringing property;
 - d) definitively removing the products from the channels of commerce; or
 e) the destruction of the products and/or of the materials and impelemnts
 - concerned."
- Art. 80 UPCA: publication of the judgement

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IV. REMEDIES

4. Damages

- RoP 118: "In addition to the orders and measures and without the prejudice to the discretion of the Court referred to in Articles 63, 64, 67 and 80 of the Agreement the Court may, if requested, order the payment of damages or compensation according to Articles 68 and 32(1)(f) of the Agreement."
- Art. 68 (1) UPCA: "The Court shall, at the request of the injured party, order the infringer who knowingly, or with reasonable grounds to know, engaged in a patent infringing activity, to pay the injured party
 - <u>damages appropriate to the harm</u> actually suffered by that party as a result of the infringement."
- Art. 68 (4) UPCA: in case infringer did not knowingly, or with reasonable grounds to know, engage in the infringing activity
 - recovery of profits
 - payment of compensation

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IV. REMEDIES

4. Damages

- Art. 68 (2) UPCA: extent of damages
 - <u>injured party</u> shall be placed in the position it would have been in if no infringement had taken place
 - infringer shall not benefit from the infringement
 - damages shall not be punitive
- Art. 68 (3) UPCA: two alternatives for determining the amount of damages
 - a) take into account all appropriate aspects, such as injured party's lost profits, infringer's unfair profits and (in appropriate cases) moral prejudice caused to the injured party by the infringer
- b) set the damages as a **lump sum** which should at least correspond to a **royalty** amount of damages can be **stated in the order** (RoP 118) or determined in **separate**
- proceedings (RoP 125-144)
 - RoP 126: successful party shall lodge an Application for the determination of damages no later than one year from service of the final decision on the merits
 - RoP 126: Application may include a request for an order to lay open books

IV. REMEDIES

5. Communication of Information

- Art. 67 UPCA: Court may order the communication of information in response to a justified and proportionate request of the applicant
- Art. 67 (1) UPCA: information to be communicated by the infringer
 - a) the ${\bf origin} \ {\bf and} \ {\bf distribution} \ {\bf channels} \ {\bf of} \ {\bf the} \ {\bf infringing} \ {\bf products} \ {\bf or} \ {\bf processes}$
 - b) the **quantities** produced, manufactured, delivered, received or ordered, as well as the **price obtained** for the infringing products
 - c) the identity of any third person involved in the production or distribution of the infringing products or in the use of the infringing products

Further, Order to lay open books: RoP 144

subject to a request to lay open books pursuant to RoP 141

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IV. REMEDIES

5. Communication of Information

 Art. 67 (2) UPCA: Court may order any <u>third party</u> to provide information in the meaning of Art. 67 (1) UPCA, if the third party

 a) was found in the possession of the infringing products on a commercial scale or to be using an infringing process on a commercial scale

- b) was found to be providing on a commercial scale services used in infringing activities
- c) was $\ensuremath{\textbf{otherwise}}\xspace$ in the infringement or provision of services

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V. COSTS

1. Court Fees, Art. 36 (3) UPCA

Art. 70 UPCA: court fees shall be paid by the parties

- On May 8, 2015, the Preparatory Committee published a Consultation Document with a draft proposal for court fees and recoverable costs:
 - RoP 370: fixed fee for certain infringement actions plus a value-based fee for actions exceeding a value of EUR 500k
 - RoP 370: fixed fee *i.a.* for revocation action with no additional value-based fee
 - draft table of fees to be adopted by Administrative Committe (Art. 36 (3) UPCA)
- Example: infringement action including request for determination of damages and counterclaim for revocation; value-in-dispute: EUR 1 Mio. each
 - infringement action: fixed fee EUR 11k
 - application to determine damages: fixed fee EUR 3k
 - additional value-based fee for above: EUR 5k
 - counterclaim for revocation: fixed fee EUR 19k (same fee as infringement action subject to a fee limit of EUR 20k)

Action	Fixed fee
nfringement action	EUR 11,000
Counterclaim for infringement	EUR 11,000
Action for declaration of non-infringement	EUR 11,000
Action for compensation for license of right	EUR 11,000
Application to determine damages	EUR 3,000
Appeal pursuant to Rule 220.1 (a) and (b)	EUR 16,000
Other counterclaims pursuant to Article 32 (1) (a) UPCA	EUR 11,000

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V. COSTS

- 1. Court Fees, Art. 36 (3) UPCA
- Value-based fees (exemplary up to a value of EUR 5,000,000)

Value of the matter in dispute	Additional fee
Up to and including EUR 500,000	EUR 0
Up to and including EUR 750,000	EUR 2,500
Up to and including EUR 1,000,000	EUR 5,000
Up to and including EUR 1,500,000	EUR 10,000
Up to and including EUR 2,000,000	EUR 15,000
Up to and including EUR 3,000,000	EUR 20,000
Up to and including EUR 4,000,000	EUR 25,000
Up to and including EUR 5,000,000	EUR 30,000

. COSTS Court Fees, Art. 36 (3) UPC	A	
Other procedures and actions		
Procedures/actions	Fixed fee	
Revocation action	EUR 20,000	
Counterclaim for revocation	same fee as the infringement action subject to a fee limit of EUR 20,000	
Application for provisional measures	EUR 11,000	
Application for opt-out	EUR 80	
Application for withdrawal of an opt-out	EUR 80	
Action against a decision of the European Patent Office	EUR 1,000	
Application to preserve evidence	EUR 350	
Application for an order for inspection	EUR 350	
Application for an order to freeze assets	EUR 3,000	
		No



ther procedures and actions	
Procedures/actions	Fixed fee
iling a protective letter	EUR 200
Application to prolong the period of a protective letter kept on the register	EUR 100
nterlocutory appeals	EUR 3,000
Application for leave to appeal	EUR 3,000
Request for discretionary review	EUR 1,500
Application for rehearing	EUR 2,500
Application for re-establishement of rights	EUR 350
pplication to review a case management order	EUR 300
Application to set aside decision by default	EUR 1,000

V. COSTS

- 1. Court Fees, Art. 36 (3) UPCA
- Examples for court fees

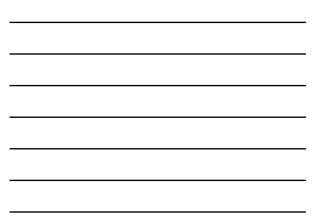
Value of the matter in dispute	Revocation action	Infringement action	Counterclaim for revocation
EUR 250,000	EUR 20,000	EUR 11,000	EUR 11,000
EUR 500,000	EUR 20,000	EUR 11,000	EUR 11,000
EUR 1,000,000	EUR 20,000	EUR 16,000	EUR 16,000
EUR 5,000,000	EUR 20,000	EUR 41,000	EUR 20,000
EUR 10,000,000	EUR 20,000	EUR 66,000	EUR 20,000
More than EUR 30,000,000	EUR 20,000	EUR 231,000	EUR 20,000

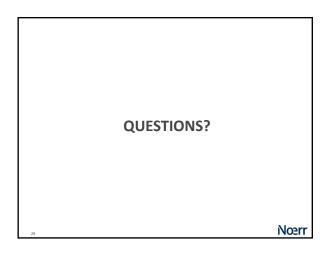
V. COSTS

- 2. Cost Reimbursement
- Art. 69 UPCA: The unsuccessful party shall bear reasonable costs and other expenses incurred by the successful party up to a ceiling set by the RoP
- Recoverable costs, RoP 150: reimbursable are
 - court fees and
 - costs of the successful party
- Ceiling: May 8, 2015, draft Consultation Document:

 draft scale of ceilings for recoverable costs to be adopted by Administrative Committee (Art. 69 UPCA)
- only reasonable and proportionate legal costs are reimbursable (Art. 69 UPCA)
 RoP 156 (2): judge-rapporteur decides on the costs to be awarded or apportioned in accordance with Article 69 UPCA

2.	COSTS Cost Reimbursement Scale of ceilings for recoverable costs		
	Value of action	Ceiling for recoverable costs of representation per instance and party	
	Up to and including EUR 250,000	Up to EUR 50,000	
	Up to and including EUR 500,000	Up to EUR 75,000	
	Up to and including EUR 1,000,000	Up to EUR 150,000	
	Up to and including EUR 2,000,000	Up to EUR 200,000	
	Up to and including EUR 4,000,000	Up to EUR 400,000	
	Up to and including EUR 8,000,000	Up to EUR 600,000	
	Up to and including EUR 16,000,000	Up to EUR 800,000	
	Up to and including EUR 30,000,000	Up to EUR 1,000,000	
	Up to and including EUR 50,000,000	Up to EUR 1,500,000	
	More than EUR 50,000,000	Up to EUR 3,000,000	
28			Noerr









NEWLY-ENACTED PATENT REFORM [OR PATENT REFORM: WILL IT EVER COME TO PASS?]

Jeffrey Samuels, Professor Emeritus, Akron Law Bob Armitage, Consultant, IP Strategy & Policy Suzanne Michel, Senior Patent Counsel, Google Russ Slifer, Deputy Director, USPTO



NEWLY-ENACTED PATENT REFORM [OR PATENT REFORM: WILL IT EVER COME TO PASS?]

The following documents have been provided as individual documents on the flash drive.

https://www.congress.gov/114/bills/hr9/BILLS-114hr9rh.pdf - H.R. H.R. 9 – The Innovation Act.

<u>https://www.congress.gov/114/crpt/hrpt235/CRPT-114hrpt235.pdf</u> House Report No. 114-235 – Judiciary Committee Report on H.R. 9, The Innovation Act.

https://www.congress.gov/114/bills/s632/BILLS-114s632is.pdf

S. 632 – Support Technology and Research for Our Nation's Growth Patents Act of 2015 (the "STRONG Patents Act of 2015")

> http://judiciary.house.gov/_cache/files/b849282c-76c9-418b-b26f-2c754e410133/armitage-testimony.pdf. Testimony of Robert A. Armitage on H.R. 9 – The Innovation Act



SECTION 337 PRACTICE & DEVELOPMENTS

Deanna Okun, Partner, Adduci Mastriani & Scaumberg LLP; former Chairman, U.S. International Trade Commission G. Brian Busey, Partner, Morrison Foerster LLP Jeff Hsu, Supervisory Attorney, U.S. International Trade Commission

REVISION OF IPR AMENDMENT PROCESS OVERVIEW

Working with a small group of stakeholders, and with technical assistance from the PTO, Senate staff has developed proposed statutory text responding to concerns about the existing process for amendment claims in an instituted inter partes or post grant review. The uncertainty inherent in the current amendments process has led to the general unavailability of amended claims. To help ensure that patentees have a meaningful opportunity to amend claims while protecting the interests of petitioners, patentees will be given an opportunity to prosecute such amendments through examination by the PTO rather than through motions practice before the PTAB.

Examination of an amendment. Following institution, a patentee will have the option to request that the PTO examine proposed amendments to one or more claims on which the PTAB has institute review. The PTO will then examine any such proposed amendments for patentability, using the existing model for reexamination of issued patents. The original claim on which the IPR/PGR was instituted will remain under the review of the PTAB, and a request for amendment will not be deemed an admission of unpatentability.

Interaction between examination and IPR/PGR. The examination of proposed amendment(s) may not be stayed without the patentee's consent, and the examination and the instituted IPR/PGR will proceed separately. In the context of examining a proposed amendment, however, the PTO shall consider documents from the relevant IPR/PGR, including the petition, the evidence, prior art and arguments submitted by the parties, the institution decision of the PTAB, and any final written opinion if issued during the examination of the request. This will allow the PTO to ensure that different outcomes do not occur for substantially-similar claims.

Effect of examination. Any amended claims that eventually issue from examination will be presumed to be valid (as they now are under existing law) regardless of the outcome of the IPR/PGR. Moreover, intervening rights will apply to any such claims; so infringement liability will only issue from the time the amended claim itself issues. Petitioners will not be estopped by the outcome of the IPR/PGR from challenging amended claims issued from examination in future proceedings before the Office or in the courts.

Permissible changes in an IPR/PGR. There will be only two ways for a patentee to change the scope of a claim before the PTAB. First, a patentee will continue to be permitted to cancel claims. Second, the PTAB may grant a motion to amend on the joint request of both parties in order to materially advance settlement of an IPR/PGR. The PTAB will continue to review any such motions and determine whether they should be granted on a case-by-case basis.

###

Under this approach, patentees will obtain new levels of predictability and certainty, based on substantial experience with existing examination practice, about how amended claims can be obtained once an IPR/PGR has been instituted. Current and potential petitioners will be protected from unexamined claims being added to patents and unfair gamesmanship by patentees seeking to subvert the adversarial PTAB proceedings. And PTAB proceedings will be streamlined with the removal of consideration of contentious, and rarely granted, motions to amend.

<u>REVISION OF IPR AMENDMENT PROCESS</u> <u>LEGISLATIVE TEXT</u>

§ 316. Conduct of inter partes review [NB: Corresponding changes will be made to § 326 for PGR]

(a) REGULATIONS.—The Director shall prescribe regulations—

(9) setting forth standards and procedures for allowing the patent owner to cancel a challenged claim under subsection (d) or request examination of amended claims, and ensuring that any information submitted by the patent owner in support of any amendment entered under subsection (d) is made available to the public as part of the prosecution history of the patent. Such regulations shall provide that:

(i) the request for examination of any proposed amendment shall reference the instituted inter partes review involving the patent sought to be amended;
(ii) the request for examination may, but is not required to, include a preliminary statement explaining why the amended claim is patentable over the prior art relied upon by the Director in instituting the inter partes review; and
(iii) in examining any proposed amendment, the Director shall consider the petition in the relevant inter partes review, including the evidence, prior art and arguments submitted by the parties, the institution decision of the Patent Trial and Appeal Board, and any final written opinion if issued during the examination of the request.

(d) AMENDMENT OF THE PATENT.—

 (1) MOTIONS TO AMEND.—During an inter partes review instituted under this chapter, motions to amend the patent may be granted by the Patent Trial and Appeal Board only:
 (A) to cancel a challenged patent claim; or

(B) upon the joint request of the petitioner and the patent owner to materially advance the settlement of a proceeding under section 317.

- (2) REQUEST FOR EXAMINATION.— Not later than three months after the institution of an inter partes review under this chapter, the patent owner may file a request for examination by the Director of one or more amendments of any claim or claims that are the subject of the instituted inter partes review. Upon receipt of a request for examination in compliance with this subsection, the Director shall order any proposed amended claims examined for patentability under sections 131 to 133 and such examination will be conducted with special dispatch. The examination proceedings and any subsequently issued certificate are subject to the provisions of section 305 through 307 as if such amended claims were added in reexamination.
- (3) SCOPE OF CLAIMS.—A request for examination under this subsection must amend claims that are the subject of the inter partes review and may not enlarge the scope of the claims

of the patent. A request for examination of an amendment to a claim on which an inter partes review has been instituted shall not be deemed an admission of unpatentability of that instituted claim.

- (4) INTERACTION BETWEEN INTER PARTES REVIEW AND EXAMINATION.— An examination under this subsection shall not be stayed without the patentee's consent and shall proceed notwithstanding any other proceedings related to the issued patent, including any instituted inter partes review. All challenged claims on which the inter partes review was instituted shall continue to be reviewed by the Patent Trial and Appeal Board unless cancelled by the patentee, or otherwise withdrawn or amended as part of a settlement. The Patent Trial and Appeal Board shall have the authority to coordinate any appeal of an examination proceeding with any instituted inter partes review, if the appeal arises before a final written decision. The issuance of a certificate under section 307 shall not result in review of any added claims during the previously instituted inter partes review.
- (5) CONCLUSION OF EXAMINATION.—The proceeding will conclude with the issuance of a certificate under section 307 incorporating into the patent any amended claim or new claim, if any, that is determined to be patentable as a result of the examination under this subsection.
- (6) EFFECT OF GRANTING A CERTIFICATE FOR AMENDED CLAIMS.— Any claim that is determined to be patentable and incorporated into a patent following conclusion of an examination conducted under this subsection through the publication of a certificate shall be presumed valid in accordance with section 282(a) notwithstanding the outcome of the inter partes review of the related challenged claim.
- (7) FUTURE PROCEEDINGS.— Neither the petitioner nor the patent owner shall be estopped from challenging or asserting in a future proceeding any claim that is determined to be patentable and incorporated into a patent in an examination under this subsection. The time limitation set forth in section 315(b) shall operate with respect to any such claim only on account of a complaint alleging infringement of the patent that is served after the issuance of the certificate including such claim.
- (8) RULE OF CONSTRUCTION.—Nothing in this subsection shall abridge the right of a patentee to seek reexamination, supplemental examination, or reissue of a patent, or claims thereof, that are the not subject of an instituted inter partes review.
- (9) FEE.—Any request for examination shall be accompanied by the fee set for reexamination for the patent owner requesting examination.

§ 318. Decision of the Board [NB: Corresponding changes will be made to § 328 for PGR]

(a) **Final Written Decision.**— If an inter partes review is instituted and not dismissed under this chapter, the Patent Trial and Appeal Board shall issue a final written decision with respect to the patentability of any patent claim challenged by the petitioner and any new claim added under section 316(d)(1).

(b) **Certificate.**— If the Patent Trial and Appeal Board issues a final written decision under subsection (a) and the time for appeal has expired or any appeal has terminated, the Director shall issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable, confirming any claim of the patent determined to be patentable, and incorporating in the patent by operation of the certificate any new or amended claim added under section 316(d)(1).

(c) **Intervening Rights.**— Any proposed amended or new claim determined to be patentable and incorporated into a patent following an inter partes review under this chapter shall have the same effect as that specified in section 252 for reissued patents on the right of any person who made, purchased, or used within the United States, or imported into the United States, anything patented by such proposed amended or new claim, or who made substantial preparation therefor, before the issuance of a certificate under subsection (b).

(d) **Data on Length of Review.**— The Office shall make available to the public data describing the length of time between the institution of, and the issuance of a final written decision under subsection (a) for, each inter partes review.

37 C.F.R. 42.73(d)(3)

(3) *Patent applicant or owner*. A patent applicant or owner will be precluded from obtaining in the patent challenged in the inter partes review, or any patent claiming priority therefrom, or with a common priority claim, a claim canceled under section 316(d)(1)(A) or a claim that is not patentably distinct over the prior art on the basis of which a challenged claim was finally refused

<u>REVISION OF IPR AMENDMENT PROCESS</u> <u>LEGISLATIVE TEXT</u>

§ 316. Conduct of inter partes review [NB: Corresponding changes will be made to § 326 for PGR]

(a) REGULATIONS.—The Director shall prescribe regulations—

(9) setting forth standards and procedures for allowing the patent owner to move to amend the patent under subsection (d) to cancel a challenged claim <u>under subsection (d)</u> or propose a reasonable number<u>request examination</u> of substitute<u>amended</u> claims, and ensuring that any information submitted by the patent owner in support of any amendment entered under subsection (d) is made available to the public as part of the prosecution history of the patent. Such regulations shall provide that:

(i) the request for examination of any proposed amendment shall reference the instituted inter partes review involving the patent sought to be amended;
(ii) the request for examination may, but is not required to, include a preliminary statement explaining why the amended claim is patentable over the prior art relied upon by the Director in instituting the inter partes review; and
(iii) in examining any proposed amendment, the Director shall consider the petition in the relevant inter partes review, including the evidence, prior art and arguments submitted by the parties, the institution decision of the Patent Trial and Appeal Board, and any final written opinion if issued during the examination of the request.

- (d) AMENDMENT OF THE PATENT.—
 - IN GENERAL<u>MOTIONS TO AMEND</u>.—During an inter partes review instituted under this chapter, <u>motions to amend</u> the patent owner-may file 1-motion to amend<u>be granted by</u> the patent in 1 or more of the following ways:
 - Patent Trial and Appeal Board only:
 - (A) Cancel anyto cancel a challenged patent claim-; or
 - (B) For each challenged claim, propose a reasonable number of substitute claims.

<u>(B)</u>

- (2)-ADDITIONAL MOTIONS. Additional motions to amend may be permitted upon the joint request of the petitioner and the patent owner to materially advance the settlement of a proceeding under section 317, or as permitted by regulations prescribed by the Director.
- (2) <u>REQUEST FOR EXAMINATION.</u>— Not later than three months after the institution of an inter partes review under this chapter, the patent owner may file a request for examination by the Director of one or more amendments of any claim or claims that are the subject of the instituted inter partes review. Upon receipt of a request for examination in compliance with this subsection, the Director shall order any proposed amended claims examined for

patentability under sections 131 to 133 and such examination will be conducted with special dispatch. The examination proceedings and any subsequently issued certificate are subject to the provisions of section 305 through 307 as if such amended claims were added in reexamination.

- (3) SCOPE OF CLAIMS.— An amendment<u>A request for examination</u> under this subsection<u>must</u> amend claims that are the subject of the inter partes review and may not enlarge the scope of the claims of the patent-or introduce new matter. A request for examination of an amendment to a claim on which an inter partes review has been instituted shall not be deemed an admission of unpatentability of that instituted claim.
- (4) INTERACTION BETWEEN INTER PARTES REVIEW AND EXAMINATION.— An examination under this subsection shall not be stayed without the patentee's consent and shall proceed notwithstanding any other proceedings related to the issued patent, including any instituted inter partes review. All challenged claims on which the inter partes review was instituted shall continue to be reviewed by the Patent Trial and Appeal Board unless cancelled by the patentee, or otherwise withdrawn or amended as part of a settlement. The Patent Trial and Appeal Board shall have the authority to coordinate any appeal of an examination proceeding with any instituted inter partes review, if the appeal arises before a final written decision. The issuance of a certificate under section 307 shall not result in review of any added claims during the previously instituted inter partes review.
- (5) CONCLUSION OF EXAMINATION.—The proceeding will conclude with the issuance of a certificate under section 307 incorporating into the patent any amended claim or new claim, if any, that is determined to be patentable as a result of the examination under this subsection.
- (6) EFFECT OF GRANTING A CERTIFICATE FOR AMENDED CLAIMS.— Any claim that is determined to be patentable and incorporated into a patent following conclusion of an examination conducted under this subsection through the publication of a certificate shall be presumed valid in accordance with section 282(a) notwithstanding the outcome of the inter partes review of the related challenged claim.
- (7) FUTURE PROCEEDINGS.— Neither the petitioner nor the patent owner shall be estopped from challenging or asserting in a future proceeding any claim that is determined to be patentable and incorporated into a patent in an examination under this subsection. The time limitation set forth in section 315(b) shall operate with respect to any such claim only on account of a complaint alleging infringement of the patent that is served after the issuance of the certificate including such claim.
- (8) RULE OF CONSTRUCTION.—Nothing in this subsection shall abridge the right of a patentee to seek reexamination, supplemental examination, or reissue of a patent, or claims thereof, that are the not subject of an instituted inter partes review.
- (9) FEE.—Any request for examination shall be accompanied by the fee set for reexamination for the patent owner requesting examination.

§ 318. Decision of the Board [NB: Corresponding changes will be made to § 328 for PGR]

(b) **Certificate.**— If the Patent Trial and Appeal Board issues a final written decision under subsection (a) and the time for appeal has expired or any appeal has terminated, the Director shall issue and publish a certificate canceling any claim of the patent finally determined to be unpatentable, confirming any claim of the patent determined to be patentable, and incorporating in the patent by operation of the certificate any new or amended claim determined to be patentable.added under section 316(d)(1).

(c) **Intervening Rights.**— Any proposed amended or new claim determined to be patentable and incorporated into a patent following an inter partes review under this chapter shall have the same effect as that specified in section 252 for reissued patents on the right of any person who made, purchased, or used within the United States, or imported into the United States, anything patented by such proposed amended or new claim, or who made substantial preparation therefor, before the issuance of a certificate under subsection (b).

(d) **Data on Length of Review.**— The Office shall make available to the public data describing the length of time between the institution of, and the issuance of a final written decision under subsection (a) for, each inter partes review.

37 C.F.R. 42.73(d)(3)(i)

(3) *Patent applicant or owner*. A patent applicant or owner <u>iswill be</u> precluded from <u>taking</u> action inconsistent with the adverse judgment, including obtaining in <u>the patent challenged in the</u> inter partes review, or any patent:

(i) claiming priority therefrom, or with a common priority claim, a claim canceled under section 316(d)(1)(A) or a claim that is not patentably distinct from a over the prior art on the basis of which a challenged claim was finally refused-or canceled claim; or

(ii) An amendment of a specification or of a drawing that was denied during the trial proceeding, but this provision does not apply to an application or patent that has a different written description.



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Why An IPR Amendment Off-Ramp Makes Sense

Law360, New York (October 14, 2015, 10:32 AM ET) -- A recently proposed amendment to Senate Bill 1137 introduces an improved process for handling claim amendments in patent office trials (i.e., inter partes reviews, post-grant reviews and covered business method reviews). The new process provides an "off-ramp" for amendments that takes them out of the time-constrained trial schedule and puts them in an ordinary examination process. This off-ramp approach addresses the complaint of many patent owners that claim amendments are too difficult to obtain in patent office trials, while also benefiting petitioners and the Patent Trial and Appeal Board. It's a win-win-win solution.

Comparing the Off-Ramp Proposal to Current Practice

In current amendment practice, a patent owner may file one motion to amend that proposes a reasonable number of substitute claims.[1] Alternatively, the patent owner can pursue amended claims during reexamination. But in the trial proceeding, the patent owner, as the movant, bears the burdens of proof and persuasion to show how each substitute claim is patentable over the prior art.[2] The petitioner may file an opposition to the motion, and may cite additional prior art to show unpatentability.[3] The board generally rules on the motion in its final written decision, which concludes the trial. Thus, a patent owner has no opportunity to revise the proposed amendment in view of the additional prior art or the board's ruling.

The off-ramp legislation ends the current practice of allowing amendments during trial, and diverts a patent owner's amendment out of the trial proceeding and into a separate examination that operates much like re-examination.[4] The examination is conducted in accordance with the ordinary statutes and rules governing patent prosecution. While an examiner examines the proposed claim amendment with special dispatch, the board's trial of the original claims continues on its original schedule.

If the examiner concludes that the amendment is patentable, the office will issue a certificate incorporating the amended claims into the patent, as if such claims were added in re-examination. As is the case after reexamination, any such claims are presumed valid, and the usual provisions regarding revised claims — such as third parties' intervening rights — apply. The petitioner (or another third party) is free to challenge the amended, issued claims in another patent office trial proceeding and no estoppel applies.

The Off-Ramp Benefits Patent Owners

The off-ramp proposal brings changes that create a more effective process for patent owners to refocus their claims to a more appropriate scope in light of the invalidity challenge brought



David McCombs



Andrew Ehmke

by a petitioner.

Importantly, the off-ramp provides a faster option for obtaining new claims via an examination process. Patent owners already have the option to pursue amended claims in a reexamination proceeding. From that perspective, the off-ramp is nothing new. But that examination would not begin until after the board issues its final written decision on the original claims (often, the board stays a co-pending reexamination until the trial proceeding is complete). The off-ramp explicitly allows the examination to operate in parallel with any trial before the board, eliminating nine months or more of potential delay between the filing of a patent owner's motion to amend and the final written decision. To guard against inconsistent decisions between the examination and the trial proceedings, the proposal requires that the examiner consider the decisions of the board.

When compared to amendment practice during trial, the off-ramp presents two additional benefits, although patent owners could have also obtained these through standard reexamination. First, the off-ramp takes the amendment process out of motion practice where the patent owner bears the burden of proving patentability. Other office proceedings — prosecution, re-examination and reissue — put the burden on the office to show why the proposed amendment is not patentable.[5] Returning to this traditional allocation of responsibilities makes the amendment process more manageable for patent owners.

Second, the off-ramp decouples the evaluation of a claim amendment from the statutory oneyear time limit mandated for patent office trials.[6] The trial schedule effectively limits the patent owner to a single opportunity to propose amended claim language. Since the off-ramp is not constrained by a statutory timetable, the patent owner can engage in a traditional backand-forth conversation with the patent office regarding the amended claim language, or pursue an appeal. Like re-examination, the off-ramp does allow for continuation practice, however.

The Off-Ramp Benefits Petitioners

Petitioners benefit from the off-ramp in multiple ways.

The petitioner is no longer obligated to play an "examiner" role in responding to a proposed amendment. This role is particularly difficult for petitioners who have a compressed time schedule for responding to amendments, including searching for new, relevant art and forming arguments. And they must do so at the same time they are engaged in the trial proceeding. The off-ramp obviates this issue entirely, since the petitioner has no obligation to respond to the proposed amendment. Instead, the amendment is given over to the examining corps of the CRU, for analysis. The petitioner can focus its efforts and resources on the original patent claims — the only dispute the petitioner signed up for.

Of prime importance to petitioners, the off-ramp eliminates any threat that they will be estopped from challenging the validity of any amended claims that issue based on arguments that they "could have raised." This means that if a petitioner is later sued on an amended claim, it can fully defend itself in court, which is not necessarily the case for amendments made during trial proceedings.

Equally important, the new off-ramp process modifies the one-year bar to accommodate later challenges to amended claims. That is, petitioners will be able to file a post-issuance proceeding against the amended claims, even if the petitioner had been served with a complaint alleging infringement of the original patent more than one year prior.

Under the current process, amended claims are potentially immune from further challenges by petitioners because the statutory one-year bar applies to the patent (as opposed to the claims).[7] In one case where a patent's claims were amended after service of a complaint, a petitioner argued that the one-year bar should be measured from when amended claims

issued from re-examination (not the date of service of the complaint). The board rejected this argument on the basis that the amended claims are part of the asserted patent, so the oneyear bar date was measured from service of the complaint (even though the complaint alleged infringement of the original, unamended claims).[8] A patent owner might argue that similar logic should be applied to bar a challenge to claims amended during the IPR or CBM trial. Under the new off-ramp process, however, the one-year time bar would not apply to the amended claims, enabling petitioners to bring future challenges of the amended claims before the PTAB.[9]

Finally, if, and when, an amended claim issues out of the examination process, the petitioner (and any other third parties) will benefit from any of the usual intervening rights that apply to reissue patents.

The Off-Ramp Benefits the Patent Office and the Public

Finally, the off-ramp proposal benefits the patent office by relieving the board of the unhelpful obligation to consider unexamined claims. The current regime burdens the board with deciding on motions to amend, but without having the benefit of an examiner's review and analysis of the amendment. The board itself has no mandate — or the staffing resources — to conduct a search of the prior art. And, notably, in other contexts, the board will refuse to consider claim amendments that have not been examined.[10]

The off-ramp realigns the responsibilities of the board (and the examining corps) with the role they have long played in office proceedings. Examiners examine, and judges judge. It makes intuitive sense to let them focus on tasks consistent with their roles in the patent office. The public also benefits because the proposed amended claims will face the scrutiny of a prior art search and examination.

The proposed legislation also gives the patent office the regulatory flexibility it needs to make the new process successful. For example, the proposal requires the amendment examination to be handled "with special dispatch," but leaves it to the patent office's experience and expertise to determine how best to achieve that. Notably, the statutes governing reexamination struck a similar balance, which left the office free to create the central reexamination unit and allowed the office's most experienced examiners to focus on handling these more complex cases.[11] The statutes governing patent office trials were also similarly detailed, but still left sufficient room for the office to revise its initial regulations recently, finetuning the process based on extensively gathered feedback.[12] Given the infrequency with which patent legislation receives focused congressional attention, the office's ability to adjust its procedures in light of actual experience is an important benefit for patent stakeholders.

Conclusion

The proposed amendment off-ramp for patent office trials makes sense for all of the relevant stakeholders. It relieves patent owners of delay in pursuing examination of amended claims; it relieves petitioners from the heavy burden of estoppel and an unyielding one-year time bar to future challenges; it relieves the board from considering unexamined claims; and it re-engages the examining corps to do what they do best. We look forward to the proposal reaching discussion in both chambers of Congress and to its enactment.

-By David McCombs and Andrew Ehmke, Haynes and Boone LLP

David McCombs and Andrew Ehmke are partners in Haynes and Boone's Dallas office.

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The University of Akron OHIO's POLYTECHNIC UNIVERSITY

School of Law

Fourth Annual Naples Patent Experts Conference February 8-9, 2016

SECTION 337 LITIGATION AT THE ITC

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WHAT IS THE U.S. INTERNATIONAL TRADE COMMISSION?

- Administrative Agency in Washington, DC
- Established by Congress in 1916 as an independent, nonpartisan, quasi-judicial federal agency
- Broad investigative powers on matters of trade
 - Administer U.S. trade remedy laws (including Section 337, or 19 U.S.C. § 1337) in a fair and objective manner;
 - Provide the President, the U.S. Trade Representative, and Congress with independent, quality analysis, information, and support on matters relating to tariffs and international trade and competitiveness; and
 - Maintain the Harmonized Tariff Schedule of the United States.

ROLE OF THE U.S. INTERNATIONAL TRADE COMMISSION

- ITC has jurisdiction for Section 337 unfair trade practices, antidumping/countervailing duty and safeguards investigations
- Independent Executive Level Agency
 - 6 Political Appointees
 - 400 Professional Staff

RELEVANT ROLES AT THE INTERNATIONAL TRADE COMMISSION

6 Decision-Making Commissioners

- Serve overlapping terms of nine years each
- New term beginning every 18 months
- Equal party split
- 6 Decision-Making Administrative Law Judges
- Role of Career Staff
 - Office of Unfair Import Investigations
 - General Counsel

OFFICE OF UNFAIR IMPORT INVESTIGATIONS

19 U.S.C. § 1337(b) Investigation of violations by Commission – "The Commission shall investigate any alleged violation of this section on complaint under oath or upon its initiative."

19 C.F.R. § **210.3** – "Commission Investigative Attorney" means a Commission attorney designated to engage in investigatory activities in an investigation or a related proceeding under this part. (aka, Staff, IA, or OUII) "Party" means each complainant, respondent, intervenor, or "OUII"

1 Director, 3 Supervisory Attorneys, 15 Investigation Attorneys; Many Admitted to Practice Before the PTO; Degrees include Computer Science, Engineering, Material Sciences, (2 yrs. of Medical School), Biology, etc.

WHAT IS SECTION 337?

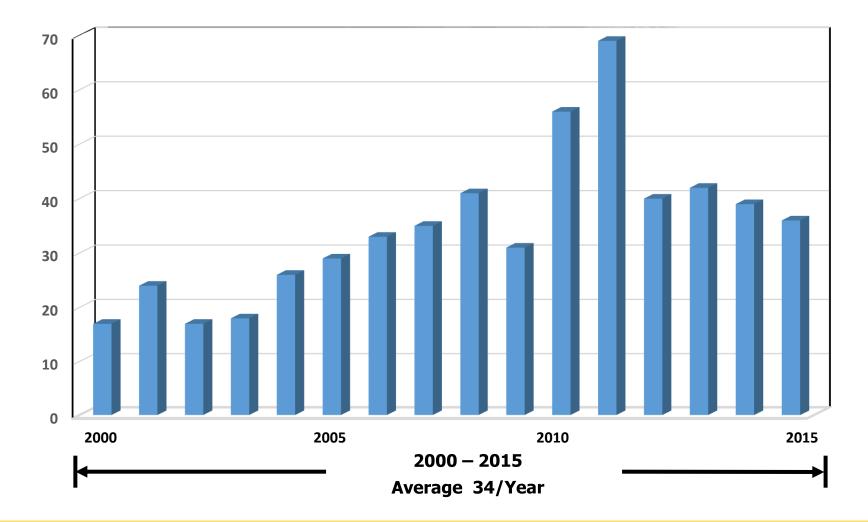
Trade remedy to address unfair competition through importation

- Authorizes the ITC to investigate unfair methods of competition and unfair acts, including IP infringement, in the importation of articles into the United States
- Enforced by the U.S. Customs and Border Protection, a component of the U.S. Department of Homeland Security

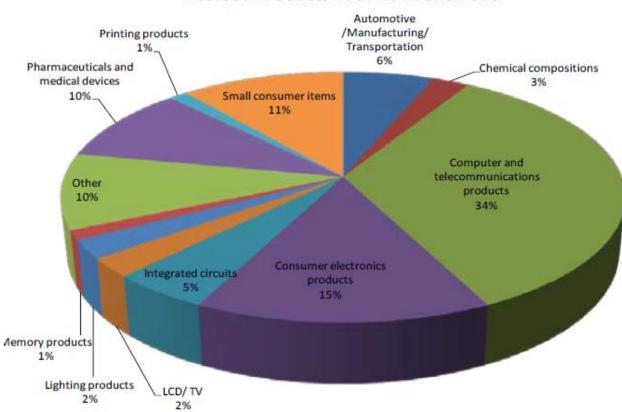
Protects against unfair trade only

- Patent (90% of recent investigations involve patents), Trademark, Copyright
- Theft of trade secrets
- Other unfair acts, e.g., false designation of origin, false labeling, antitrust
- Unclear whether breach of contract or other business torts might qualify as unfair acts under Section 337

USE OF SECTION 337



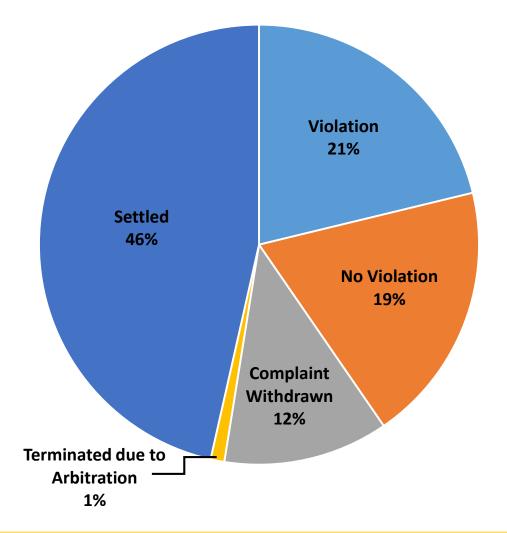
PRODUCT CLASSIFICATIONS



Accused Products in CY 2012 and 2013

Facts & Trends Regarding USITC Section 337 Investigations Prepared by the U.S. International Trade Commission (June 10, 2014)

DISPOSITIONS 2005-2015



SECTION 337 VIOLATION

Elements of Violation under 337(a)(1)(B) (Statutory Intellectual Property)

- Importation into the United States, the sale for importation, or the sale within the U.S. after importation by the owner, importer or consignee of articles
- Infringement by articles of one or more claims of a valid and enforceable U.S. statutory intellectual property right (unfair act or method of competition)
- Domestic Industry related to the articles protected by the patent exists, or is in the process of being established
- Elements of Violation under 337(a)(1)(A) (Unfair Acts)
 - Injury threat or effect of which is to destroy or substantially injure an industry in the United States, prevent the establishment, or restrain or monopolize trade and commerce

SECTION 337 V. DISTRICT COURT

The Office of Unfair Import Investigations (Staff or OUII) may be a Party to the Investigation.

Section 337

- Jurisdictional advantages: (1) name multiple respondents from U.S. and abroad; (2) *in rem* jurisdiction
- Expedited proceedings usually 12-16 months; short deadlines throughout investigation
- No counterclaims by respondents
- Discovery: (1) nationwide subpoena power;
 (2) discovery against foreign respondents;
 (3) sanctions available against foreign respondents who fail to comply with discovery
- ALJ expertise in IP cases; ALJ handles both discovery disputes and hearing (becomes familiar with the issues)
- Exclusion orders enforced by U.S. Customs & Border Protection

District Court

- No domestic industry requirement (both technical and economic)
- No importation requirement
- Complaint need not lay out fundamental initial infringement contentions; (essentially notice pleading vs. fact pleading at ITC)
- 3rd Party Discovery can be easier than in the ITC
- Jury
- Monetary Damages
- Injunctive relief (?)

SECTION 337 INVESTIGATION DETERMINATION & REVIEW PROCESS

- Initial Determination by ALJ
- Petition(s) for Review of the ALJ's Initial Determination
- Commission Determination to Review ALJ's Initial Determination
 - Commission may modify or reverse any aspect of the ALJ's Initial Determination
 - Commission review process takes ~4 months
 - Role of General Counsel's Office
 - Only one vote required
- Executive Branch Review: Remedial Orders are subject to Presidential Review (with Presidential authority delegated to the United States Trade Representative)
 - May disapprove of any remedial order for policy reasons
 - Recently disapproved of remedial orders related to a standard-essential patent
- Appeal to the Court of Appeals for the Federal Circuit
 - Right to appeal Commission determinations is directed to anyone adversely affected by the determination (whether violation is found or not)

Domestic Industry Standard as defined in 19 U.S.C. § 1337(a)(3)

- Considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, trademark, mask work or design concerned –
 - (A) Significant investment in plant and equipment;
 - (B) Significant employment of labor or capital; or
 - (C) Substantial investment in the patent's exploitation, including engineering, research & development, or licensing
- Commission has applied an increasingly rigorous standard in determining whether a domestic industry exists, especially under subparagraph (C)

REMEDIES AVAILABLE

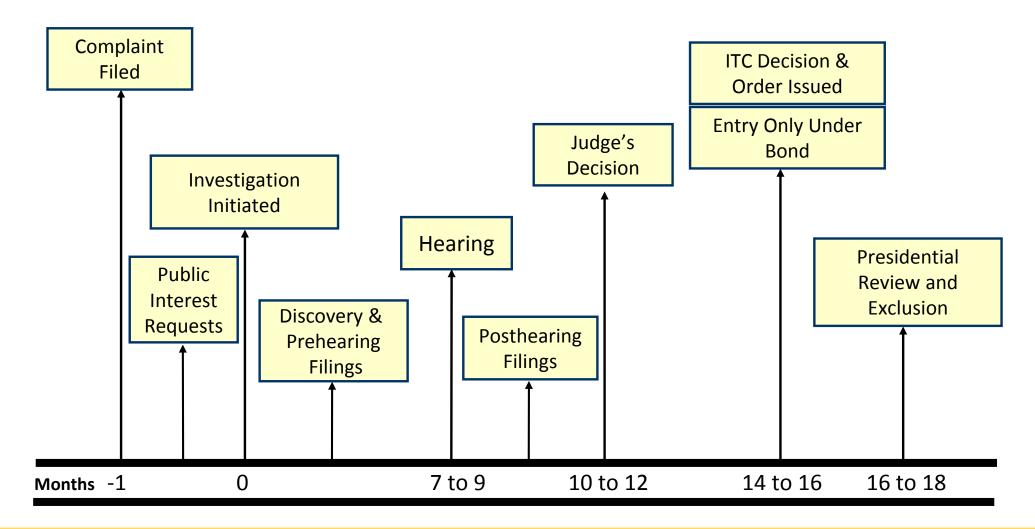
- General Exclusion Order excludes all infringing products, regardless of manufacturer (in rem)
- Limited Exclusion Order excludes the infringing products of specific person(s) found to be violating the statute (in rem)
- Cease and Desist Order directed to individuals/corporations found to maintain commercially significant inventory of infringing goods imported in the U.S. prior to a determination of a Section 337 violation (in personam)
- Remedy must not be contrary to the public interest as determined by four statutory factors

- The ITC solicits public input, identifies and analyzes public interest issues
- Mandated by statute (337(d)(1)) to consider effects of remedies on public interest factors:
 - 1) Public health and welfare;
 - 2) Competitive conditions in the United States economy;
 - 3) Production of like or directly competitive articles in the United States; and
 - 4) United States consumers.
- Remedies tailored to safeguard the public interest
 - Baseband Processor Chips, Inv. No. 337-TA-543
 - Personal Data & Mobile Communications Devices, Inv. No. 337-TA-710

PUBLIC INTEREST COMMENTS

- The Commission (since 2010) solicits public interest comments at the time a new complaint is filed with the ITC
- If comments are submitted, the Commission may authorize the ALJ to receive evidence and make a recommended determination on public interest
- Absent authorization, public interest is not part of discovery or the record in front of the ALJ

SECTION 337 TIMELINE



INSTITUTION OF SECTION 337 INVESTIGATIONS

- Pre-Institution Draft Review with OUII
- Institution by Commission
 - 30 days after Filing of Complaint
 - Notice of Investigation Controls Scope of Investigation
- Complainant may seek "Temporary Relief" (akin to Preliminary Injunction)
 - Time Limits
 - 90 Days to Commission Determination
 - 150 Days to Commission Determination More Complicated
 - Rare Last TEO granted in 1996 Hardware Logic Emulation Systems

POST-INVESTIGATION

Advisory Opinions

- Not Appealable
- Cannot re-litigate original investigation

Proceedings Before Customs and Border Protection (CBP)

- Determine whether product covered by exclusion order
- Meet with both parties separately
- Role of Centers for Excellence and Expertise (specialize in different industries)
- > Possible new *inter partes* proceedings

Seizure, Forfeiture, Fines and Penalties

ENFORCEMENT OF EXCLUSION ORDERS

- U.S. Customs & Border Protection (formerly Customs Service) within the U.S. Department of Homeland Security
- Office of International Trade
 - Regulations & Rulings; IPR Branch
- Educate Customs
 - Provide samples of infringing goods
 - Provide patent excerpts, technology tutorial
- Provide industry intelligence to Customs e.g., preferred ports, likely means of importation

- ITC's Jurisdiction (Suprema & ClearCorrect)
- 100-Day Program
- Domestic Industry
- General Exclusion Orders
- Trade Secrets Cases
- Public Interest
- Standard-Essential Patents
- Post-Grant Review

ITC's Jurisdiction (Suprema & ClearCorrect)

- 100-Day Program
- Domestic Industry
- General Exclusion Orders
- Trade Secrets Cases
- Public Interest
- Standard-Essential Patents
- Post-Grant Review

ITC JURISDICTION

Induced Infringement (Suprema)

- Suprema, Inc. v. ITC, 796 F.3d 1338 (Aug. 10, 2015) (en banc)
- Federal Circuit confirmed that the ITC has authority to issue exclusion order against imported products that ultimately are used to infringe method claims, even if those claims are not infringed until after the product has been imported into the U.S.
- En banc court overturned the earlier panel decision that held there were no "articles that infringe" at the time of importation.
- Suprema eliminated substantial uncertainty for parties considering bringing complaints to enforce method claims before the ITC.

ITC JURISDICTION

Electronic Transmissions (ClearCorrect)

- ClearCorrect Operating, LLC v. ITC, No. 2014-1527, 2015 WL 6875205 (Fed. Cir. Nov. 10, 2015)
- Federal Circuit held that importation of digital data can not serve as the basis for a violation finding, reversing the ITC's determination
- Thus, the ITC cannot issue remedial orders against infringing products that are digitally transmitted, limiting the ITC's jurisdiction
- Deadline for petitions for panel rehearing and rehearing *en banc* was January 27, 2016

ITC's Jurisdiction (Suprema & ClearCorrect)

100-Day Program

- Domestic Industry
- General Exclusion Orders
- Trade Secrets Cases
- Public Interest
- Standard-Essential Patents
- Post-Grant Review

100-DAY PROGRAM FOR EARLY TERMINATION

- First announced in June 2013, the Commission can identify potentially case-dispositive issues at the institution of an investigation and direct the presiding Judge to issue an Initial Determination on the designated issue within 100 days
- The Commission has designated two investigations for expedited consideration, but only one officially under the program: Inv. Nos. 337-TA-874, 949
- Case dispositive issues that have been the subject of expedited proceedings: (1) domestic industry; and (2) standing

FIRST 100-DAY EARLY TERMINATION INVESTIGATION

- Certain Products Having Laminated Packaging, Laminated Packaging, and Components Thereof, Inv. No. 337-TA-874
- Judge Essex examined the economic prong of the domestic industry requirement and concluded that it had not been met
- The Commission reviewed the Judge's Initial Determination, agreed and terminated the investigation

100-DAY PROGRAM FOR EARLY TERMINATION

- Certain Audio Processing Hardware and Software and Products Containing Same, Inv. No. 337-TA-949
- Judge Pender examined whether the complainant had standing to assert the patents and concluded that the complainant did have the requisite standing
- The Commission determined not to review Judge Pender's Initial Determination

100-DAY PROGRAM FOR EARLY TERMINATION

- Recently, the ITC issued a Notice of Proposed Rulemaking (NOPR) to codify and expand the 100-day program
- The NOPR proposes two new avenues for triggering the program:
- (1) Parties would be able to file a motion within 30 days of institution asking the presiding Judge to issue an order designating a potentially case-dispositive issue for early ruling
- (2) The Judge, on her or his own initiative, can designate a potentially case-dispositive issue for early ruling

- ITC's Jurisdiction (Suprema & ClearCorrect)
- 100-Day Program
- Domestic Industry
- General Exclusion Orders
- Trade Secrets Cases
- Public Interest
- Standard-Essential Patents
- Post-Grant Review

Extension of the Technical Prong

- Certain Computers and Computer Peripheral Devices, Inv. No. 337-TA-841, Comm'n Op. (Jan. 9, 2014).
- Technical prong requirement of a practicing "article" applies to domestic industries based on licensing
- Commission opinion contains extensive discussion of Federal Circuit opinions in *Interdigital Communications, LLC v. ITC,* 690 F.3d 1318 (Fed. Cir. 2012), 707 F.3d 1295 (Fed. Cir. 2013); and *Microsoft Corp. v. ITC,* 731 F.3d 1354 (Oct. 3, 2013).

Showing of Nexus to Patent Claims for Industries Based on R&D, Engineering and Licensing

- Certain Integrated Circuit Chips and Products Containing the Same, Inv. No. 337-TA-859, Comm'n Op. (Aug. 22, 2014).
- "Exploitation" under Subsection C requires showing of a <u>nexus</u> between Subsection C activities <u>and the asserted patent</u>, not just to the <u>Domestic</u> <u>Industry product</u>.
- Required nexus no longer presumed from a showing that R&D related to the article practicing the asserted patent; <u>need to establish linkage between the R&D and the patented feature</u>.

Interplay Among the Statutory Subsections?

Certain Optoelectronic Devices For Fiber Optic Communications, Components Thereof, And Products Containing The Same, Inv. No. 337-TA-860

Review question regarding R&D investments :

"[W]ith respect to both asserted patents in this investigation, discuss whether Complainants are permitted to rely upon their research and development investments to satisfy the requirements under section 337(a)(3)(A) and (B) or whether such investments are only applicable to establishing a domestic industry under section 337(a)(3)(C). Explain all relevant statutory provisions, case law, and Commission precedent pertaining to this issue."

Commission Opinion:

"As [complainant] has made an adequate showing that its claimed investments are appropriately considered under Section 337(a)(3)(C), we need not reach the merits of its alternative claim under Section 337(a)(3)(A) and (B). We note that a complainant ... may plead that it satisfies the domestic industry requirement in the alternative under one or more prongs of Section 337(a)(3)."

Quantitative Evidentiary Requirement (Lelo)

- Lelo Inc. v. ITC, 786 F.3d 879 (Fed. Cir. 2015).
- Reversed Commission's finding that a domestic industry had been proven in *Certain Kinesiotherapy Devices and Components Thereof*, Inv. No. 337-TA-823, Comm'n Op. (July 12, 2013).
- Qualitative factors alone are insufficient to show "significant investment in plant and equipment" and "significant employment of labor or capital" under prongs (A) and (B) of the § 337 domestic industry requirements.
- Quantitative data is required to assess "significance"

- ITC's Jurisdiction (Suprema & ClearCorrect)
- 100-Day Program
- Domestic Industry
- General Exclusion Orders
- Trade Secrets Cases
- Public Interest
- Standard-Essential Patents
- Post-Grant Review

- General Exclusion Order (GEO) excludes <u>all infringing products</u>, regardless of manufacturer (in rem)
- Powerful remedy available exclusively at the ITC
- GEO investigations often have a number of defaulting respondents
- Heightened evidentiary burden
- Standard for determining whether a GEO should issue: where either
 - (a) such an order is necessary to prevent circumvention of a limited exclusion order, or
 - (b) there is a pattern of violation of Section 337 and it is difficult to identify the source of the infringing products

- Historically, approximately 5% of investigations resulted in a GEO
- Historically, more common in Trademark or Gray Market Goods investigations (Handbags, Cigarettes, Lighters, Plastic Food Containers)
- Recent data indicates that companies are increasingly turning to the ITC to seek a GEO
- Since 2014, at least five investigations have resulted in the issuance of a GEO (or issuance is forthcoming – Inv. No. 337-TA-946)
- Additionally, complainants in at least four currently active investigations are seeking GEOs (Inv. Nos. 337-TA-959, 962, 976, 978)

The following summary shows the recent uptick in GEO cases at the ITC since 2014:

Investigation	Date GEO Issued	Basis for GEO
Certain Kinesiotherapy Devices and Components Thereof Inv. No. 337-TA-823	2/7/2014 (corrected version) (rescinded 7/21/2015)	Commission Opinion overturning Judge's ID of no violation of Section 337
Certain Cases for Portable Electronic Devices Inv. No. 337-TA-867	6/20/2014	Summary Determination of violation granted with respect to defaulting respondents and recommended issuance of a GEO
Certain Toner Cartridges and Components Thereof Inv. No. 337-TA-918	8/31/2015	Summary Determination of violation granted with respect to defaulting respondents and recommended issuance of a GEO
Certain Loom Kits for Creating Linked Articles Inv. No. 337-TA-923	5/21/2015	Summary Determination of violation granted with respect to defaulting respondents and recommended issuance of a GEO

Investigation	Date	Basis for GEO		
Certain Ink Cartridges and Components Thereof Inv. No. 337-TA-946	 ALJ ID issued 10/29/2015 Commission Request for Written Submissions on Remedy issued 12/18/2015 	Summary Determination of violation granted with respect to defaulting respondents and recommended issuance of a GEO		
Certain Electric Skin Care Devices, Brushes and Chargers Therefor, and Kits Containing the Same Inv. No. 337-TA-959	Amended Complaint filed 5/20/2015	Investigation ongoing		
Certain Resealable Packages with Slider Devices Inv. No. 337-TA-962	Complaint filed 6/17/2015	Investigation ongoing		
Certain Woven Textile Fabrics and Products Containing Same Inv. No. 337-TA-976	Second Amended Complaint filed 11/12/2015	Investigation ongoing		
Certain Chassis Parts Incorporating Movable Sockets and Components Thereof Inv. No. 337-TA-978	Complaint filed 11/19/2015	Investigation ongoing		

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TRADE SECRETS CASES

- In Tian Rui Group v. ITC, 661 F.3d 1322 (Fed. Cir. 2011), the Federal Circuit held that the ITC had authority over misappropriation of trade secrets where acts occurred in China.
 - Section 337 "contemplates that unfair methods of competition and unfair acts leading to the prohibited importation will include conduct that takes place abroad."
 - "A single federal standard, rather than the law of a particular state, should determine what constitutes a misappropriation of trade secrets sufficient to establish an 'unfair method of competition' under section 337." 661 F.3d 1322, 1327 (Fed. Cir. 2011).
- Decision summarily affirmed in Sino Legend Chemical Co., v. ITC, No. 2014-1478 (Fed. Cir. Dec. 11, 2015) There have been 8 ITC investigations involving claims of trade secret misappropriation since the 2011 Tian Rui decision (several including other IP claims).
- These investigations included misappropriation claims involving former employees of the complainant. In 6 of the cases, misappropriation allegedly occurred in China.
- 4 of the 7 ITC investigations that have terminated to date (one is still pending Commission action) have resulted in findings of violation; 3 others ended in consent orders
- Increasing use of sanctions against respondents for bad faith conduct in investigations, including findings of default and attorney fees jointly and severally against both the respondent and its outside counsel (Opaque Polymers)

TRADE SECRETS CASES

The following summary shows the high success rate of complainants in recent trade secrets actions at the ITC:

Investigation	ALJ	Basis of Violation	Outcome of Trade Secret Claims
DC-DC Controllers and Products	Shaw	Patent infringement,	Consent order and settlement agreement.
Containing the Same	(previously	trade secret misappropriation	Violation of consent order found in subsequent
Inv. No. 337-TA-698	Bullock,		enforcement proceeding.
	Luckern)		
Electric Fireplaces, Components Thereof,	Shaw	Copyright infringement,	Violation found based on default for foreign
Manuals for Same, Certain Processes for	(previously	trade secret	respondents. Commission issued a 5-year
Manufacturing or Relating to Same and	Gildea)	misappropriation, breach of	limited exclusion order ("LEO").
Certain Products Containing Same		contract, tortious inference	
Inv. No. 337-TA-791/826		with contract	Consent order and settlement agreement with
			domestic respondent.
Rubber Resins and Processes for	Lord	Trade secret	Violation found. Commission issued a 10-year
Manufacturing Same	(previously	misappropriation	LEO.
Inv. No. 337-TA-849	Bullock,		
	Rogers)		
Paper Shredders, Certain Processes for	Pender	Patent infringement,	Consent order and settlement agreement with
Manufacturing or Relating to Same		trade secret misappropriation	corporate respondents. Withdrawal of complaint
Inv. No. 337-TA-863			as to individual respondents.

TRADE SECRETS CASES

Investigation	ALJ	Basis of Violation	Outcome of Trade Secret Claims
<i>Opaque Polymers</i> Inv. No. 337-TA-883	Pender	Patent infringement, trade secret misappropriation	Violation found based on sanctions for spoliation of evidence. Commission issued 25- year LEO and holds respondent and counsel joint and severally liable for almost \$2 million of the complainant's costs and attorneys' fees.
Crawler Cranes and Components Thereof Inv. No. 337-TA-887	Shaw	Patent infringement, trade secret misappropriation	Violation found. Commission issued 10-year LEO and cease and desist order.
Stainless Steel Products, Certain Processes for Manufacturing or Relating to Same, and Certain Products Containing Same Inv. No. 337-TA-933	Essex	Trade secret misappropriation	Violation found by the ALJ based on default as sanction for respondent's bad faith conduct in the investigation, including destroying or withholding evidence. Pending petition for review of the ID filed by the respondent

- ITC's Jurisdiction (Suprema & ClearCorrect)
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- When Does the Commission Delegate Consideration of the Public Interest Factors to the Presiding ALJ?
- Public Health and Welfare
 - E.g., Certain Antivenom Compositions and Products Containing the Same, Inv. No. 337-TA-903
- Competitive Conditions in the United States Economy (781)
 - E.g., Certain Microprocessors, Components Thereof, and Products Containing Same, Inv. No. 337-TA-781
- The Production of Like or Directly Competitive Articles in the United States
- Impact on U.S. Consumers

- Public Interest Factors Have Prevented Entry of a Remedy in Four Investigations
 - Certain Fluidized Supporting Apparatus and Components, Inv. No. 337-TA-182/188, Comm'n Op. (October 1984) (hospital burn beds); Certain Inclined Field Acceleration Tubes and Components, Inv. No. 337-TA-67, Comm'n Op. (December 1980) (basic atomic research imported acceleration tubes); Certain Automatic Crankpin Grinders, Inv. No. 337-TA- 60, Comm'n Op. (December 1979) (maintaining and increasing the supply of fuel-efficient automobiles).
 - Certain Mobile Electronic Devices, Including Wireless Communication Devices, Portable Music and Data Processing Devices, and Tablet Computers, Inv. No. 337-TA-794; see Letter from Ambassador Froman to Commission Chairman Williamson, August 3, 2013.

Commission Has Considered Tailored Remedies

- Certain Person Data and Mobile Communication Devices, Inv. No. 337-TA-710, Comm'n Op. at 83 (Dec. 29, 2011) (delaying exclusion orders four months based on competitive conditions in the economy)
- Certain Baseband Processor Chips and Chipsets, Inv. No. 337-TA-543, USITC Pub. No. 4258, Comm'n Op. at 148-54 (2007) (excluding new infringing cellphone models, but grandfathering already existing models)

- ITC's Jurisdiction (Suprema & ClearCorrect)
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STANDARD-ESSENTIAL PATENTS

- FRAND Encumbered Patents (e.g., InterDigital Communications, 613, 800 and 868)
- Not a bar to relief at the Commission per se
- What are the obligations under the SSO Agreements or Policies?
- Relevant Law?
- Course of Conduct in Negotiations (and even Settlement Discussions)
- Fact Intensive Inquiry

- ITC's Jurisdiction (Suprema & ClearCorrect)
- 100-Day Program
- Domestic Industry
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- Trade Secrets Cases
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POST-GRANT REVIEW

- Impact of ongoing proceedings before the Patent Trial and Appeal Board (PTAB) is Uncertain
 - > Will the ALJs and Commission Stay Investigations Pending Proceedings at the PTO?
 - How will such proceedings impact claim construction?
- What Impact Will Post-Grant Review Proceedings Have on the Five Factors That the Commission Consider in Whether to Stay an Investigation?
 - Certain Semiconductor Chips with Minimized Chip Package Size and Products Containing Same, Inv. No. 337-TA-605, Comm'n Op. (May 27, 2008)
 - Certain Microelectromechanical Systems ("MEMS Devices") and Products Containing Same, Inv. No. 337-TA-876, Order No. 6 (May 21, 2013) (denying respondent's motion to stay the investigation pending reexamination of three of the five asserted patents and inter partes review of the remaining two asserted patents).



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QUESTIONS?



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