

Scope¹

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Intellectual property (IP) law doctrines fall into three basic categories: validity, infringement and defenses. Virtually every significant legal doctrine in IP is either about whether the plaintiff has a valid IP right that the law will recognize – validity – about whether what the defendant did violates that right – infringement – or about whether the defendant is somehow privileged to violate that right -- defenses.⁴

IP regimes tend to enforce a more or less strict separation between these three legal doctrines. They apply different burdens of proof and persuasion to infringement and validity. In many cases they ask different actors to decide one doctrine but not the other. The U.S. Patent and Trademark Office, for example, decides questions of patent and trademark validity but not questions of infringement. Even in court, resolution of one issue is often allocated to a judge while the jury decides a different issue. And even where none of that is true, the nature of IP law is to categorize an argument in order to apply the proper rules for that argument.

The result of this separation is that parties treat IP rights “like a nose of wax, which may be turned and twisted in any direction.”⁵ When infringement is at issue, IP owners tout the breadth of their rights, while accused infringers seek to cabin them within narrow bounds.

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⁴ If the IP owner prevails there are also issues about the remedy awarded. We do not consider remedial issues in this paper.

⁵ *White v. Dunbar*, 119 U.S. 47, 74 (1886).

When it comes to validity, however, the parties reverse their position, with IP owners emphasizing the narrowness of their rights in order to avoid having those rights held invalid and accused infringers arguing the reverse.

Because of the separation between validity, infringement, and defenses, it is often possible for a party to successfully argue that an IP right means one thing in one context and something very different in another. And courts won't necessarily detect the problem because they are thinking of only the precise legal issue before them.

The result is a number of IP doctrines that simply make no sense to an outsider. In patent law, for instance, it is accepted law that there is no "practicing the prior art" defense.⁶ In other words, one can be held liable for doing precisely what others had legally done before, even though a patent isn't supposed to cover things people have already done. In design patent law, one can be held liable for making a design that an "ordinary observer" would find too similar to a patented design, even though the things that make the two look similar – say, the roundness of the wheels on my car – are not things the patentee is entitled to own. In copyright, once a court has concluded that someone has actually copied from the plaintiff, a song can be deemed infringing because of its similarity to a prior song, even if the similarity is overwhelmingly attributable to unprotectable standard components of the genre. And in trademark, a party can be deemed infringing because its products look too similar to the plaintiffs and therefore make confusion likely, even if that confusion is likely caused by non-source-designating features of the design.

⁶ See *infra* notes ___-___ and accompanying text.

Because they are sometimes sensitive to this problem, courts have created various stopgap doctrines to try to deal with these holes in IP law. Copyright law, for instance, says expression cannot be protected if there are too few alternative means of expression, so that one author's way of putting something has "merged" with the idea they are expressing.⁷ Trademark law has tried to prevent overreaching in product configuration protection by making it hard to have a valid product configuration trade dress at all.⁸ But even these efforts to patch the system are doomed to fail at determining the proper scope of an IP right, for the simple reason that they are themselves either validity or infringement doctrines and are therefore subject to the same nose of wax problem as different decisionmakers tackle different pieces of the issue at different times.

The culprit is simple, but fundamental: IP regimes largely lack an integrated procedure for deciding the proper extent of an IP right. Without some way of assessing how broad an IP right is that considers validity, infringement, and defenses together, courts will always be prone to make mistakes on any one of the doctrines. In general, these mistakes tend to redound to the benefit of IP owners, as courts are more reluctant to declare an IP right invalid altogether even when the defendant should not be liable for infringement. But sometimes the mistakes run the other way, as when the fact that the plaintiff is improperly seeking to expand the scope of her legitimate but narrow right leads a court to hold that right altogether invalid.

In this article, we suggest that IP regimes need a process for determining the *scope* of an IP right. Scope is not merely validity, and it is not merely infringement. Rather, it is the range

⁷ See, e.g., *Morrissey v. Procter & Gamble*, 379 F.2d 675 (1st Cir. 1967).

⁸ See, e.g., *Wal-Mart Stores, Inc. v. Samara Bros., Inc.*, 529 U.S. 205 (2000).

of things the IP right lawfully protects against competition.⁹ IP rights that claim too broad a scope tend to be invalid, either because they tread on the rights of those who came before or because they cover things that the law has made a decision not to allow anyone to own. IP rights with narrower scope are valid, but the narrowness of that scope should be reflected in the determination of what actions do and do not infringe that right. And whatever the doctrinal label, we should not allow an IP owner to capture something that is not within the legitimate scope of her right. Nor should it follow from the fact that some uses are outside the lawful scope of an IP owner's right that the IP right itself is invalid and cannot be asserted against anyone. Only by evaluating scope in a single, integrated proceeding can courts avoid the nose of wax problem that has grown endemic in IP law. Scope is, quite simply, the fundamental question that underlies everything else in IP law, but which courts rarely think about expressly.

One IP regime – patent law – has started in the last two decades to think about scope in a more systematic way through the process of claim construction. Patent courts hold a pre-trial *Markman* hearing to determine what the patent does and does not cover; they use that determination to inform both validity and infringement.¹⁰ Claim construction has its share of

⁹ Some academic works think about the scope of an IP right in an integrated way, though usually only with one IP regime in mind, and without our focus on the gaps between infringement, invalidity, and defenses. See, e.g., Bernard Chao, *The Infringement Continuum*, 35 **Cardozo L. Rev.** 1359, 1359 (2014) (“For many years, patent law has struggled with the issue of permissible claim scope.”); Mark A. Lemley, *The Changing Meaning of Patent Claim Terms*, 104 **Mich. L. Rev.** 101, 119-21 (2005) (discussing the scope of patent claims in an integrated way); Dan L. Burk & Mark A. Lemley, *Policy Levers in Patent Law*, 89 **Va. L. Rev.** 1575 (2003) (evaluating patent policy levers in part on the basis of how they affect the scope of rights in different industries); Zahr K. Said, *Reforming Copyright Interpretation* [draft at 51-52] (working paper 2014) (arguing for a judicial determination of scope in copyright proceedings). Chao goes on to suggest calibrating remedies as a way to modulate claim scope.

¹⁰ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).

problems,¹¹ and patent law has not entirely avoided the nose of wax problem, but we think patent law is on the right track in trying to resolve these questions in an integrated fashion rather than allowing inconsistent assessments of scope in separate validity and infringement proceedings.¹² Other IP regimes can look to a modified form of the *Markman* model as they design their own doctrines of scope, learning from its shortcomings while trying to modulate the breadth of permissible IP rights.

In Part I, we discuss the current divided structure of IP regimes, explaining how validity, infringement, and defenses are often evaluated at different times by different parties applying different standards. In Part II, we discuss the problematic consequences of that separation for each of the major IP regimes. Finally, in Part III we propose that IP adopt a unified scope proceeding, drawing inspiration – but also some caution – from patent law’s *Markman* experiment.

I. IP Litigation: A Process Divided

A. The Divided Nature of the IP Inquiry

IP cases have a familiar tri-partite structure. The first question is whether the plaintiff owns any valid rights. If (and only if) it does have valid rights, then the second question is whether the defendant’s conduct infringes those rights. Third is the question of whether the defendant might have some defense or special exclusion that exempts from liability its otherwise infringing conduct. More particular doctrines are then conceived of as validity or

¹¹ For discussion, see, e.g., Dan L. Burk & Mark A. Lemley, *Fence Posts or Sign Posts? Rethinking Patent Claim Construction*, 157 **U. Pa. L. Rev.** 1743 (2009).

¹² See, e.g., Mark A. Lemley, *The Changing Meaning of Patent Claim Construction*, 104 **Mich. L. Rev.** 101 (2005).

infringement issues, or as matters of defense. The allocation into one of these buckets matters because the consequences of treating some doctrine as a validity rather than an infringement doctrine are often different. Validity doctrines tend to have all-or-nothing effect, so a finding against the claimant on one of these doctrines typically leads to the conclusion that the claimant has no rights at all. Infringement doctrines, on the other hand, tend to focus on the particular defendant, so a finding on one of these doctrines typically applies only as against that particular defendant. Validity and infringement doctrines also may be decided by different decisionmakers.

This kind of rigid separation between validity, infringement, and defense often doesn't work, however, because most of the important questions in IP are really questions of the *scope* of a party's rights, and scope has a variety of different dimensions that don't fit neatly into these doctrinal categories. Indeed, while they tend not to get headline billing, questions of scope are pervasive throughout IP cases.

In each area, courts first must determine what the thing is to which rights might attach – what is the invention, the design, the work, or the mark? This is, in the first instance, a question of what the creator claims to own, but it is not that simple. For one thing, the IP systems differ from each other in their claiming requirements – in terms of timing, claiming methodology, and specificity.¹³ Patent owners arrive at court with a document that spells out their claims in writing (however unclearly) or, in the case of design patents, in pictures. Copyright owners arrive with a work fixed in a tangible medium that can serve as a starting point, but without having articulated specifically what aspects of that work warrant protection. Trademark owners

¹³ See Jeanne C. Fromer, *Claiming Intellectual Property*, 76 **U. Chi. L. Rev.** 719 (2009).

sometimes show up with registrations and sometimes do not, but even when they do have registrations, those registrations typically only partially represent what is claimed, given the generality of the goods and services specifications.

This first kind of scope assessment, which aims to determine what the creator actually contributed to the world, might be regarded a question of factual scope. The primary purpose of determining this kind of scope is to enable a court to evaluate whether the claimed property is subject to valid rights at all. Almost all IP regimes premise protection on some form of novelty – the invention or creation of a new thing the world has not seen before.¹⁴ But truly new creations are rare things. Almost all IP owners add their contribution onto a base of prior knowledge. One important purpose of asking “what is it?” is to be able to test whether valid rights attach in relation to a unit of the claimed scope, and in particular what features of the thing that is claimed make it protectable. All IP regimes recognize that a party can own valid rights despite the fact that many features of the subject are not subject to valid rights. One can, for example, patent inventions that incorporate many elements of prior inventions as long as they add some novel and non-obvious new element.¹⁵ Similarly one can own valid a copyright on expressions of facts or on particular photographs of well-known places,¹⁶ just as one can

¹⁴ Even trademark law, which does not require novelty per se, typically awards rights to the party that first uses a mark in connection with particular goods. Apple Corp. didn’t invent the term “apple,” but it was the first to use it as a brand to sell computers.

¹⁵ *Cf.* *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418-19 (2007) (“Although common sense directs one to look with care at a patent application that claims as innovation the combination of two known devices according to their established functions, it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does. This is so because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known.”).

¹⁶ See *Feist Publ., Inc. v. Rural Telephone Svc. Co., Inc.*, 499 U.S. 340, 348 (1991) (“Factual compilations, on the other hand, may possess the requisite originality. The compilation author typically chooses which

claim trademark rights in phrases with descriptive words or product packaging with some standard features.¹⁷ In patent law we refer to the features that make the invention patentable as the “point of novelty.”¹⁸ Copyright and trademark law lack a similar term, but clearly they have the same concept. That which the creator adds can be protected; that which they take from the prior art cannot be.

These determinations, which together define the nature of a party’s entitlement, are analogous to the ones that frame disputes about real property. In order to determine whether a party has violated the owner’s rights in a piece of property, a court must first determine the metes and bounds of the property claimed and the interest the claimant has in that property (i.e., was it taken in fee simple, is it a future interest, a lease, etc.?). But no matter what the claiming rules, delineating the boundaries of the IP right requires *interpretation*, and that interpretation is, necessarily, done in the shadow of legal rules. That leads us to the second type of scope inquiry, which we might call legal scope.

Once we know the factual scope of a party’s rights, in the sense we have just described it, we can ask what acts violate rights in that property. That inquiry too has embedded within it several questions related to scope. For every IP system determines infringement by reference to both the acts that cannot be undertaken in relation to the subject of IP rights and the nature

facts to include, in what order to place them, and how to arrange the collected data so that they may be used effectively by readers. These choices as to selection and arrangement, so long as they are made independently by the compiler and entail a minimal degree of creativity, are sufficiently original that Congress may protect such compilations through the copyright laws.”).

¹⁷ See 2 J. THOMAS MCCARTHY, MCCARTHY ON TRADEMARKS & UNFAIR COMPETITION § 11:26 (The combination of two or more admittedly descriptive elements as a composite mark may result in a composite which is nondescriptive.”); *Antioch Co. v. Western Trimming Corp.*, 347 F3d 150, 158 (6th Cir. 2003) (“in order to receive trade dress protection for the overall combination of functional features, those features must be configured in an arbitrary, fanciful, or distinctive way”).

¹⁸ See Mark A. Lemley, *Point of Novelty*, 105 NW. U. L. REV. 1253 (2011).

of the similarity between the defendant’s invention, work, or mark and that of the plaintiff.¹⁹ Patent, for example, prohibits others from making, using, offering to sell, or selling the patented invention within the United States, or importing the invention into the United States.²⁰ That formulation requires both a determination that the defendant is engaged in certain acts – the making, using, selling, etc., - and a determination that the defendant is engaging in those prohibited acts with “the patented invention” (or, in the case of design patent, the “patented design”). Thus, a party that makes the patented invention outside the United States (and does not import it) does not infringe, and a party that sells an invention that does not read on each element of the claimed invention does not infringe.

Copyright similarly requires a determination that the defendant has reproduced, prepared derivative works, distributed to the public, publicly displayed, or publicly performed, and that she has done those acts with “the copyrighted work.”²¹ A party that privately performs the copyrighted work does not infringe, just as a party that publicly performs something that is not the copyrighted work does not infringe. Trademark law requires that the defendant make commercial use of the plaintiff’s mark in a way that is likely to cause confusion or to dilute a famous mark.²² A party that does not make commercial use does not infringe, even if whatever use was made was likely to cause confusion. Likewise a party that makes commercial use of a mark does not infringe if that mark is too dissimilar or is used in a context that makes confusion and dilution unlikely.

¹⁹ Jeanne Fromer and Mark Lemley speak of IP regimes as requiring some combination of “technical similarity” and “market substitution.” Jeanne Fromer & Mark A. Lemley, *The Audience in IP Infringement*, 112 **Mich. L. Rev.** 1251 (2014).

²⁰ 35 U.S.C. § 271(a).

²¹ 17 U.S.C. § 106.

²² 15 U.S.C. §§ 1114, 1125.

Together the delineated acts and the requisite similarity determine the legal scope of a party's rights. That legal scope is inextricably intertwined with the determination of the nature of the entitlement we previously described. For when we say that the defendant must publicly perform "the copyrighted work," we take for granted that we have already been able to define "the copyrighted work" so that we can anchor our analysis of similarity in relation to that definition. Further, we generally mean that the defendant must have taken the thing that gives the IP right its validity – the point of novelty, in patent terms. The marks "Shake Shack" and "Joe's Crab Shack" might share the word "shack," but that fact alone shouldn't cause the newcomer to be guilty of trademark infringement, for the simple reason that the word "shack" alone is not the thing that justifies protecting the trademark. Similarly, your novel might share with our article the word "the," but copying that word from us doesn't make you a copyright infringer, because the word does not owe its origin to us.

The determination of the legal scope of a party's rights therefore necessarily depends on a definition of the IP right. More particularly, evaluating whether the defendant's use comes within the legal scope of the plaintiff's rights requires a delineation of the protectable elements of those rights, because all of the IP regimes require, at least in theory, not just similarity between the defendant's and plaintiff's works, but similarity with respect to the protectable elements.

Legal scope is also determined in part by various defenses. Some doctrines, though formally classified as defenses, really go to the question of validity. This might be because an issue is only formally designated a defense because the IP at issue is registered and therefore benefits from a presumption of validity. Distinctiveness, for example, is presumed for registered

trademarks, so a defendant that claimed the asserted mark was generic would have to raise genericness as an affirmative defense and would bear the burden of proof on that issue.²³

Invalidity in a patent case similarly must be raised by the defendant as a defense.²⁴ Because these kinds of defenses really relate to validity, they tend to be all-or-nothing – meaning that these defenses generally affect the existence of rights at all, rather than simply excusing the particular defendant’s conduct.²⁵ Classifying these doctrines as defenses matters, however, because it affects who bears the burden of proof and how heavy that burden will be.²⁶

Invalidity in patent cases, for example, must be proved by clear and convincing evidence.²⁷ Still, defenses of this type are essentially decisions about whether the IP rights should exist at all.

Other defenses are more like excuses in that they don’t deny the existence of valid rights but offer some reason why those rights do not reach this particular defendant under the circumstances. In copyright law, the statutory exemption for using protected works in face-to-face classroom teaching does not alter the copyright owner’s rights vis-à-vis any other use,

²³ 15 U.S.C. § 1115(a).

²⁴ 35 U.S.C. § 282(a).

²⁵ There are some exceptions here, particularly in trademark law, which sometimes allows unfair competition remedies in very limited situations even when a mark has been found generic. *See, e.g.*, *Kellogg Co. v. National Biscuit Co.*, 305 U.S. 111, 116 (1938); *Blinded Veterans Ass’n v. Blinded Am. Veterans Found.*, 872 F.2d 1035, 1043 (D.C. Cir. 1989); *King–Seeley Thermos Co. v. Aladdin Indus., Inc.*, 321 F.2d 577, 581 (2d Cir. 1963). The injunctions in these cases are quite narrow, and they specifically cannot prevent competitors from using the generic terms. *Blinded Veterans*, 872 F.2d at 1043 (“The subsequent competitor cannot be prevented from using the generic term to denote itself or its product, but it may be enjoined from passing itself or its product off as the first organization or its product. Thus, a court may require the competitor to take whatever steps are necessary to distinguish itself or its product from the first organization or its product.”).

²⁶ Calling something a defense may also affect who decides – though as we note below, the allocation of decision-making responsibility is surprisingly unclear in some of the contexts with which we’re concerned.

²⁷ *Microsoft Corp. v. i4i, LLP*, 131 S.Ct. 2238 (2011).

even other educational uses, which usually must be adjudicated under the less specific standards of fair use.²⁸

These different types of defenses exist in different proportion in different IP regimes. Utility patent law has many of the first type of defenses because patent requires defendants to prove invalidity and unenforceability, but it has virtually none of the latter, save for the extremely narrow experimental use defense.²⁹ Design patent is mostly the same, though there is some ambiguity about the role of functionality in infringement.³⁰ Copyright has relatively few general defenses because its threshold for validity is so low, though as we discuss below, some courts regard certain aspects of validity (like merger) as defenses. On the other hand, copyright is chock full of specific exceptions and defenses that protect particular users in particular situations.³¹ And even cases that seem from some vantage point to be concerned with validity look that way only because of the nature of the defendant's use – which is to say that they might really be defendant-specific scope decisions after all.

Take the famous case of *Baker v. Selden*, which is widely regarded as the source of copyright's idea-expression doctrine.³² According to the Court, Selden's attempt to enforce rights against Baker for the latter's use of accounting forms that were substantially similar to those illustrated in Selden's book amounted to an illegitimate attempt to use copyright to

²⁸ See 17 U.S.C. § 110.

²⁹ *Madey v. Duke University*, 307 F.3d 1351 (Fed. Cir. 2002) (holding the experimental use defense inapplicable in virtually all circumstances).

³⁰ See *Richardson v. Stanley Works, Inc.*, 597 F.3d 1288 (Fed. Cir. 2010).

³¹ 17 U.S.C. §§ 107-122.

³² 101 U.S. 99 (1879).

prevent use of an unpatented method of accounting.³³ As the Court noted, “the mere copyright of Selden's book did not confer upon him the exclusive right to make and use account-books, ruled and arranged as designated by him and described and illustrated in said book.”³⁴

The court talks about protectability, so it is natural to see the case in terms of validity.³⁵ But Selden’s forms were included in a book that clearly was the subject of copyright, and the question for the Court was whether Baker’s creation of similar account books infringed that copyright. To put it in our terms, the issue was the scope of Selden’s rights in his book. That scope did not extend to preventing use of the forms for the purpose of practicing the art.³⁶ But, the court implied, other uses of the forms might have fallen within Selden’s rights. As the Court said, “where the art [the book] teaches cannot be used without employing the methods and diagrams used to illustrate the book, or such as are similar to them, such methods and diagrams are to be considered as necessary incidents to the art, and given therewith to the public; *not given for the purpose of publication in other works explanatory of the art, but for the purpose of practical application.*”³⁷ *Baker v. Selden*, then, isn’t really a validity case or an infringement case. It is about the proper scope of a valid copyright.

³³ *Baker*, 101 U.S. at 105 (“The description of the art in a book, though entitled to the benefit of copyright, lays no foundation for an exclusive claim to the art itself. The object of the one is explanation; the object of the other is use. The former may be secured by copyright. The latter can only be secured, if it can be secured at all, by letters-patent.”).

³⁴ *Id.* at 107.

³⁵ *Id.* (“The conclusion to which we have come is, that blank account-books are not the subject of copyright ...”).

³⁶ *Id.* at 103 (“The copyright of a book on perspective, no matter how many drawings and illustrations it may contain, gives no exclusive right to the modes of drawing described, though they may never have been known or used before. By publishing the book, without getting a patent for the art, the latter is given to the public.”).

³⁷ *Id.*

Trademark is the most hybrid of the regimes. Some defenses – including genericness, abandonment, and mechanical functionality – are really validity doctrines with all-or-nothing effect. Other doctrines – like descriptive fair use and the first sale doctrine – are defendant-specific.³⁸ Still other doctrines – *Rogers v. Grimaldi* and related expressive use doctrines, for example – are defendant-specific but perhaps not really defenses as much as expressions of what falls outside the scope of a trademark owner’s legal rights.³⁹

B. Gaps in the Fabric of IP Scope

Notwithstanding the interconnectedness of the various scope questions courts must address, those questions arise in different parts of the tri-partite case structure typically associated with IP cases. The result of this separation between validity, infringement, and defenses is a number of disconnects – gaps in the IP regime which either an IP owner or an infringer can sneak through. By gaps, we mean circumstances in which the law should reach a consistent scope result but fails to do so because each IP doctrine assumes that others will take care of the problem.

Gaps exist in the fabric of IP for a number of reasons.

³⁸ As one of us has previously emphasized, trademark law is plagued with uncertainty about the extent to which various defensive doctrines are really defenses in the sense that they are distinct from the prima facie case of infringement. See William A. McGeeveran & Mark P. McKenna, *Confusion Isn't Everything*, 89 Notre Dame L. Rev. 253 (2013). That uncertainty has significant consequences for scope, in that it is often unclear whether the “defenses” are doing any work to limit scope, or whether they are instead simply describing situations under which confusion is unlikely and therefore non-infringing.

³⁹ Under *Rogers*, which now seems to be the dominant approach to expressive use cases, use of a mark in or in relation to an expressive work is not infringing so long as it has some artistic relevance to the work and does not explicitly mislead. *Rogers v. Grimaldi*, 875 F.2d 994 (2d Cir. 1989). This is clearly a scope doctrine, but – to our point about the superficiality of these categories – probably more a question of infringement than defense.

Different Decisionmakers. Sometimes different actors decide different doctrines, often at different times. Some IP issues are decided by judges, others by juries.⁴⁰ Judges and juries can have fundamentally different approaches to similar questions.⁴¹ When a judge resolves one issue (say, granting summary judgment that a patent is infringed) and declines to resolve others (whether the patent is invalid) on the assumption that the jury will handle the latter issue, the fact that the jury rather than the judge makes the second determination leaves open the possibility that the two issues will not be resolved consistently. That is even more likely when the jury hears only part of the story because the judge has already decided other parts. In our example, a jury that might be inclined to decide that a plaintiff's patent shouldn't cover the defendant's conduct doesn't have an opportunity to do so because the judge has already resolved the infringement issue. The jury will hear only the all-or-nothing question of whether the patent is invalid without learning of the dispute over how broadly it is being construed.

For many IP regimes, the problem of different decisionmakers is heightened by the fact that the Patent and Trademark Office (PTO) is set up to resolve some IP issues (specifically, validity questions) but not others. The PTO decides the validity of the patents and trademarks it considers, initially or in reexamination, without taking into account the scope of the resulting right, who might be sued for infringing it, or whether they might have a defense to suit.

⁴⁰ For a discussion on the division between judge and jury in patent cases, along with some skepticism as to whether juries are required to decide many of these issues, see Eileen M. Herlihy, *The Ripple Effect of Seventh Amendment Decisions on the Development of Substantive Patent Law*, 27 **Santa Clara Comp. & High Tech. L.J.** 333, 341-42 (2011); Mark A. Lemley, *Why Do Juries Decide If Patents Are Valid?*, 99 **Va. L. Rev.** 1673 (2013). For consideration of a thorny issue on the allocation of decisionmaking in trademark cases, see *Hana Fin. Corp. v. Hana Bank*, ___ S.Ct. ___ (Jan. 21, 2015).

⁴¹ For a detailed discussion, see Jeanne Fromer & Mark A. Lemley, *The Audience in IP Infringement*, 112 **Mich. L. Rev.** 1251 (2014).

Indeed, the PTO even applies different substantive standards than the courts on important issues like claim construction in patent law⁴² and likelihood of confusion in trademark law.⁴³

In patent law, that structural disconnect has recently become more pronounced. While the PTO considers only validity issues when deciding to issue a patent, courts traditionally have considered both validity and infringement issues when the patent is enforced. Beginning in 1980, however, the PTO got limited power to reexamine its earlier decision to issue a patent.⁴⁴ Those powers were expanded dramatically in 2011 by the America Invents Act, which gave the PTO the power to conduct inter partes review,⁴⁵ post-grant oppositions,⁴⁶ and covered business method reviews.⁴⁷ Patent challengers have instituted thousands of such reviews since 2011.⁴⁸ And for one of these proceedings, covered business method review, courts are generally expected to stay litigation proceedings until the PTO review process is complete.⁴⁹ The result is that a growing number of patent cases will be resolved by considering the question of validity in the abstract, without infringement and defenses being presented to the PTO.

⁴² While courts seek to determine the proper meaning of a term to a person of ordinary skill in the art, the PTO applies the “broadest reasonable construction” of a term, not only when granting patents in the first instance but even when reexamining issued patents that are also pending in litigation. *See, e.g., Dawn-Marie Bey & Christopher A. Cotropia, The Unreasonableness of the PTO’s ‘Broadest Reasonable Interpretation’ Standard*, 37 **AIPLA Q.J.** 285 (2009) (discussing and criticizing this difference).

⁴³ The PTO evaluates likelihood of confusion considering only the similarity of the marks as depicted, not taking into account the context in which the mark is used. *See* 3 McCarthy on Trademarks and Unfair Competition § 20:15 (4th ed.) (“In determining likelihood of confusion in an opposition, it is the mark as shown in the application and as used on the goods described in the application which must be considered, not the mark as actually used by applicant.”). The difference between PTO and judicial likelihood of confusion standards is the subject of a Supreme Court case pending at this writing. *B&B Hardware v. Hargis Indus., Inc.*, ___ S.Ct. ___ (2015).

⁴⁴ 35 U.S.C. §301 et seq.

⁴⁵ 35 U.S.C. §311 et seq.

⁴⁶ 35 U.S.C. §321 et seq.

⁴⁷ AIA §18.

⁴⁸ http://www.uspto.gov/aia_implementation/statistics.jsp.

⁴⁹ AIA §18(b)(2); *VirtualAgility, Inc. v. Salesforce.com, Inc.*, 759 F.3d 1357 (Fed. Cir. 2014).

Different Burdens of Proof. Even if the decisionmaker is the same, validity, infringement, and defenses often come with different burdens of proof. For example, IP rights are all presumed valid when challenged in court; the standard of proof differs from a preponderance of the evidence in copyright and trademark cases to clear and convincing evidence in patent and design patent cases. Proving infringement is the IP owner's burden, always by preponderance of the evidence; proving a defense is a defendant's burden, and again the level of proof required may differ by doctrine and defense.⁵⁰

Even the same doctrine may require different standards of proof for different parties and at different times. Patent invalidity must be proven by clear and convincing evidence in court, but only by a preponderance of the evidence during patent examination or during some – but not all – forms of reexamination in the PTO.⁵¹ The fact that someone is the first inventor of a patent must be proved in an interference proceeding by a preponderance of the evidence if the patent has not yet issued or been published but by clear and convincing evidence if the challenge is raised thereafter.⁵²

The fact that different parts of the IP fabric are subject to different standards of proof leaves open the possibility that those burdens will distort the overall result in the case. If there is a preponderance of the evidence supporting a patent defendant, but not clear and convincing evidence, whether we treat the evidence as relevant to validity or to infringement

⁵⁰ Inequitable conduct in patent law, for instance, requires proof by the defendant by clear and convincing evidence. *Therasense, Inc. v. Becton, Dickinson & Co.*, 649 F.3d 1276 (Fed. Cir. 2011) (en banc). Most other defenses require a defendant to show only a preponderance of the evidence.

⁵¹ *See, e.g., In re Swanson*, 540 F.3d 1368, 1377-78 (Fed. Cir. 2008).

⁵² *Bruning v. Hirose*, 161 F.3d 681, 684-86 (Fed. Cir. 1998). No challenge can be made at all more than a year after the patent issued or the application is published. 35 U.S.C. §135(b) (abrogated prospectively by the America Invents Act of 2011).

will determine who wins the case. Similarly, when evidence is hard to come by, classifying a doctrine as part of infringement (which the plaintiff must prove) or a defense (which the defendant must prove) will determine the outcome. Further, as Jonathan Masur and Lisa Ouellette have shown, the difference in deference regimes can lead to systematic mistakes in applying the law from one context to another.⁵³

A Reluctance to Invalidate IP Rights. Courts and particularly juries are reluctant to second-guess the Patent and Trademark Office and declare IP rights altogether invalid. Roger Ford has argued that courts are accordingly too willing to resolve cases on infringement grounds even when the IP right should in truth be invalid.⁵⁴ In fact, however, this reluctance often makes sense, not so much because the PTO has the final say as because many times an IP right is properly valid but narrow. But a low threshold for validity makes sense only if we have confidence that we can sort out efforts to overclaim the scope of that right using infringement doctrines. And often we don't have the proper tools in infringement or defenses. When validity and infringement are separated, the reluctance of courts to invalidate an IP right altogether means that they find it hard to reach the right result when the tools for limiting the right are classed as invalidity or general defenses rather than infringement doctrines or conduct-specific defenses. This is true of the functionality doctrine in both trademark and design patents, for instance. Because we don't have a clear defense for non-trademark uses⁵⁵ –

⁵³ Jonathan Masur & Lisa Larrimore Ouellette, *Deference Mistakes*, __ **U. Chi. L. Rev.** __ (forthcoming 2015).

⁵⁴ Roger Ford, *Patent Invalidity vs. Noninfringement*, 99 **Cornell L. Rev.** 71 (2013).

⁵⁵ *Rescuecom Corp. v. Google Inc.*, 562 F.3d 123 (2d Cir. 2009), is generally considered responsible for effectively killing the trademark use doctrine, though it remains the law in several circuits. For discussion of the state of the doctrine and its merits, compare Stacey L. Dogan & Mark A. Lemley, *Grounding Trademark Law Through Trademark Use*, 92 **Iowa L. Rev.** 1669 (2007) (defending the

uses of a mark by a defendant, not for purposes of signaling source, but to take advantage of the intrinsic characteristics of the product – courts are often faced with a choice between invalidating a mark altogether or letting the plaintiff get away with expanding the scope of her right beyond its proper bounds.⁵⁶ Courts in this situation tend to expand the right rather than invalidate it,⁵⁷ though sometimes they have made up new defenses or other doctrines to try to avoid the choice.⁵⁸

Strategic Behavior. Each of the problems we just identified exists even if no one tries to exploit these gaps. They are inherent disconnects between the rules of validity, infringement, and defenses. But in fact parties inevitably seek to exploit these gaps for their own advantage. For IP owners, exploiting those gaps generally takes the form of defining the scope of a right broadly for infringement purposes but nonetheless escaping a finding of invalidity; for accused infringers it is the reverse. Parties can exploit the gaps in a variety of ways. One of the simplest

importance of the doctrine) with Graeme Dinwoodie & Mark D. Janis, *Confusion Over Use: Contextualism in Trademark Law*, 92 **Iowa L. Rev.** 1597 (2007) (arguing that there should be no limitation on the sort of conduct that could infringe trademarks if found to confuse consumers); cf. Mark P. McKenna, *Trademark Use and the Problem of Source*, 2009 **U. Ill. L. Rev.** 773 (challenging the ability of courts to define what constitutes a trademark use).

⁵⁶ See Chao, *supra* note __, at 1359 (“Although there are numerous existing doctrines that try to prevent claims from straying too far from their specification, these doctrines offer binary outcomes ill suited for patent law.”).

⁵⁷ See *Rosetta Stone Ltd. v. Google, Inc.*, 676 F.3d 144 (4th Cir. 2012) (holding that the functionality doctrine applies only to the mark as used by the plaintiff and not to the defendant’s use of the mark); *Au-Tomotive Gold, Inc. v. Volkswagen of America, Inc.*, 457 F.3d 1062 (9th Cir. 2006) (refusing to apply the aesthetic functionality doctrine to the defendant’s use of the marks for fear of invalidating those marks).

⁵⁸ In *Christian Louboutin S.A. v. Yves St. Laurent Am.*, 696 F.3d 206 (2^d Cir. 2012), for instance, the court evaded the aesthetic functionality doctrine and limited Louboutin’s rights to contrasting red-sole shoes so as to find for the defendant but avoid invalidating the mark altogether. And several courts have sought to apply a doctrine of “defensive functionality” to protect the defendant’s use from liability without invalidating the mark altogether, though those efforts have ultimately been rejected. See *Rosetta Stone, Ltd. v. Google Inc.*, 732 F. Supp. 2d 628 (E.D. Va., 2010), reversed in relevant part, 676 F.3d 144 (4th Cir. 2012); *Fleischer Studios, Inc. v. A.V.E.L.A. Inc.*, 632 F.3d 1116 (9th Cir. 2011), reversed on rehearing, 654 F.3d 958 (9th Cir. 2011). One of us (McKenna) has previously argued that those courts were on the right track.

is trying to separate the determination of validity from the determination of infringement, either by having them done at separate times or by different decisionmakers. Whenever the two are separated, IP owners will argue in the infringement proceedings that their right is quite broad, covering what the defendant does, only to turn around and argue in validity proceedings that their right is quite narrow and therefore valid. Accused infringers will do the reverse. Without a single integrated scope proceeding, there is no easy way to constrain this behavior.

II. The Problems with Separation

A. IP Doctrines and the Nose of Wax

The result has been that every IP regime has instances in which courts systematically reach the wrong decisions on the scope of the right. In this section we offer a few examples from each regime.

1. Copyright

Copyright law is the least reliant of the IP regimes on validity doctrines and therefore the most reliant on infringement doctrines and defenses to manage the scope of a party's rights. Copyright's originality threshold requires only independent creation and a minimal level of creativity.⁵⁹ As the Supreme Court said in *Feist*, "the requisite level of creativity is extremely low; even a slight amount will suffice. The vast majority of works make the grade quite easily, as they possess some creative spark, no matter how crude, humble or obvious it might be."⁶⁰

⁵⁹ See *Feist Publ., Inc. v. Rural Telephone Svs., Inc.*, 499 U.S. 340, 345 (1991) ("Original, as the term is used in copyright, means only that the work was independently created by the author (as opposed to copied from other works), and that it possesses at least some minimal degree of creativity.").

⁶⁰ *Id.* (internal quotations omitted).

Copyright thus allows protection for works that are extremely similar to works in the public domain or other copyrightable works,⁶¹ or that incorporate many unprotectable elements.

There are limits here, of course. Copyright does not extend to facts or ideas,⁶² and while copyright can subsist in the selection and arrangement of facts or ideas, courts will deny protection in cases where idea and expression merge – where there are few ways to express an idea.⁶³ Copyright also does not extend to common elements and “scenes a faire” - stock scenes that naturally flow from a common theme.⁶⁴ Section 102(b) of the Copyright Act is in some senses a codification of the idea/expression dichotomy, but that section goes further and excludes protection for processes, systems, and methods of operation.⁶⁵

These are important doctrines that sometimes operate at the validity stage to preclude protection under any circumstances. In *Feist*, for example, the Court found Rural’s white pages uncopyrightable because the names, towns, and telephone numbers were unprotectable facts

⁶¹ Indeed, in principle a work is protectable even if it is *identical* to prior works, so long as the work was independently created. See *Sheldon v. Metro-Goldwyn Pictures Corp.*, 81 F.2d 49, 54 (2d Cir. 1936) (“Borrowed the work must indeed not be, for a plagiarist is not himself *pro tanto* an ‘author’; but if by some magic a man who had never known it were to compose anew Keats’s Ode on a Grecian Urn, he would be an ‘author,’ and, if he copyrighted it, others might not copy that poem, though they might of course copy Keats’s.”).

⁶² *Feist*, 499 U.S. at 344.

⁶³ See, e.g., *Morrissey v. Proctor & Gamble Co.*, 379 F.2d 675 (1st Cir. 1967) (finding Morrissey’s rules for a promotional contest uncopyrightable on merger grounds).

⁶⁴ See, e.g., *Walker v. Time Life Films, Inc.*, 784 F.2d 44, 50 (2d Cir. 1986) (no protection for common elements in police fiction, such as “drunks, prostitutes, vermin and derelict cars” and “foot chases and the morale problems of policemen, not to mention the familiar figure of the Irish cop”); *Evans v. Wallace Berrie & Co.*, 681 F.Supp. 813, 817 (S.D. Fla. 1988) (“Such similarities as using a sand dollar as currency, foods made of seaweed, seahorses for transportation and plates made of oysters or mother of pearl are not protected similarities of expression, but are more accurately characterizations that naturally follow from the common theme of an underwater civilization.”).

⁶⁵ 17 U.S.C. § 102(b). See Pamela Samuelson, *Why Copyright Excludes Systems and Processes from the Scope of Its Protection*, 85 TEX. L. REV. 1921, 1944-61 (2007) (demonstrating that § 102(b) was intended to codify the exclusion of processes, systems, and methods of operation, in keeping with case law developed following *Baker v. Selden*).

and Rural had not selected or arranged those facts in an original way.⁶⁶ As a result, Feist’s white pages could not infringe, even though Feist had actually copied a number of listings from Rural’s phone book.⁶⁷ And in *Morrissey v. Proctor & Gamble*, the court refused protection to Morrissey’s sweepstakes rules on merger grounds even though it found that “there was more than one way of expressing” the rules for the game, and that there was “almost precise similarity” between the plaintiff’s and defendant’s rules.⁶⁸

But in general, copyright law only very rarely disqualifies works altogether and instead generally relies on infringement doctrine to limit the scope of rights in a work so that it reflects that work’s marginal copyrightability. Indeed, even the doctrines we just identified don’t fit neatly in the validity box. Most commonly courts recite these restrictions not to deny the plaintiff protection at all, but for the purpose of identifying the unprotectable elements of a work that still meets the threshold of protectability. These elements are identified so that the substantial similarity analysis (at the infringement stage) can be focused on the protectable elements – though, as we describe further below, it’s not clear how well courts actually do focus the inquiry this way. In *Leigh v. Warner Brothers*, for example, the court held that Leigh’s copyright in the his “photograph of a sculpture in the Bonaventure Cemetery known as the Bird Girl” extended only to “the selection of lighting, shading, timing, angle, and film.”⁶⁹ Leigh’s

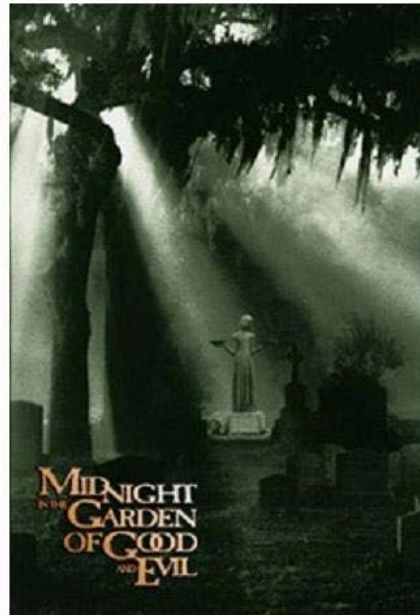
⁶⁶ Feist Publ., Inc. v. Rural Telephone Service Co., Inc., 499 U.S. 340, _ (1991).

⁶⁷ *Id.* at 343-44 (noting that Feist copied 1,309 listings that were identical to listings in Rural’s phone books, including 4 fictitious listings).

⁶⁸ *Morrissey*, 379 F.2d at 678.

⁶⁹ *Leigh v. Warner Bros., Inc.*, 212 F.3d 1210, 1213 (11th Cir. 2000). Leigh took the photo for the cover of *Midnight in the Garden of Good and Evil*, a novel by John Berendt. “After reading a manuscript of the novel, Leigh explored appropriate settings in Savannah and ultimately selected a photograph of a sculpture in the Bonaventure Cemetery known as the Bird Girl. Sylvia Shaw Judson had sculpted the Bird Girl in 1938, and she produced three copies of the statue. The Trosdal family had purchased one of the

copyright did not cover “the appearance of the statue itself or of Bonaventure Cemetery, for Leigh has no rights in the statue or its setting.”⁷⁰ Taking those unprotectable features into account, the court held that the district court was “correct as a matter of law to conclude that the film sequences featuring the Bird Girl statue [in Warner Brothers’ film version of the novel] are not substantially similar to the protected elements of Leigh’s photograph,” but that there was a jury question regarding the similarity of Warner Brothers’ photographic images, which had “much in common with the elements protected by Leigh’s copyright.”⁷¹



We confess that we can’t see much if anything in common between these two photos other than their core subject matter. But the court’s approach treats idea/expression and related

statues and placed it in their plot at Bonaventure Cemetery. The novel does not mention the Bird Girl statue.” *Id.*

⁷⁰ *Id.* at 1214. Courts sometimes suggest that “the merger doctrine is most applicable where the idea and the expression are of items found in nature, or are found commonly in everyday life.” See *Yankee Candle*, 259 F.3d at 36.

⁷¹ *Id.* at 1216.

doctrines as just an input to infringement analysis, and therefore as something to be dealt with by the jury at the infringement stage.⁷²

Courts sometimes even treat merger as a scope doctrine. In *Yankee Candle*, the court evaluated Yankee’s claim that Bridgewater infringed on the labels of nine candle fragrances by first dissecting the work to remove unprotectable elements and then second “apply[ing] the doctrines of merger and scene-a-faire to determine *how* substantially similar the copy must be to infringe.”⁷³ Focusing on Yankee’s labels, the court found that, because the ideas of 6 of the 9 labels merged with expression, “there could be no infringement unless Bridgewater’s photographs were ‘nearly identical’ to Yankee’s.”⁷⁴ This was a matter of scope, however, and not validity. “The merger doctrine does not,” the court said, “allow the identical reproduction of photographs of realistic objects when there are sufficient details in those photographs to make them unique.”⁷⁵ Thus, “[i]f Bridgewater had scanned Yankee’s labels into a computer and reproduced them exactly, it would have certainly infringed Yankee’s copyrights on those labels. Even if Bridgewater had taken its own photographs, but had arranged the subjects in a ‘nearly

⁷² The Ninth Circuit treats originality as a question of validity, but merger as an affirmative defense to infringement, to be raised by the defendant. See *Oracle Am., Inc. v. Google, Inc.*, 750 F.3d 1339 (Fed. Cir. 2014) (applying Ninth Circuit law); *Apple v. Formula Int’l*, 725 F.2d 521 (9th Cir. 1984). Nevertheless, the Ninth Circuit also maintains that merger is to be evaluated as of the time of creation of the work – meaning that the number of ways an idea can be expressed must be evaluated at the time the allegedly infringed work is created. *Oracle*, 750 F.3d at __. For a discussion of the confused and circuit-dependent nature of dissection in infringement, see Mark A. Lemley, *Our Bizarre System for Proving Copyright Infringement*, 57 J. COPYRIGHT SOC’Y 719 (2010).

⁷³ *Yankee Candle*, 259 F.3d at 34 (emphasis in original). On this approach, “the court may find that the idea and expression are so inseparable that copying of the work is not prohibited or that only exact reproduction of the work will justify finding of infringement.” *Id.* quoting *Concrete Mach. Co. v. Classic Lawn Ornaments*, 843 F.2d 600, 607 (1st Cir. 1988).

⁷⁴ *Yankee Candle*, 259 F.3d at 35.

⁷⁵ *Id.* at 36.

identical' manner to that of Yankee, a jury could have found the requisite showing of substantial similarity to support copyright infringement."⁷⁶

But doing so little work at the validity stage, and particularly treating these limiting doctrines as inputs to the infringement analysis, puts tremendous pressure on courts to tailor the scope of rights in a work at the infringement stage. As courts typically recognize, the scope of protection to which an author is entitled ought to match the size of her original contribution.⁷⁷ For that to work, validity and infringement have to be in alignment regarding which elements of a work deserve protection and the scope of protection to which a work is entitled.

In fact existing infringement doctrine creates a number of potential gaps in the fabric of the scope inquiry. First, because of the way we conduct the infringement inquiry, there is no guarantee the ordinary observer's determination of substantial similarity will be based on similarity to protectable elements.

There are two primary tests of infringement, both of which separate the question of actual copying from improper appropriation. Under the Second Circuit's approach in *Arnstein v. Porter*, to prove infringement the plaintiff must establish that "(a) that defendant copied from plaintiff's copyrighted work and (b) that the copying (assuming it to be proved) went to far as to constitute improper appropriation."⁷⁸ On the first question of actual copying, "analysis ('dissection') is relevant, and the testimony of experts may be received to aid the trier of the

⁷⁶ *Id.*

⁷⁷ See *Meshwerks, Inc. v. Toyota Motor Sales, U.S.A., Inc.*, 528 F.3d 1238, 1264 (10th Cir. 2008) ("So, in the case of photographs, for which Meshwerks' digital models were designed to serve as practically advantageous substitutes, authors are entitled to copyright protection only for the 'incremental contribution,' represented by their interpretation or expression of the objects of their attention.")

⁷⁸ *Arnstein v. Porter*, 154 F.2d 464, 468 (2d Cir. 1946).

facts. If evidence of access is absent, the similarities must be so striking as to preclude the possibility that plaintiff and defendant independently arrived at the same result.”⁷⁹ If actual copying is established, then the issue is “illicit copying” – what we call legal scope – and on that issue “the test is the response of the ordinary lay hearer” and dissection and expert testimony are irrelevant.⁸⁰

The other primary test is the Ninth Circuit’s, which refers to the two steps as “extrinsic” and “intrinsic” comparisons.⁸¹ Under the “extrinsic” test, a court must determine whether there is substantial similarity in general ideas, and it should do so not on the basis of the responses of the trier of fact, but on “specific criteria which can be listed and analyzed,” including the “type of artwork involved, the materials used, the subject matter, and the setting for the subject.”⁸² Analytic dissection and expert testimony are relevant to the extrinsic analysis, and this type of similarity “may often be decided as a matter of law.”⁸³ If the works are similar under the extrinsic test, then the question is whether there is substantial similarity of expression. This similarity is to be assessed under the “intrinsic test,” which focuses on the impressions of the “average reasonable reader and spectator.”⁸⁴ On this issue, analytic dissection and expert testimony are inappropriate.⁸⁵ Substantial similarity under the intrinsic test is a question of

⁷⁹ *Id.*

⁸⁰ *Id.* In some cases, the court allowed, “similarities between the plaintiff's and defendant's work are so extensive and striking as, without more, both to justify an inference of copying and to prove improper appropriation.” *Id.* at 468-69.

⁸¹ *Sid & Marty Krofft Television Prods., Inc. v. McDonald’s Corp.*, 562 F.2d 1157 (9th Cir. 1977).

⁸² *Id.* at 1164.

⁸³ *Id.*

⁸⁴ *Id.*

⁸⁵ *Id.*

fact; indeed, “satisfaction of the extrinsic test creates a triable issue of fact in a copyright action involving a literary work.”⁸⁶

These two formulations have at least one thing in common: both allow analytic dissection of a work to identify the protectable elements at the first stage, where the issue is actual copying, but reject it when the question is whether the copying was improper.⁸⁷ As a result, notwithstanding the frequency with which courts say that the plaintiff must show substantial similarity between the defendant’s work and protectable elements of the plaintiff’s work, nothing in the doctrinal formulation actually requires that comparison. In fact, courts have found infringement in a variety of questionable cases in which the similarities seem largely to have related to unprotectable elements.⁸⁸

Some courts have recognized the problem and tried to ameliorate it by departing from the *Arnstein* approach and allowing dissection, and in some cases even expert testimony, at the second step. As the Seventh Circuit said, “[w]hile dissection is generally disfavored, the ordinary observer test, in application, must take into account that the copyright laws preclude appropriation of only those elements of the work that are protected by copyright.”⁸⁹ Other courts have tried to focus the ordinary observer inquiry by having the court first identify which elements of the plaintiff’s work are protectable. In *Yankee Candle*, for example, the First Circuit said that, for purposes of evaluating substantial similarity, “the extent to which the [plaintiff’s

⁸⁶ *Shaw v. Lindheim*, 919 F.2d 1353, 1360 (9th Cir. 1990).

⁸⁷ One of us has previously characterized this approach as “exactly backwards.” Mark A. Lemley, *Our Bizarre System for Proving Copyright Infringement*, 57 J. COPYRIGHT SOC’Y 719 (2010).

⁸⁸ See, e.g., *World of Wonder v. Vector Intercontinental*, 1986 WL 15608 (N.D. Ohio Dec. 31, 1986) (finding that a tape that controlled the Teddy Ruxpin doll’s movements infringed plaintiff’s copyright in its original doll).

⁸⁹ *Atari, Inc., v. North American Phillips Consumer Electric Corp.*, 672 F.2d 607, 615 (7th Cir. 1982). See also, *Susan Wakeen Doll, Inc. v. Ashton Drake Galleries*, 272 F.3d 441, 451 (7th Cir. 2001) (noting, approvingly, that the jury had heard expert testimony regarding similarities).

work] contain[s] protected expression is a matter of law, determined by the court. Once this determination is made, the question of whether two works are substantially similar (and corresponding application of the ordinary observer test) is a matter for the trier of fact unless summary judgment is proper.”⁹⁰

Similarly in *Apple v. Microsoft*, the Ninth Circuit held that in a case involving computer software, once the plaintiff had satisfied the extrinsic test, a court should frame the comparison for purposes of the intrinsic test. “Using analytic dissection, and, if necessary, expert testimony, the court must determine whether any of the allegedly similar features are protected by copyright.”⁹¹ Then, “[h]aving dissected the alleged similarities and considered the range of possible expression, the court must define the scope of the plaintiff's copyright—that is, decide whether the work is entitled to ‘broad’ or ‘thin’ protection. Depending on the degree of protection, the court must set the appropriate standard for a subjective comparison of the works to determine whether, as a whole, they are sufficiently similar to support a finding of illicit copying.”⁹² In a later case the Ninth Circuit emphasized that, at least in software cases, “[a]nalytic dissection is relevant not only to the copying element of a copyright infringement claim, but also to the claim’s ownership element.”⁹³

Courts also sometimes ratchet up the level of similarity necessary to find infringement where copyright protection is supposed to be “thin.” In these cases, courts have required that the defendant’s work be not just substantially similar to the plaintiff’s, but “virtually

⁹⁰ *Yankee Candle* 259 F.3d at 34 n.5.

⁹¹ *Apple Computer, Inc. v. Microsoft Corp.*, 35 F.3d 1435, 1443 (9th Cir. 1994).

⁹² *Id.* See also *Brown Bag Software v. Symantec Corp.*, 960 F.2d 1465, 1476 (9th Cir. 1992) (approving of the district court’s dissection of the plaintiff’s work for the “purpose of determining whether similarities [between the programs] result from unprotectable [or protected] expression and emphasizing that)

⁹³

identical,”⁹⁴ or they have required substantial similarity from the perspective of the “more discerning observer,” rather than the “ordinary observer.”⁹⁵

Courts seem most eager to depart from the two-step process and allow dissection and expert testimony in cases involving software, reflecting concern that ordinary observers will have too much difficulty assessing similarity of such complex works.⁹⁶ Several courts have followed the Second Circuit’s abstraction-filtration-comparison approach from *Computer Associates v. Altai*, a particularly structured approach to substantial similarity under which a court first dissects the plaintiff’s work into elements at varying levels of abstraction, then filters out the unprotectable elements, and finally by compares the allegedly infringing work to the remaining “kernels” of creative expression.⁹⁷ But this approach seems to treat software as a special case. Elsewhere the notion that particular copyrightable elements should be flagged for purposes of comparison is in constant tension with the requirement that the works be compared “as a whole,” particularly in those cases that emphasize the “total look and feel” of the works.⁹⁸

⁹⁴ See, e.g., *Hoehling v. Universal City Studios*, 618 F.2d 972 (2d Cir. 1980); *Apple v. Microsoft*, 35 F.3d at 1443.

⁹⁵ See, e.g., *Boisson v. Banian, Ltd.*, 273 F.3d 262, 271 (2d Cir. 2001).

⁹⁶ See, e.g., *Whelan Assocs., Inc. v. Jaslow Dental Lab., Inc.*, 797 F.2d 1222, 1233 (3d Cir. 1986) (“We therefore join the growing number of courts which do not apply the ordinary observer test in copyright cases involving exceptionally difficult materials, like computer programs, but instead adopt a single substantial similarity inquiry according to which both lay and expert testimony would be admissible.”).

⁹⁷ *Computer Assocs. Intern., Inc. v. Altai, Inc.*, 982 F.2d 693, 706 (2d Cir. 1992). See also *Eng’g Dynamics, Inc. v. Structural Software, Inc.*, 26 F.3d 1335, 1342-43 (5th Cir. 1994); *Gates Rubber Co. v. Bando Chemical Indus., Ltd.*, 9 F.3d 823, 834-36 (10th Cir. 1993). On the consensus behind the *Altai* framework, see Mark A. Lemley, *Convergence in the Law of Software Copyright?*, 10 **High Technology Law Journal** 1 (1995).

⁹⁸ Courts seem particularly drawn to the “total feel” approach in cases involving visual works. See, e.g., *Tufenkian Import/Export Ventures, Inc. v. Einstein Moomjy, Inc.*, 338 F.3d 127, 134 (2d Cir. 2003) (“Essentially, the total-concept-and-feel locution functions as a reminder that, while the infringement analysis must begin by dissecting the copyrighted work into its component parts in order to clarify

Lack of clarity about whether and when the substantial similarity analysis will explicitly take scope into account is exacerbated by the fact the allocation of decisionmaking in copyright cases is remarkably unclear. Some courts treat copyrightability as a question of fact for purposes of assessing validity.⁹⁹ The Seventh Circuit treats it as a question of law.¹⁰⁰ The Ninth Circuit has issued conflicting decisions on the respective roles of judge and jury.¹⁰¹ Where validity and infringement are determined by different decisionmakers, there is no reason to be confident that the scope limitations presumed at the validity stage will in fact be reflected at the infringement stage.

Misalignment may arise even within the infringement analysis because allocation of decisionmaking between the two parts of the tests is also unclear. According to *Arnstein*, both actual copying and improper appropriation are issues of fact.”¹⁰² The *Yankee Candle* and *Apple v. Microsoft* approaches maintain the factfinder’s role in making the ultimate assessment of substantial similarity, but they require the court to frame the comparison at the improper appropriation (or intrinsic comparison) stage, implying either that dissection is for the court or that improper appropriation at least requires guidance from the court.

precisely what is not original, infringement analysis is not simply a matter of ascertaining similarity between components viewed in isolation.”); *Roth Greeting Cards v. United Card Co.*, 429 F.2d 1106 (9th Cir. 1970).

⁹⁹ *See, e.g.*, *Matthew Bender & Co., Inc. v. West Publ. Co.*, 158 F.3d 674, 681 (2d Cir. 1998) (“we treat the question of whether particular elements of a work demonstrate sufficient originality and creativity to warrant copyright protection as a question for the factfinder”).

¹⁰⁰ *Schrock v. Learning Curve Int’l, Inc.*, 586 F.3d 513, 517 (7th Cir. 2009) (“In this circuit, copyrightability is an issue of law for the court.”).

¹⁰¹ *Compare Ets-Hokin v. Skyy Spirits, Inc.*, 225 F.3d 1068, 1073 (9th Cir. 2000) (“Whether a particular photograph is protected by copyright law is a mixed question of law and fact, also subject to de novo review.”) *with* *North Coast Indus. v. Jason Maxwell, Inc.*, 972 F.2d 1031, 1034 (9th Cir. 1992) (treating the originality of the plaintiff’s work as a question of fact for the jury).

¹⁰² *Id.* at 469. *See also* *See Leigh v. Warner Bros., Inc.*, 212 F.3d 1210, 1213 (11th Cir. 2000) (“Copyright infringement is generally a question of fact for the jury to decide”).

The problems with the fracturing of these inquiries is worse when different decisionmakers are involved at the various stages, but we think the prospect for misalignment is real even when the same decisionmaker makes all of the determinations. Indeed, recent empirical work by Shyam Balganes, Irina Manta, and Tess Wilkinson-Ryan suggests that judgments of similarity may often be contaminated by information relating to the defendant's actual copying.¹⁰³ Specifically, Balganes et al find "an appreciable upward shift in subjects' assessments of similarity between the works" when they were "provided with additional information about the simple fact of copying or the creative effort that went into the protected work."¹⁰⁴ And if evidence of copying affects even the judgment of similarity, it's hard to believe that a decisionmaker who has already concluded that the defendant copied could focus the substantial similarity analysis on particular protectable elements rather than considering evidence of copying of unprotectable pieces as well.¹⁰⁵

While the errors in copyright largely run in the direction of overprotection because of insufficient focus on the protectable elements at the substantial similarity phase, sometimes

¹⁰³ Shyamkrishna Balganes, Irina Manta, & Tess Wilkinson-Ryan, *Judging Similarity*, 100 IOWA L. REV. 267 (2014).

¹⁰⁴ *Id.* at 271. The study's methodology assumed that the party assessing similarity would have encountered information about actual copying but would not actually have had to arrive at that conclusion herself. That arrangement obviously does not match the decisionmaking architecture in all jurisdictions. It seems reasonable, however, to conclude that the contamination effect might even be stronger when a particular decision-maker herself determined that the defendant had actually copied.

¹⁰⁵ In *Whelan* the court suggested that, where the same decisionmaker was involved at both stages of the substantial similarity inquiry, it might not matter whether expert testimony and dissection are technically relevant at the improper appropriation stage. According to the court, "the distinction between the two parts of the *Arnstein* test may be of doubtful value when the finder of fact is the same person for each step: that person has been exposed to expert evidence in the first step, yet she or he is supposed to ignore or 'forget' that evidence in analyzing the problem under the second step. Especially in complex cases, we doubt that the 'forgetting' can be effective when the expert testimony is essential to even the most fundamental understanding of the objects in question." *Whelan*, 797 F.2d at __. The Balganes study suggests the court was right to doubt the decisionmaker's ability to "forget," but that the problem forgetting is more likely to relate to evidence of actual copying.

that problem causes errors in the other direction. Courts have, for example, sometimes found merger despite the fact that there seemed to be many other ways to express the idea underlying the plaintiff's work. They have done so because of uncertainty about how to determine which of those alternatives would infringe, typically where the plaintiff has overclaimed. In *Herbert Rosenthal Jewelry Corp. v. Kalpakian*, for example, the court held that the plaintiff could not claim copyright in a jeweled bee pin because allowing protection would give it a monopoly on depicting bees in jeweled pins.



This has struck some observers as bizarre, because there are obviously many ways to design a jeweled bee pin. But we think that criticism misses the obvious point that the plaintiff asked the court to recognize rights of astonishing scope. As the court said,

The breadth of this claim is evident. For example, while a photograph of the copyrighted bee pin attached to the complaint depicts a bee with nineteen small white jewels on its back, plaintiff argues that its copyright is infringed by defendants' entire line of a score or more jeweled bees in three sizes decorated with from nine to thirty jewels of various sizes, kinds, and colors.

Although plaintiff's counsel asserted that the originality of plaintiff's bee pin lay in a particular arrangement of jewels on the top of the pin, the elements of this arrangement were never identified. Defendants' witnesses testified that the 'arrangement' was simply a function of the size and form of the bee pin and the size

of the jewels used. Plaintiff's counsel, repeatedly pressed by the district judge, was unable to suggest how jewels might be placed on the back of a pin in the shape of a bee without infringing plaintiff's copyright. He eventually conceded, 'not being a jeweler, I can't conceive of how he might rearrange the design so it is dissimilar.'¹⁰⁶

As the court rightly recognized, "[i]f plaintiff's understanding of its rights were correct, its copyright would effectively prevent others from engaging in the business of manufacturing and selling jeweled bees."¹⁰⁷ In an ideal world, the court would have had at its disposal a mechanism by which the protectable elements of the plaintiff's bee pins could have been identified, and the court then could have resolved the particular case by comparing the defendant's bee pins to those protectable elements. In the absence of a reliable mechanism of that sort, the court felt it had no choice but to declare the bee pins uncopyrightable.

2. *Patent*

As we will see in the next Part, patent law does more than its sister doctrines to try to evaluate the scope of a patent right in an integrated fashion. The patent claims themselves are an effort to define the scope of the legal right *ex ante*. And the pretrial *Markman* hearing requires the parties to resolve the scope of the patent right before either validity or infringement is established.

Nonetheless, patent law too has gaps that result from its separation of validity and infringement. The first and most obvious of these gaps involves defendants who practice a technology that is already in the prior art. Since patent law requires that an invention be novel and nonobvious, it should be clear that a patent owner is not entitled to sue someone for using technology that existed before she ever "invented" it. Nonetheless, the Federal Circuit has

¹⁰⁶ 446 F.2d 738, 740 (9th Cir. 1971)

¹⁰⁷ *Id.*

repeatedly held that there is no “practicing the prior art” defense in patent law.¹⁰⁸ As Timothy Lau has ably explained,¹⁰⁹ this rather bizarre rule results from the separation of patent law doctrines into validity and infringement. Because it is the patent owner’s burden to prove infringement, but the defendant’s burden to prove invalidity by clear and convincing evidence, the court worries that defendants can skip on their burden of proof that the defendant’s technology was in fact in the prior art.¹¹⁰ But the fact that the courts will not recognize practicing the prior art as a defense means that defendants who are in fact engaged in what should be protected activity do not always have a fair opportunity to prove it. A district court may construe the patent claims for infringement purposes without focusing on the possibility that a claim construed that broadly might be invalid.¹¹¹ And when the issue of validity does arise, district courts and juries may be reluctant (even apart from the high standard of proof) to hold the patent altogether invalid.

Patent owners can and do exploit this gap with some regularity. Relying not only on the higher standard of proof for invalidity than non-infringement, but also on the demonstrated

¹⁰⁸ See, e.g., *Kinetic Concepts, Inc. v. Blue Sky Med. Grp., Inc.*, 554 F.3d 1010, 1025 (Fed. Cir. 2009) (“[P]racticing the prior art’ is not a defense to patent infringement.”).

¹⁰⁹ Timothy Lau, *Defensive Use of Prior Art to Exonerate Accused Acts in US and Chinese Patent Litigation*, 27 **Colum. J. Asian L.** 51 (2013).

¹¹⁰ Lemley, *Point of Novelty*, *supra* note __, at __.

¹¹¹ While it was traditionally a rule of patent claim construction that claims were to be construed to preserve their validity, that canon is in disrepute in the Federal Circuit right now. *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc) (dismissing that canon as one “of limited utility in any event” and saying that “we have not applied that principle broadly”). The reason once again can be traced to a scope gap – different decisionmakers evaluate claim construction and infringement, and they do so at different times. The Federal Circuit was concerned about treading on the province of the jury to evaluate validity. But the result has been that claim construction and infringement are assessed without a clear idea of whether the patentee is seeking excessive scope.

reluctance of juries to invalidate patents,¹¹² patent owners are often willing to trade a greater risk of eventual invalidity to gain a broad scope for their (possibly invalid) patent claims. Sometimes this gamble fails. In *Liebel-Flarsheim v. Medrad*, for instance, the patentee succeeded in 2004 in persuading the court to construe its claim to be much broader than the thing it had actually invented,¹¹³ only to have the claim ultimately invalidated as insufficiently supported by the patent disclosure.¹¹⁴ But more often it succeeds, either in court or in settlement before trial.¹¹⁵ This is a particular problem with “bottom-feeder” patent trolls who are only interested in coercing a nuisance-value settlement based on the cost and uncertainty of litigation.¹¹⁶ The practical effect of not having a practicing the prior art defense is that some defendants who are actually using old technology are nonetheless held liable, and more are forced to pay settlements to avoid the risk of losing a case that in theory they should win.

A final example of a scope gap in patent law operates against patentees rather than for them. Patent law is designed to cover new inventions, but not to preempt abstract ideas altogether.¹¹⁷ Patentees in computer software, following the playbook that has worked for them in the practicing the prior art example, have sought broader and broader interpretations

¹¹² John R. Allison & Mark A. Lemley, *Empirical Evidence on the Validity of Litigated Patents*, 26 **AIPLA Q.J.** 185 (1998) (finding that juries uphold patents 67% of the time, while judges do so only 55% of the time at trial). More recent evidence suggests that the gap has disappeared, though that seems to be driven primarily by ANDA cases, which are decided by judges, not juries. John R. Allison et al., *Understanding the Realities of Modern Patent Litigation*, 92 **Tex. L. Rev.** 1769 (2014).

¹¹³ *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898 (Fed. Cir. 2004).

¹¹⁴ *Liebel-Flarsheim Co. v. Medrad, Inc.*, 481 F.3d 1371 (Fed. Cir. 2007).

¹¹⁵ The overwhelming majority of patent cases settle before trial. *See, e.g.*, John R. Allison et al., *Patent Quality and Settlement Among Repeat Patent Litigants*, 99 **Geo. L.J.** 677 (2011) (finding between 85 and 90% of cases settle); Jay P. Kesan & Gwendolyn G. Ball, *How Are Patent Cases Resolved? An Empirical Examination of the Adjudication and Settlement of Patent Disputes*, 84 **Wash. U. L.Q.** 237 (2006).

¹¹⁶ For a discussion of the bottom-feeder troll business model, see Mark A. Lemley & A. Douglas Melamed, *Missing the Forest for the Trolls*, 113 **Colum. L. Rev.** 2117 (2013).

¹¹⁷ *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S.Ct. 2347 (2014); *Bilski v. Kappos*, 561 U.S. 593 (2010).

of their patent claims, to the point where many claims are not limited either to a particular computer algorithm or approach or to a particular hardware implementation. Rather, they claim any computer configured in any way to achieve a particular result.¹¹⁸ But in this case, the backlash against that functional claiming has been spectacular. The Supreme Court held in 2014 that claims of this sort are not patent-eligible at all,¹¹⁹ and the lower courts have already invalidated dozens of patents on this ground.¹²⁰ The fact that the scope determination got pushed into validity made it an all-or-nothing exercise, and in this case patentees end up getting nothing as a result of their overreaching, even if they would have a valid claim to a particular software algorithm.

3. Trademark

Trademark law has, relative to copyright, several validity doctrines with some bite. Most importantly for our purposes, valid marks must be distinctive and non-functional.¹²¹ But courts tend to rely primarily on the likelihood of confusion factors and on certain defendant-specific doctrines like descriptive fair use to manage the scope of trademark rights. Validity and infringement are interrelated here. Distinctiveness, trademark law's core validity concept, significantly affects scope through the likelihood of confusion factors precisely because

¹¹⁸ See Mark A. Lemley, *Software Patents and the Return of Functional Claiming*, 2013 **Wis. L. Rev.** 905 (discussing the breadth of this phenomenon and the problems it causes); Kevin Emerson Collins, *Patent Law's Functionality Malfunction and the Problem of Overbread, Functional Software Patents*, 90 **Wash. U. L.Q.** 1399 (2013); Kyle Logan, *Step-Plus-Function Claims: An Analysis of Federal Circuit Law*, 24 **Fordham Intell. Prop., Med. & Ent. L.J.** 907 (2014) (same).

¹¹⁹ *Alice*, 134 S.Ct. at __.

¹²⁰ See, e.g., *Ultramercial, Inc. v. Hulu LLC*, 2014 WL 5904902 (Fed. Cir. Nov. 14, 2014); *buySAFE, Inc. v. Google Inc.*, 765 F.3d 1350 (Fed. Cir. 2014); *Digitech Image Techs., LLC v. Electronics for Imaging, Inc.*, 758 F.3d 1344 (Fed. Cir. 2014).

¹²¹ 15 U.S.C. §1052.

distinctiveness can only be assessed in relation to particular goods or services.¹²² Thus, while trademark rights are no longer strictly limited to the goods for which the plaintiff uses the mark,¹²³ those goods continue to anchor the likelihood of confusion analysis through the similarity of goods factor.¹²⁴

But similarity of the goods is only one dimension of relevant similarity, and infringement is determined by evaluating the confusion factors flexibly, with no one factor dispositive.¹²⁵ In general we can say that the more similar the mark and the more similar the goods or services, the more likely the use infringes, but there is no definitive threshold level of similarity of mark or of goods that makes another's use non-infringing. And, importantly from our perspective, while the confusion factors require assessment of confusion as a result of the defendant's use of a mark, and while courts often focus on features of the relevant marks as a result, nothing in

¹²² Courts determine the distinctiveness of word marks by placing them in categories along the *Abercrombie* spectrum according to the relationship between the mark and the goods. See *Abercrombie & Fitch Co. v. Hunting World, Inc.*, 537 F.2d 4 (2d Cir. 1976).

¹²³ See, e.g., Mark A. Lemley & Mark P. McKenna, *Owning Mark(et)s*, 109 **Mich. L. Rev.** 137 (2010).

¹²⁴ The well-known *Polaroid* factors were developed explicitly to gauge the likelihood of confusion in the case of noncompeting products. See *Polaroid Corp. v. Polarad Elecs. Corp.*, 287 F.2d 492, 495 (2d Cir. 1961) ("Where the products are different, the prior owner's chance of success is a function of many variables: the strength of his mark, the degree of similarity between the two marks, the proximity of the products, the likelihood that the prior owner will bridge the gap, actual confusion, and the reciprocal of defendant's good faith in adopting its own mark, the quality of defendant's product, and the sophistication of the buyers."). Each of the courts of appeals has its own, non-exhaustive set of likelihood of confusion factors, though there is substantial overlap among them. See RESTATEMENT (THIRD) OF UNFAIR COMPETITION §§ 20–23 (1995) (identifying and cataloging eight foundational factors).

¹²⁵ *Nora Beverages, Inc. v. Perrier Group, Inc.*, 269 F.3d 114, 119 (2d Cir. 2001) (noting that although the *Polaroid* factors are important in determining infringement, no one factor is dispositive and courts should focus on "the ultimate question of whether consumers are likely to be confused"). *But cf.* Barton Beebe, *An Empirical Study of the Multifactor Tests for Trademark Infringement*, 95 CALIF. L. REV. 1581 (2006) (concluding that a finding that the similarity of the marks factor does not favor a likelihood of confusion is, in practice, dispositive, and a finding that the proximity of the goods factor does not favor a likelihood of confusion is nearly dispositive; also concluding that a finding of bad faith intent is in fact dispositive).

the factors explicitly seeks to ascertain whether the features of the defendant's mark that are causing the confusion are features that define the plaintiff's protectable interest.

This isn't to say that the confusion analysis doesn't in some ways take scope into account. In fact, it is black-letter law that the amount of similarity necessary to support a likelihood of confusion finding is a function of the strength of the plaintiff's trademark.¹²⁶ Strong trademarks get broader protection – have greater scope.¹²⁷ And while strength relates primarily to consumer recognition of a mark, in assessing strength many courts consider whether others in the relevant market also use the claimed mark for the purpose of describing or adorning their goods or services.¹²⁸ When a number of parties are using the same or a similar mark, each

¹²⁶ “The strength of a trademark encompasses two different concepts, both of which relate significantly to likelihood of consumer confusion. The first and most important is inherent strength, also called “inherent distinctiveness.” This inquiry distinguishes between, on the one hand, inherently distinctive marks—marks that are arbitrary or fanciful in relation to the products (or services) on which they are used—and, on the other hand, marks that are generic, descriptive or suggestive as to those goods. The former are the strong marks. The second sense of the concept of strength of a mark is “acquired distinctiveness,” *i.e.*, fame, or the extent to which prominent use of the mark in commerce has resulted in a high degree of consumer recognition.” *Virgin Enters. Ltd. v. Nawab*, 335 F.3d 141, __ (2d Cir. 2003).

¹²⁷ *Id.* at __ (“the law accords broad, muscular protection to marks that are arbitrary or fanciful in relation to the products on which they are used, and lesser protection, or no protection at all, to marks consisting of words that identify or describe the goods or their attributes”).

¹²⁸ See *First Sav. Bank, F.S.B. v. First Bank Sys., Inc.*, 101 F.3d 645, 654 (10th Cir. 1996) (“[W]e recognized the well-established principle that extensive third-party use of the disputed term indicates that the term itself deserves only weak protection”). When assessing strength in the likelihood of confusion contexts, courts have sometimes looked more broadly, viewing as relevant the extent to which a mark has been used by others *in any market*. *Sun Banks of Florida, Inc. v. Sun Federal Sav. and Loan Ass'n*, 651 F.2d 311 (5th Cir. 1981) (“we find the extensive third-party use of the word ‘Sun’ impressive evidence that there would be no likelihood of confusion between Sun Banks and Sun Federal”); *Armco, Inc. v. Armco Burglar Alarm Co.*, 693 F.2d 1155, 1159-1160 (5th Cir. 1982) (noting that absence of third-party use contributes to the strength of a trademark); *Amstar Corp. v. Domino's Pizza, Inc.*, 615 F.2d 252, 259-260 (5th Cir. 1980) (finding extensive third-party uses of “Domino” limited protection of plaintiff's mark outside the uses to which it had already put its mark). Sara Stadler has thus argued that uniqueness is really what the courts are interested in when they talk about strength. Sara Stadler, *The Wages of Ubiquity in Trademark Law*, 88 **Iowa L. Rev.** 731 (2003).

party's rights are narrow.¹²⁹ In *Eastland Music v. Lionsgate*, for example, the court noted the extensive prior use of “the phrase 50/50 or a sound alike variant (50-50, fifty-fifty, fifty/fifty)” as the “title of intellectual property” and therefore held that, by entering such a crowded field, Eastland's rights in its Phifty-50 mark, which it used for a rap duo, were “weak and narrow.”¹³⁰

Courts have been most successful in aligning scope at the validity and infringement stages when, as in *Eastland*, they expressly consider those two issues together and specifically describe the aspects of the plaintiff's mark that warrant protection. In *Star Industries v. Bacardi*, the court found Star Industries' “O” design inherently distinctive because it “had sufficient shape and color stylization to render it slightly more than a simply linear representation of an ellipse or the letter ‘O’” and was “a unique design in the alcoholic beverage industry at the time it was introduced.”¹³¹ But, the court noted, “the extent of stylization was marginal at best. The outline of the “O,” though not uniform, is ordinary in its slightly varying width, and the interior and exterior borders are also ordinary.”¹³² As a result, Star Industries had only a “‘thin’ or weak mark, which [was] entitled to only limited protection.”¹³³ Having called out the specific aspects of Star's “O” design that made it protectable, the court could compare Bardardi's “O” with

¹²⁹ See 2 J. Thomas McCarthy, *McCarthy on Trademarks and Unfair Competition* § 11:85 (“In a “crowded” field of look-alike marks, each member of the crowd is relatively “weak” in its ability to prevent use by others in the crowd.”).

¹³⁰ *Eastland Music Group, LLC v. Lionsgate Ent., Inc.*, 707 F.3d 869, 871 (7th Cir. 2013). To our point about the difficulty of separating issues between validity and infringement, the Seventh Circuit also noted that the “principal reason [Phifty-50] was registrable is that it is a made-up homophone of a familiar phrase, which in ordinary usage is suggestive or descriptive.” *Id.* Implying then that perhaps the issue was actually distinctiveness, the court said “[i]t takes a powerful showing of association between such an expression and a particular producer of goods to establish a trademark claim—and Eastland Music has not attempted such a showing.”

¹³¹ *Star Industries, Inc. v. Bacardi & Co. Ltd.*, 412 F.3d 373, 383 (2d Cir. 2005).

¹³² *Id.*

¹³³ *Id.*

those specific features in mind. Unsurprisingly, the court then found that Bacardi’s orange “O” design was not likely to cause confusion.



But courts have had a much easier time doing this with relatively simple marks – single letter designs like a stylized “O” or combinations of letters. Thus we can imagine a court dealing with Lagunitas Brewing’s recent suit against Sierra Nevada. Lagunitas claimed that Sierra Nevada infringed its rights in a “family of IPA marks.”¹³⁴ Lagunitas admitted that other brewers had adopted “the shorthand parlance of ‘IPA’ to market their India Pale Ales,” and indeed the “IPA” designation is in widespread use by a variety of different brewers. The term IPA itself is therefore likely generic and unprotectable.

¹³⁴ Lagunitas Brewing Co. v. Sierra Nevada Brewing Co., ¶11, No. 3:15-cv-00153 (N.D. Cal.). The complaint has since been withdrawn.



Nevertheless, Lagunitas insisted that the “unique ‘IPA’ lettering used in the Lagunitas ‘IPA’ Family of Trademarks has a distinctive serif font, distinctive kerning (or letter spacing), between the ‘P’ and the ‘A’, slightly aged or weathered look, with uneven areas on each of the letters, and the elimination of any periods between the letters.”¹³⁵



¹³⁵ Id. at ¶16.

According to Lagunitas, Sierra Nevada’s new Hop Hunter IPA packaging infringed Lagunitas’ family of IPA marks because the Sierra Nevada

design uses all capital, large, bold, black “IPA” lettering in a font selection that is remarkably similar to the iconic Lagunitas design and, indeed, is the central and most prominent feature of the new Sierra Nevada design, emulating the iconic Lagunitas Family of IPA Trademarks. [The design] even uses the kerning between the “P” and the “A” characters that is distinctive to the Lagunitas Family of IPA Trademarks, and in the case of the “neck” label, the proposed Sierra Nevada “IPA” lettering is depicted with the aged or weathered look distinctive to the iconic Lagunitas IPA Family of Trademarks.

Once we look not just at the plaintiff’s and defendant’s marks but at the other uses of IPA, it becomes clear that any protectable element in the IPA mark is extremely narrow. But a jury that considers only infringement might never see, much less understand, those limitations.

Courts have an especially difficult time managing the scope of complex marks with multiple elements, including trade dress. One reason is the greater difficulty defining the mark in these cases. Take, for example, the recent decision in *Reynolds Consumer Prods. v. Handi-Foil Corp.*¹³⁶ In that case, Reynolds objected to the packaging of two Handi-Foil aluminum foil products. Reynolds claimed to own rights in the “overall look, feel and commercial impression of its Reynolds Wrap packaging design.”¹³⁷ Specifically, Reynolds identified *at least* twelve elements that make up this common law trade dress:

(a) the color scheme; (b) the use of the color scheme; (c) the use of prominent lettering within the blue section; (d) the use of silver bands to separate the blue and pink sections; (e) the placement of the quantity information; (f) the inclusion of the “made in the U.S.A.” lettering; (g) the repetition of the color scheme and type on the ends of the boxes; (h) the “press here to lock” feature at the ends of the boxes; (i) the use of graphics with how-to information; (j) the “Lift” graphic; (k)

¹³⁶ 2014 WL 3615853 (E.D. Va. 2014).

¹³⁷ *Id.* at *7

the positioning of the brand name on the top flap of the box; and (1) the color yellow, placement, and text used to caution the consumer.¹³⁸

Though it noted the maxim that trade dress with more elements tends to have narrower scope, the court never addressed validity or attempted to identify the features that made the Reynolds trade dress protectable. It simply engaged in a side-by-side comparison between Handi-Foil's and Reynolds' packages, which was enough for the court to conclude that "the similarity between the overall impressions" was "striking."¹³⁹



In fact, the court thought the similarities were striking "even if the boxes' color schemes [were] put aside."¹⁴⁰ What were the damning similarities?

¹³⁸ Id.

¹³⁹ Id. at *9.

¹⁴⁰ Id.

the two boxes [on the bottom] both say “non-stick” and “heavy duty.”¹⁴¹ The Reynolds box says “foods lift right off!” and the Handi-Foil box says “Food Easily Lifts Off!” Both boxes place the (identical) square footage on the right end of the box, with the metric conversions typed neatly below. Additionally, the two-dimensional images above cannot capture the similarity of the boxes' side and end panels, all of which bear striking semblance. Add to these characteristics the “Made in USA” language on the right portion of the boxes in Example No. 1 ...¹⁴²

These elements of similarity, and the court’s belief that Handi-Foil attempted to mimic the Reynolds Wrap box as it tried to enter the aluminum foil market, convinced the court of the reasonableness of the jury's trade dress verdict. In fact, according to the court, “any other finding may well have been unreasonable.”¹⁴³

The problem with this conclusion is that the elements of similarity called out by the court were not even elements of the trade dress articulated by Reynolds, very likely because those elements almost certainly were not elements Reynolds was entitled to own. Phrases like “Food Easily Lifts Off” and “Made in the USA” are clearly descriptive, so any rights Reynolds owned in relation to the phrases must have been related to the particular stylization, which Handi-Foil did not copy. When one limits the trade dress in the Reynolds Wrap packaging to only the sorts of things they are legally entitled to own, the similarities disappear. But because the court treated infringement separately from the question of validity, it reached a clearly incorrect result. This kind of gap is the result of separation of validity from infringement and particularly the lack of any integrated mechanism by which to delineate the proper scope of Reynolds’ protection. Indeed, whether any of the similarities ought to have been relevant to a confusion

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.*

analysis depends on the scope of Reynolds' rights, an issue which the court never even engaged.

Many courts have responded to this challenge in trade dress cases by requiring claimants to identify the elements of the claimed trade dress.¹⁴⁴ As these courts recognize, it is impossible to determine the scope of a party's rights without first definitively ascertaining the claimed property. But as the *Reynolds* case demonstrates, articulating the elements of the trade dress is not sufficient, because courts are reluctant to identify specifically which of those elements triggers protectability.¹⁴⁵ Especially with trade dress, courts are often concerned that, by highlighting particular elements, a factfinder might lose track of the totality of the trade dress and "miss an overall similarity."¹⁴⁶

The risk in refusing to highlight particular features is that similarity judgments will, in fact, be driven by similarity of the unprotectable features. In theory a court could guard against this by requiring a well-constructed survey that used as a control the closest non-infringing substitute, thereby differentiating confusion that resulted from the protectable elements from any other form of confusion. But in practice there are several problems with that approach. First, Barton Beebe's empirical research suggests courts don't often rely on surveys,

¹⁴⁴ See, e.g., *General Motors Corp. v. Lanard Toys, Inc.*, 468 F.3d 405, 415 (6th Cir. 2006) ("In requiring a list of discrete elements, we are looking to avoid vague and indeterminate references to the overall appearance or look of plaintiff's packaging."); *Yurman Design, Inc. v. PAJ, Inc.*, 262 F.3d 101-116-17 (2d Cir. 2001) ("We hold that a plaintiff seeking to protect its trade dress in a line of products must articulate the design elements that compose the trade dress.").

¹⁴⁵ See *Kendall-Jackson Winery, Ltd. v. E. & J. Gallo Winery*, 150 F.3d 1042, 1050 (9th Cir. 1998) ("[T]he proper enquiry is not whether individual features of a product are functional or non-distinctive but whether the whole collection of features taken together are functional or nondistinctive.").

¹⁴⁶ *August Storck K.G. v. Nabisco, Inc.*, 59 F.3d 616, 620 (7th Cir. 1995). This is simply an application of the familiar anti-dissection rule, under which "a composite mark is tested for its validity and distinctiveness by looking at it as a whole, rather than dissecting it into its component parts." McCarthy § 11:27.

emphasizing them only to support conclusions they have reached for other reasons.¹⁴⁷ Second, and probably more importantly, one would have to identify the protectable elements of the trade dress and differentiate them from unprotectable elements even to construct the kind of survey we have in mind, where the closest non-infringing substitute is used as the control. Courts' reluctance to define the scope of the trade dress therefore infects their ability to evaluate the quality of a control.

Take, for example, *Gucci v. Guess?*, in which Gucci claimed that a variety of Guess? products infringed its Repeating GG Pattern trade dress, which consisted of “a pair of inward facing, inverted G's set at the corners of a repeating, diamond-shaped pattern connected by two dots forming straight diagonal lines.”¹⁴⁸ The “Diamond Motif Trade Dress [was] this pattern executed on canvas in a brown/beige colorway, with pinpoint “shading” within the Gs.”¹⁴⁹

Clearly Guess?'s design shared some of those features, particularly the use of a diamond shaped pattern connected by Gs, canvas execution in a brown/beige colorway, with pinpoint shading within the Gs:

¹⁴⁷ See Barton Beebe, *An Empirical Study of the Multifactor Tests for Trademark Infringement*, 95 Cal. L. Rev. 1581, 1641-42 (2006).

¹⁴⁸ *Gucci Am., Inc. v. Guess?, Inc.*, 868 F.Supp.2d 207, 218-19 (S.D.N.Y. 2012)

¹⁴⁹ *Id.*

<u>Gucci's Repeating GG Pattern/Diamond Motif Trade Dress</u>	<u>Guess's Quattro G Pattern</u>
	

Thus, standing alone, the two designs no doubt look quite similar – similar enough that one might be concerned about confusion. But comparison of only these two designs would be highly misleading, since there were at the time of Guess's use many other bags on the market that shared one or more of those features. In particular, other bags featured diamond-shaped patterns, canvas execution, and/or the brown/beige colorway:



	bags.html	Dooney & Bourke Signature Quilt Collection (since at least 2005)
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Despite these co-existing designs, the court found “that there is a likelihood of confusion between the Diamond Motif Trade Dress and the Quattro G Pattern, when it is rendered in brown/beige colorways.”¹⁵⁰ Much of the court’s conclusion might be explained by its finding that Guess? had intentionally copied the Repeating GG Pattern and the Diamond Motif Trade Dress, a finding it based on the fact that Guess? had sent its manufacturers copies of the Gucci design and asked them to tweak the design to make it more similar. But the court also was influenced by a survey that perfectly illustrates our concern. As you can see below, Gucci’s survey expert used a modified version of an actual Guess? bag as the test bag (modified to remove the central striped element, because Gucci separately claimed the stripe as a trademark). The control, however, changed virtually everything – the color, the orientation of the logos on the bag, and even the design of the interlocking 4 G’s on Guess?’s bag (which, incidentally, is the Guess? Quattro G trademark).



Actual Guess Bag



Mantis Test Bag



Mantis Control Bag

¹⁵⁰ Id. at 248.

As it turned out, more people believed Gucci was the source of the test bag than the control bag – a result that should surprise no one, given how different the control bag looks.¹⁵¹ But there is no reason to think any confusion regarding the source of the test bag was a result of the protectable aspects of Gucci’s design. Indeed, it’s entirely possible the respondents simply believed that any bag with a brown/beige colorway and logos arranged on the diagonal came from Gucci.

Perhaps because they are cognizant of the difficulties managing scope at the infringement stage, courts concerns about scope sometimes affect their assessments of validity. In some trade dress cases, for example, courts have ratcheted up the secondary meaning requirement, in particular demanding more than the sort of commercial success evidence courts often accept in word mark cases. In *Yankee Candle*, for example, the court refused to recognize any rights in the common features of Yankee’s candle labels, which it described as “essentially a combination of functional and common features” and subjected to a rigorous secondary meaning analysis.¹⁵² This kind of concern even works at the wholesale level, especially with regard to trade dress. The Supreme Court’s *Wal-Mart* decision, under which product configuration can never be considered inherently distinctive, was based in part on the

¹⁵¹ Remarkably, the court found infringement despite its conclusion that, combining several surveys, the “maximum level of confusion amongst casual observers in the post-sale setting” was just 5.8 percent. *Id.*

¹⁵² *Yankee Candle Co., Inc. v. Bridgewater Candle Co., LLC*, 259 F.3d 25, 44 (1st Cir. 2001) (requiring more than “evidence of the pervasiveness of the trade dress,” noting that anything less would “provide trade dress protection for any successful product”).

Court's concerns about overclaiming under a rule that allowed claims to proceed on the basis of alleged inherent distinctiveness.¹⁵³

In other cases, courts' concerns about inability to appropriately cabin a party's rights leads them to refuse to recognize IP rights at all because the plaintiff seems to be overclaiming. In *Wallace Int'l v. Godinger Silver Art Co.*, for example, the court refused to recognize rights in Wallace's claimed Baroque-style silverware design. It did so on the ground the design was aesthetically functional, but it seems clear to us that the court believed the real problem was one of scope: "Of course, if Wallace were able to show secondary meaning in a precise expression of baroque style, competitors might be excluded from using an identical or virtually identical design."¹⁵⁴ In other words, at the level of "Baroque-style silverware," Wallace's design might not have secondary meaning, and it surely would have extended Wallace's rights to designs desired by consumers primarily for their aesthetic value. If Wallace had claimed narrowly, both problems might have been averted. But since Wallace either would not or could not do so, it had no rights at all.

While, as these cases suggest, courts in trademark cases are sometimes unwilling to recognize rights when they are concerned about scope, in other cases courts are more comfortable finding non-infringement. That is particularly so where the tool for finding

¹⁵³ *Wal-Mart Stores, Inc. v. Samara Bros.*, 529 U.S. 205, 213-14 (2000) (noting the lack of clarity in tests of inherent distinctiveness and the "unlikelihood of inherently source-identifying design" and therefore declaring inherent distinctiveness for product design "not worth the candle").

¹⁵⁴ See *Wallace Int'l Silversmiths, Inc. v. Godinger Silver Art Co.*, 916 F.2d 76, 82 (2d Cir. 1990) ("Of course, if Wallace were able to show secondary meaning in a precise expression of baroque style, competitors might be excluded from using an identical or virtually identical design."), *abrogated on other grounds by Knitwaves, Inc. v. Lollytogs Ltd.*, 71 F.3d 996 (2d Cir. 1995).

invalidity strikes courts as cutting too broadly, since they understand the relevant invalidity doctrine (most often, functionality) to render the claimed mark unenforceable in any case.

Particularly in aesthetic functionality cases, courts have sometimes been reluctant to reach that conclusion. In *Louboutin v. Yves Saint Laurent*,¹⁵⁵ for example, the Second Circuit seemed to recognize that consumers might want, and competitors might therefore need, red-soled shoes for non-source-related reasons. But rather than finding the red soles unprotectable on that basis, the court fumbled around, suggesting that aesthetic functionality could be considered only *after* resolving all other issues of protectability and confusion,¹⁵⁶ and only through a “fact-specific inquiry” and never by “per se rules.”¹⁵⁷ It then dodged the question entirely by construing Louboutin’s mark narrowly to cover only contrasting red outsoles, and not all-red shoes like those Yves Saint Laurent sold.¹⁵⁸ Rather than invalidating the mark, it limited the scope of Louboutin’s rights and found non-infringement.

But unlike *Louboutin*, where the court found another route to deny recovery to the plaintiff, in many cases courts’ concerns about the consequences of using validity doctrines leaves them without a tool even to avoid enforcement against a particular defendant who has not done anything the law legitimately prohibits. In *Au-Tomotive Gold, Inc. v. Volkswagen of America, Inc.*, for example, the defendant wanted to use the Volkswagen logo on key chains and license plate covers, which it plausibly contended consumers wanted to match their cars.¹⁵⁹

155. *Christian Louboutin S.A. v. Yves Saint Laurent Am. Holding, Inc.*, 696 F.3d 206 (2d Cir. 2012).

156. *See Louboutin*, 696 F.3d at 216–17.

157. *See id.* at 222–23.

158. *Id.* at 228.

159. *Au-Tomotive Gold, Inc. v. Volkswagen of Am., Inc.*, 457 F.3d 1062, 1065 (9th Cir. 2006).

Though the court acknowledged that this was possible,¹⁶⁰ it could not bring itself to find that the VW logos were functional, largely because it felt that finding would compel the conclusion that VW owned no rights in the VW logos for any purposes, including for when used to designate the source of Volkswagen’s vehicles.¹⁶¹ Thus, the court found the defendant liable for a use trademark law should not prohibit as a matter of legal scope because the tool it had available to it swept too broadly.

Similarly in *Rosetta Stone v. Google Inc.*, the Fourth Circuit held that Google could face trademark liability for the automatic operation of its AdWords feature, which showed people ads they might be interested in based on the search terms they typed into Google. The district court held that while Google “used” the mark in a technical sense, it did so in a way that took advantage of its function, not as a trademark. But the Fourth Circuit rejected that conclusion, deciding that the tool chosen to achieve that end – functionality – was an all-or-nothing validity rule and could not be used to calibrate the scope of Rosetta Stone’s rights in its mark.¹⁶²

Similarly, in the Betty Boop case, the Ninth Circuit originally held that a defendant could not be

160. *Id.* at 1067 (“[c]onsumers sometimes buy products bearing marks such as the Nike Swoosh, the Playboy bunny ears, the Mercedes tri-point star, the Ferrari stallion, and countless sports franchise logos, for the appeal of the mark itself, without regard to whether it signifies the origin or sponsorship of the product”).

161. One of us (McKenna) has previously argued that aesthetic functionality need not have this all or nothing character – that courts could find that particularly uses were for their aesthetic function and thereby insulate the defendant from liability without declaring the mark entirely invalid. See William A. McGeeveran & Mark P. McKenna, *Confusion Isn’t Everything*, 89 NOTRE DAME L. REV. 253 (2013); Mark P. McKenna, *(Dys)Functionality*, 48 HOUSTON L. REV. 823 (2012). The other of us (Lemley) has argued that such uses (for non-trademark purposes) should be deemed non-infringing because only trademark uses can infringe. Stacey L. Dogan & Mark A. Lemley, *Grounding Trademark Law Through Trademark Use*, 92 IOWA L. REV. 1669 (2007). While these arguments differ in some important respects, both are efforts to delineate the scope of trademark rights for marks that pass the validity threshold.

¹⁶² *Rosetta Stone Ltd. v. Google, Inc.*, 676 F.3d 144 (4th Cir. 2012) (“Once it is determined that the product feature – the word mark ROSETTA STONE in this case – is not functional, then the functionality doctrine has no application, and it is irrelevant whether Google’s computer program functions”).

liable for putting a picture of Betty Boop on shirts, because it was the image of Betty Boop, not the trademark, they were appropriating, and trademark law is not supposed to give ownership over the image itself.¹⁶³ The court subsequently reversed itself, however, again concluding that the tool it saw as available to it – the functionality defense – could not be used to calibrate the proper scope of the plaintiff’s right.¹⁶⁴

We have argued elsewhere that trademark law has expanded inappropriately in various respects and is in need of limiting principles.¹⁶⁵ One of the reasons courts find liability in cases that extend well beyond the proper scope of trademark rights is that the limiting doctrines that are available turn out to be all-or-nothing validity doctrines. Courts are (properly) reluctant to invalidate a plaintiff’s mark altogether, and they are unwilling or unable to limit the scope of that mark in cases where it has been asserted against a defendant that is not doing something the law actually forbids.

4. *Design patent.*

Unlike utility patents, design patents are supposed to protect only the ornamental features of a design, not the functional aspects that make the device work better.¹⁶⁶ If a design

¹⁶³ *Fleischer Studios, Inc. v. A.V.E.L.A. Inc.*, 632 F.3d 1116 (9th Cir. 2011).

¹⁶⁴ *Fleischer Studios, Inc. v. A.V.E.L.A. Inc.*, 654 F.3d 958 (9th Cir. 2011). On the Betty Boop case, see Irene Calboli, *Betty Boop and the Return of Aesthetic Functionality: A Bitter Medicine Against ‘Mutant Copyrights’*, *Eur. Intell. Prop. Rev.* (2013).

¹⁶⁵ Mark A. Lemley & Mark P. McKenna, *Irrelevant Confusion*, 62 *Stan. L. Rev.* 413 (2010); Mark A. Lemley & Mark P. McKenna, *Owning Mark(et)s*, 109 *Mich. L. Rev.* 137 (2010).

¹⁶⁶ *PHG Techs, LLC v. St. John Cos.*, 469 F.3d 1361, 1366 (Fed. Cir. 2006). Unlike trademark law, which is designed to protect identifications of source, design patent is intended to protect aesthetics directly so there is no aesthetic functionality doctrine in design patent as there is in trademark. See, e.g., J.H. Reichman, *Design Protection and the New Technologies: The United States Experience in a Transnational Perspective*, 19 *U. Balt. L. Rev.* 6, 40 (1991); Michael Risch, *Functionality and Graphical User Interface Design Patents*, 17 *Stan. Tech. L. Rev.* 53 (2014).

patent owner tries to assert control over a functional aspect of the design, she is improperly expanding the scope of the right beyond what the law is supposed to give.

One scope problem with design patents parallels the one just discussed in trademarks: functionality. The functionality doctrine is intended to stop this sort of overreaching. Unfortunately, it is not up to the task. Because it is a validity doctrine, not an infringement doctrine or a defense, a finding that a design patent is functional means no protection at all for the design, even for its ornamental features.¹⁶⁷ Courts, unwilling to invalidate a design entirely merely because part of the designed device is functional, have responded by narrowing the design patent functionality doctrine almost to the point of nonexistence.¹⁶⁸ In design patent law, a design is functional – and thus unprotectable – only if there is no other possible way to achieve the same result.¹⁶⁹ And a functional design is unprotectable only if it is “governed solely by function.”¹⁷⁰ Needless to say, that almost never happens.¹⁷¹ But if the design is treated as non-functional for validity purposes, the fact that it does function is then ignored when it comes to infringement and defenses, because functionality is a validity doctrine, not an infringement doctrine. The result is that it is all too possible that a design patent owner can

¹⁶⁷ *Power Controls Corp. v. Hybrinetics, Inc.*, 806 F.2d 234, 238 (Fed. Cir. 1986).

¹⁶⁸ *See, e.g.*, Mark P. McKenna & Katherine J. Strandburg, *Progress and Competition in Design*, 17 *Stan. Tech. L. Rev.* 1 (2014); Risch, *supra* note ____.

¹⁶⁹ *Avia Group Int’l, Inc. v. L.A. Gear of Cal.*, 853 F.2d 1557, 1563 (Fed. Cir. 1988); *Seiko Epson Corp. v. Nu-Kote Int’l, Inc.*, 190 F.3d 1360, 1368 (Fed. Cir. 1999) (holding that a design is functional only if it is “the only possible form of the article that could perform its function.”); *L.A. Gear, Inc. v. Thom McAn Shoe Co.*, 988 F.2d 1117, 1123 (Fed. Cir. 1993). This is a much narrower standard than functionality in trademark law, which prevents protection if something affects the cost or quality of the article being sold. *Traffix Devices, Inc. v. Marketing Displays, Inc.*, 532 U.S. 23 (2001).

¹⁷⁰ *Seiko Epson Corp. v. Nu-Kote Int’l, Inc.*, 190 F.3d 1360, 1368 (Fed. Cir. 1999); *In re Carletti*, 328 F.2d 1010, 1022 (C.C.P.A. 1964).

¹⁷¹ Stats on invalidations based on functionality?

capture scope she was never meant to have, preventing her competitors from copying functional rather than ornamental features of a product.¹⁷²

We could solve that problem at the infringement stage if we could apply functionality – or something like it – as a legal scope filter to ensure that defendants were not held liable based on similarities of functional rather than ornamental features. But in fact the functionality problem is compounded by a second gap in scope – the test for infringement. The basic test for infringement of a design patent is the “ordinary observer” test, which assesses “whether an ordinary observer, familiar with the prior art, would be deceived into thinking that the accused design was the same as the patented design.”¹⁷³ But that test has long been supplemented by a requirement that the defendant have appropriated the thing that makes the design new and different from the prior art.¹⁷⁴ If the defendant’s use didn’t include the novel feature(s) in the patentee’s design, it couldn’t infringe.¹⁷⁵

In 2008, in *Egyptian Goddess, Inc. v. Swisa, Inc.*, the Federal Circuit changed the law of design patents to eliminate the point-of-novelty test for infringement.¹⁷⁶ Instead, the court said, the focus must be on the overall appearance of the whole design, not on “small” differences at the point of novelty.¹⁷⁷ Novelty still matters, but now only as a defense that

¹⁷² *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 672 (Fed. Cir. 2008) (en banc). The prior test had permitted a defendant to avoid infringement if he could show that he used only the unprotectable elements of the design. *Lee v. Dayton-Hudson Corp.*, 838 F.2d 1186, 1188 (Fed. Cir. 1988), but the “ordinary observer” test does not seem to contemplate such a “practicing the functional art” defense.

¹⁷³ *Egyptian Goddess, Inc. v. Swisa, Inc.*, 543 F.3d 665, 672 (Fed. Cir. 2008) (en banc).

¹⁷⁴ *Id.* at 670–71.

¹⁷⁵ Portions of these three paragraphs are adapted from Mark A. Lemley, *Point of Novelty*, 105 **Nw. U. L. Rev.** 1253 (2011).

¹⁷⁶ *Egyptian Goddess*, 543 F.3d at 678.

¹⁷⁷ *Id.*

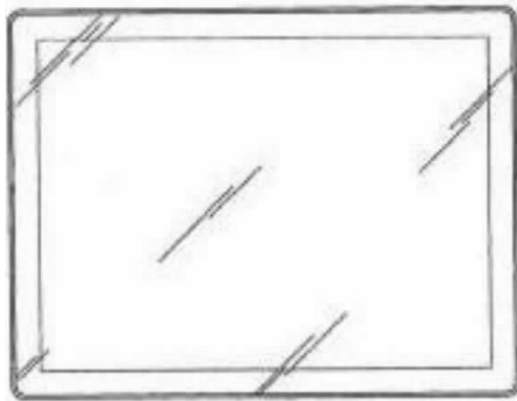
must generally be assessed separately from infringement.¹⁷⁸ And subsequent Federal Circuit cases have used *Egyptian Goddess* as precedent in concluding that point of novelty is no longer the test for the invalidity of a design patent either.¹⁷⁹

As long as an ordinary observer would confuse the two products, the fact that that confusion arises from similarities that already exist in the prior art doesn't defeat a finding of infringement. It might or might not create a defense that the patent is invalid for anticipation, though again that seems to depend on what an ordinary observer would think when comparing the patented design and the prior art.¹⁸⁰ And in any event that defense is evaluated in isolation from infringement, not as part of an integrated analysis of the proper scope of the design patent.

¹⁷⁸ See *id.* at 678. The court did, however, take some steps to try to sneak back in the prior-art comparison it had just rejected, declaring that the ordinary observer was henceforth one who was “familiar with the prior art.” *Id.* at 681. But the separation of the infringement and validity inquiries creates an even bigger problem here than it does in utility patent law. To infringe a utility patent, the defendant must include every element of the patented claim, and so must necessarily include the thing that makes the invention patentable. After *Egyptian Goddess*, by contrast, there is no longer such a requirement in design patent law. A design patent can now be infringed even by a product that lacks the new feature encompassed by the patent as long as an ordinary observer would think the two were substantially the same overall.

¹⁷⁹ See, e.g., *Int'l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1237–38 (Fed. Cir. 2009). For a discussion of this extension, see Marta Kowalczyk, Recent Developments, *Design Patent Infringement: Post-Egyptian Goddess*, 2010 U. ILL. J.L. TECH. & POL'Y 239, 250–56.

¹⁸⁰ See *Int'l Seaway*, 589 F.3d at 1237–38. The Federal Circuit backed off of that “ordinary observer” test for obviousness, which seems inconsistent with *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007), in *High Point Design LLC v. Buyers Direct, Inc.*, 730 F.3d 1301 (Fed. Cir. 2013) (holding that the standard for obviousness was the ordinary designer, not the ordinary observer). Because the ordinary designer is presumably more knowledgeable about design than the ordinary observer, the result of this change may be to render more design patents invalid, though the obviousness standard is problematic in other respects.



To see the difference, consider the *Apple v. Samsung* litigation. Apple's design patent for the iPad is on the bottom left. Samsung's accused tablet is on the bottom right. An infringement analysis conducted in isolation asks whether an ordinary observer would consider the Samsung design too close to the patented one. In fact, however, Apple is not the first to come up with a computer tablet that is square with rounded corners. The top two images are in the prior art. A comparison that includes the prior art would emphasize the narrowness of what Apple contributed to the design, and would ask whether what Samsung did appropriated

whatever it is we decide Apple’s patent added to the prior art. The move away from that integrated scope question to the ordinary observer question creates a gap – a risk that Apple will prevail because the jury finds similarity in the parts of the Apple design that are not protectable: the things Apple took from the prior art. At the very least, it puts a great deal of reliance on the jury to use their presumed “familiarity with the prior art” to implicitly exclude from consideration of similarity features that do not owe their origin to the patent owner.

Similarly, in *Prestige Jewelry v. BK Jewellery*, BK’s patented design featured a “relatively large full-cut center diamond” that was tightly surrounded by “nine peripheral single-cut diamonds.”¹⁸¹ BK alleged that Prestige infringed its design by selling the Unity cluster-top jewelry products, one version of which “featured a full-cut center diamond surrounded by eight or ten relatively smaller single-cut diamonds.”¹⁸²

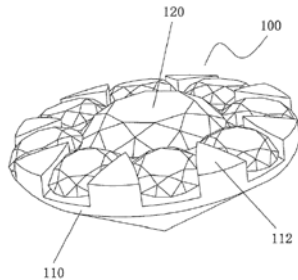


¹⁸¹ *Prestige Jewelry Int’l, Inc. v. BK Jewellery HK*, Case 1:11-cv-02930-LAP-DCF (S.D.N.Y. Sept. 15, 2014)

¹⁸² *Id.* at *10. Prestige also sold a version of the Unity jewelry that included only full-cut diamonds.

¹⁸³ Unity images from <http://www1.macys.com/shop/product/prestige-unity-diamond-circle-stud-earrings-in-14k-white-gold?ID=637519&CategoryID=57702&LinkType=#fn=BRAND%3DPrestigeUnity%26sp%3D1%26spc%3D13%26ruleId%3D%26slotId%3D4> and

BK was, of course, not the first one to make jewelry with a larger diamond surrounded by smaller diamonds. One piece of prior art (“the Lin Patent”), for example, disclosed a larger center diamond surrounded by eight smaller, full-cut diamonds:¹⁸⁴



Another piece of prior art, the “Edwardian cluster ring,” included nine peripheral stones and was practiced at least as early as the Edwardian era, approximately 1901-1915.”¹⁸⁵ A proper assessment of BK’s design would have focused particularly on the use of a relatively larger center diamond surrounded by nine smaller *peripheral-cut* diamonds. That Prestige surrounded a larger central diamond with 8 or 10 (or even 9) smaller peripheral diamonds ought not be enough to say it is infringing. But the court expressly refused to identify the point of novelty, assuming the jury could see for itself the novel features of the design and know not to credit similarities in anything but those novel features. We seriously doubt that.

A final potential scope gap in design patents involves the assertion of design patents against the use of the design on different products than the plaintiff expected. The design patent claim takes the form of an image. That image is normally representative of a product, but sometimes it is an image or an icon or brand that could be applied to a product. When the defendant uses the image in a completely different context (say, reproducing the design in a

<http://www1.macys.com/shop/product/prestige-unity-diamond-bezel-pendant-necklace-in-14k-white-gold-1-4-ct-tw?ID=661825>.

¹⁸⁴ U.S. Patent No. 7,762,104.

¹⁸⁵ Prestige Jewelry at 14.

book or using it on a bumper sticker), the question is properly whether the defendant's use is within the lawful scope of the design patent. But is that a question of validity or one of infringement? Design patent law thinks about the issue as one of validity – is my patent appropriately limited to application to a product? But it is perhaps more plausibly a scope question. The problem with Apple suing someone who puts their logo on a bumper sticker isn't that the logo patent is invalid, but that they are using that patent to control behavior we don't want to give them control over, just as Volkswagen doesn't have some inherent right to control the making of keychains. Without a way of calibrating the scope of the design patent, we are left with a choice between invalidating the patent altogether or allowing the IP owner to prevent a use design patent law was never intended to prevent.

Allowing enforcement of a design patent against these kinds of uses would also run afoul of the maxim that “that which infringes, if later, would anticipate, if earlier.”¹⁸⁶ In design patent law, “the scope of the prior art is not the universe of abstract design and artistic creativity, but designs of the same article of manufacture or of articles sufficiently similar that a person of ordinary skill would look to such articles for their designs.”¹⁸⁷ Under that standard, a bumper sticker is unlikely to count as relevant prior art against a GUI design. Yet if the design patent isn't field-limited, then it's no longer true that that which infringes if later would invalidate if earlier.

III. Towards an Integrated Doctrine of IP Scope

A. The Need for an Integrated Scope Determination

¹⁸⁶ *Int'l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233, 1239 (Fed. Cir. 2009).

¹⁸⁷ *Hupp v. Siroflex of Am., Inc.*, 122 F.3d 1456, 1462 (Fed. Cir. 1997).

What each of the examples in part II have in common is a disconnect between legal doctrines that allows an IP owner to claim to own something that the law should not give her. The proper scope of an IP right is not set by some god or dictated by immutable natural law. It is a function of the purposes of the IP regime, what it is the IP owner contributed to the world, and what uses must remain open in order that the IP regime does not unduly interfere with social welfare.¹⁸⁸ The point of the complex of infringement rules, invalidity rules, and defenses is to get as close as possible to that proper scope.

Because the law has separated the doctrines of infringement, invalidity, and defenses, and generally considers each of them in isolation from the others, IP owners can and regularly do seek to expand the scope of their IP rights beyond permissible bounds. The law sometimes reacts by invalidating the IP right altogether because of the overbreadth of the plaintiff's claim. But courts and especially juries tend to be reluctant to strike down an IP right altogether for overclaiming. And even though invalidating the right can be the better of the two options available to the court, that result is often not ideal, since invalidating the right means that it cannot be asserted even against infringements that are concededly within the proper, more limited scope of the IP right.

The separation of infringement, validity, and defenses has turned IP litigation into something akin to a game of blackjack. Whatever the hand the IP owner has been dealt, they have an incentive to add to it – increase the scope of the right – as much as possible. But if they go too far – over 21 – the entire hand is thrown out.

¹⁸⁸ See, e.g., Mark A. Lemley & Mark P. McKenna, *Owning Mark(et)s*, 109 **Mich. L. Rev.** 137, 184 (2011).

Whatever the merits of blackjack as a card game, it is not a reliable way to get IP regimes to produce the right answer. IP law needs a way to expressly consider scope in a single, integrated proceeding. Courts should coordinate infringement, validity, and defense proceedings in some way so that both the fact of overreaching and its potential consequences become clear to the parties and the court before trial. Our aim should be to find the proper scope for an IP right. But neither infringement nor invalidity nor defenses in isolation can do the trick.

B. *Markman* As a Scope Proceeding

There is one area of modern IP law that treats scope in a more-or-less integrated way: patent law. For the past twenty years, patent law has had a pretrial proceeding in which the courts construe the claims of the patent, defining what the legal definition of the patent is – and therefore what the patent does and does not cover – in the specific context of the dispute between the parties. These so-called *Markman* hearings¹⁸⁹ do what virtually no other IP proceeding does: they define the breadth of the patent right in a way that is thereafter used for both validity and infringement.¹⁹⁰ In theory, therefore, they prevent the nose of wax problem that has beset assessments of scope in IP law.

Markman hearings frequently result in summary judgment for one side or the other; once the court has decided the proper scope of the patent it is rare that there is a factual

¹⁸⁹ Named for *Markman v. Westview Instruments Corp.*, 517 U.S. 370 (1996), which created them.

¹⁹⁰ There are few substantive defenses in patent law apart from invalidity, but when they do come into play they too are governed by the definition of the invention set out in the *Markman* proceeding.

dispute as to whether the defendant infringes the patent.¹⁹¹ And while disputes about validity are more common, many of those can be resolved once the court has decided what the patent claim does and does not cover. Further, *Markman* hearings led directly to the closing of one scope gap – the temporal difference between patent validity and patent infringement. Before *Markman*, courts assessed patent validity based on how the claim would be understood as of the time of invention, or perhaps the filing date, but assessed infringement based on the understanding of the term as of the date of infringement.¹⁹² But once courts started construing claim terms in a single integrated proceeding, they rebelled against the idea that the same claim should have different meanings at different times.¹⁹³

Markman hearings are not a perfect expression of the scope principle. In particular, there are two problems in practice with *Markman* hearings as scope vehicles. First, while claim construction is supposed to consider validity,¹⁹⁴ the Federal Circuit has discouraged courts from thinking about the validity of the resulting claims when deciding the meaning of the claim terms at issue in the case.¹⁹⁵ The culprit here is the “different decisionmakers” problem. The court seems unwilling to assess validity pre-trial because it is (sometimes) an issue for the jury at trial.¹⁹⁶ The result is that even at a *Markman* hearing patentees may seek to unduly broaden the scope of the patent and take their chances later on with invalidity. The situation is still

¹⁹¹ John R. Allison & Mark A. Lemley, *The (Unnoticed) Demise of the Doctrine of Equivalents*, 59 **Stan. L. Rev.** 955 (2007).

¹⁹² Lemley, *Changing Meaning*, *supra* note ___, at 105-10.

¹⁹³ *Id.* at 110-11. Lemley endorses this integrated approach. *Id.* at 112-15.

¹⁹⁴ *See, e.g.*, *Rhine v. Casio, Inc.*, 183 F.3d 1342, 1345 (Fed. Cir. 1999) (holding that “claims should be so construed, if possible, as to sustain their validity.”).

¹⁹⁵ *Phillips v. AWH Corp.*, 415 F.3d 1303 (Fed. Cir. 2005) (en banc) (dismissing that canon as one “of limited utility in any event” and saying that “we have not applied that principle broadly”).

¹⁹⁶ For an argument that validity should not necessarily go to the jury, see Mark A. Lemley, *Why Do Juries Decide if Patents Are Valid?*, 99 **Va. L. Rev.** 1673 (2013).

better than it would be without the hearing, because the claim is given a single scope for both validity and infringement purposes. But it does not avoid the blackjack problem altogether.

Second, *Markman* hearings focus on the words of the claims written by patent lawyers to try to define the invention, rather than on the invention itself. As one of us has argued elsewhere, allowing words about inventions to become the focus rather than the inventions themselves has led to a variety of mischief, from making overclaiming easier to introducing a large number of ambiguities in the scope of the patent that have nothing to do with what the patentee actually invented, but only to do with uncertainty in the meaning of the words chosen to describe them.¹⁹⁷

But these failures of the *Markman* process should not overshadow its central achievement: getting the court to think about the scope of the patent right, rather than just to think about whether it is infringed or whether it is valid. So while we strongly disagree with Larry Solum and TJ Chiang that there is anything like an acceptable amount of certainty in the meaning we assign to words in claim construction,¹⁹⁸ we very much agree that the *Markman* hearing is at its base a dispute about the scope of the legal right being granted, not simply

¹⁹⁷ Burk & Lemley, *Fence Posts*, *supra* note __.

¹⁹⁸ Tun-Jen Chiang & Lawrence B. Solum, *The Interpretation-Construction Distinction in Patent Law*, 123 *Yale L.J.* 530 (2013). As Zahr Said points out, it may be the very transparency into the scope determination that *Markman* provides that makes the uncertainty of the process apparent. Copyright and trademark scope determinations are no more certain; we may simply not see the uncertainty because we don't think about scope expressly at all. Said, *supra* note __, at 51.

For a different critique of Chiang and Solum, see Camilla Hrdy & Ben V. Picozzi, *Claim Construction or Statutory Construction? A Response to Chiang & Solum*, 124 *Yale L.J. Forum*, <http://www.yalelawjournal.org/forum/claim-construction-or-statutory-construction> (Dec. 23, 2014); Oskar Liivak, *The Unresolved Ambiguity of Patent Claims*, <http://ssrn.com/abstract=2559958>.

about the meaning of words. That’s why claim construction failed when courts tried to do it in a vacuum, without the context of the accused device.¹⁹⁹

And unlike any other area of IP law, patent law for the past twenty years has set out to establish that scope directly, rather than just applying legal doctrines that depend on an implicit and changing assumption about the scope of the patent. While *Markman* hearings have focused on the wrong mechanism for measuring scope – the words used by lawyers to describe the invention, rather than the invention itself – they are at least trying to determine the scope of the invention in a single proceeding.

C. Adapting the Scope Proceeding

Copyright, trademark, and design patent should seek to emulate patent law in adopting an integrated, pre-trial determination of the proper scope of the IP right. This doesn’t mean they should adopt claims or claim construction verbatim.²⁰⁰ Copyrights and trademarks typically don’t have claims at all,²⁰¹ and design patents have visual claims that aren’t necessarily suitable to the sort of verbal clarification that is the heart of the *Markman* hearing.²⁰²

¹⁹⁹ Compare *Vitronics Corp. v. Conceptor Inc.*, 90 F.3d 1576 (Fed. Cir. 1996) (describing claim construction as a legal question that could be resolved in the abstract) with *Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1326-27 (Fed. Cir. 2006) (rejecting the *Vitronics* approach: “the legal function of giving meaning to claim terms always takes place in the context of a specific accused infringing device or process. . . . [K]nowledge of that product or process provides meaningful context for the first step of the infringement analysis”). It is *Wilson Sporting Goods* that is generally followed today.

²⁰⁰ Jeanne Fromer argues that copyright law already has a de facto system of claiming, though it operates centrally rather than peripherally and by example rather than by characteristic. Jeanne C. Fromer, *Claiming Intellectual Property*, 76 **U. Chi. L. Rev.** 719 (2009). But she resists the idea of building a claiming procedure more explicitly into copyright law. *Id.* at __.

²⁰¹ We say “typically” because several circuits now require a trade dress claimant to identify the particular elements of the claimed trade dress. See, e.g., *General Motors Corp. v. Lanard Toys, Inc.*, 468 F.3d 405, 415 (6th Cir. 2006) (“In requiring a list of discrete elements, we are looking to avoid vague and indeterminate references to the overall appearance or look of plaintiff’s packaging.”); *Yurman Design*,

And utility patent law has some structural advantages that make it especially well suited to the kind of integrated scope proceeding we described. By comparison to copyright and trademark, and even by comparison to design patent, utility patent law has a relatively high bar for validity, and it therefore has less work to do at the infringement stage to manage scope. Certainly there are important questions in patent cases about the meaning of the claims, and as we argued above, that scope determination can't be disentangled from infringement. But patent law has the significant advantage of the all elements rule, under which an accused invention infringes only if it reads on every element of the claimed invention.²⁰³ That rule necessarily draws a factfinder's attention to each and every limitation of the claim in a way that copyright and trademark law's infringement rules do not. And it's relatively easy to determine infringement in patent law once we know the meaning of the claims, since the infringement standard requires identity between the accused device and the claimed elements of the patented invention. Both copyright and trademark law are more expansive here in that the defendant's work or mark can be more dissimilar and still be infringing. As a result, copyright and trademark still have more work to do after determining the protectable aspects of the plaintiff's property.

Inc. v. PAJ, Inc., 262 F.3d 101-116-17 (2d Cir. 2001) ("We hold that a plaintiff seeking to protect its trade dress in a line of products must articulate the design elements that compose the trade dress.").

²⁰² See *Egyptian Goddess*, 543 F.3d at 680 (rejecting the need for a verbal claim construction of a visual claim in a design patent case). As the Supreme Court has explained, a design patent claim "is better represented by [an] illustration than it would be by any description, and a description would probably not be intelligible without the illustration." *Dobson v. Dornan*, 118 U.S. 10, 14 (1886).

²⁰³ The doctrine of equivalents obviously loosens this requirement a bit, but the Supreme Court has constrained the doctrine of equivalents too, requiring equivalency with respect to each claim element. *Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17 (1997). And as we note below, the doctrine of equivalents also builds on another scope doctrine by prohibiting parties from claiming equivalents that cover the prior art.

Nevertheless, we think courts should have an opportunity to assess the proper legal scope of copyrights, trademarks, and design patents, just as they do patents. Defining the scope of the IP right is critical for assessing all aspects of the case, and it is something that is best done by the judge before the substantive merits of the case are resolved. The most straightforward way to assess that scope is by identifying in a clear way what aspects of the IP right are protectable.

The doctrine of equivalents in utility patent law, for instance, has an integrated scope doctrine of a sort in the “prior art” defense. While, as we have seen, practicing the prior art is no defense to a claim of *literal* patent infringement, it is a defense to infringement under the doctrine of equivalents.²⁰⁴ The doctrine of equivalents creates a sort of penumbra around the scope of the patent claim, allowing patentees to sue people who make products that are only insubstantially different from the patented invention.²⁰⁵ But the doctrine of equivalents does not permit a patentee to use the doctrine to expand the scope of her claims to such an extent that it would cover things in the prior art. To avoid that problem, patent courts will construct a “hypothetical claim” that would cover the defendant’s product, and ask whether that hypothetical claim would also cover items in the prior art. If it would, the patentee is overclaiming and the effort to apply the doctrine of equivalents is rejected.²⁰⁶ The prior art

²⁰⁴ *Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.3d 677 (Fed. Cir. 1990), *overruled on other grounds by* *Cardinal Chem. Co. v. Morton Int’l, Inc.*, 508 U.S. 83 (1993).

²⁰⁵ On the doctrine of equivalents in patent law, see *Graver Tank & Mfg. Co. v. Linde Air Prods., Inc.*, 339 U.S. 605 (1950); *Warner-Jenkinson Co. v. Hilton Davis Chem. Co.*, 520 U.S. 17 (1997); *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, 535 U.S. 722 (2002).

²⁰⁶ *Wilson Sporting Goods*, 904 F.3d at ___; *Rosemount, Inc. v. Beckman Instruments, Inc.*, 727 F.2d 1540, 1546 (Fed.Cir.1984).

defense in patent’s doctrine of equivalents offers an example of an explicit scope decision that is nonetheless something short of a full-blown *Markman* hearing.

While we don’t suggest written claims for copyrights, trademarks, or design patents (and even worry about how well they work with utility patents), we think courts will often have to express in words exactly what is different and protectable about the IP right. Doing so will often occur in connection with a motion for summary judgment. But even where there is a fact issue to trial, courts should be communicating clearly to juries what similarities can – and cannot – be the basis for a finding of infringement.

Sometimes, though, a picture is worth a thousand words.²⁰⁷ Design patent law until recently had a rather straightforward effort to close the scope gap that did not require an explicit written scope definition: courts would line up the patented design, the accused product, and the closest piece of prior art next to each other.²⁰⁸ Showing infringement of a valid design patent required persuading a single factfinder that the defendant’s product was more like the patent than it was like the prior art. If it was more like the prior art, the patentee was improperly extending her right by suing the defendant. This simple artifice allowed a factfinder to easily see efforts to overclaim the scope of a design patent right in ways that might tread on the prior art.

Unfortunately, the Federal Circuit abolished this test in 2009, replacing it with an “ordinary observer” test that further separated validity from infringement and asked the factfinder deciding infringement only to compare the defendant’s product to the patented

²⁰⁷ Cf. Rebecca Tushnet, *Worth a Thousand Words: The Images of Copyright Law*, 124 *Harv. L. Rev.* ___ (forthcoming 2015).

²⁰⁸ See, e.g., *FMC Corp. v. Hennessy Indus., Inc.*, 836 F.2d 521, 527 (Fed. Cir. 1987); *Applied Arts Corp. v. Grand Rapids Metalcraft Corp.*, 67 F.2d 428, 430 (6th Cir. 1933).

design. In theory this comparison is done by an ordinary observer “familiar with the prior art” – meaning that comparisons between the claimed design and the prior art would still be relevant under the ordinary observer test.²⁰⁹ But it is now up to the defendant to frame any such comparisons, as the factfinder will not have the benefit of the court identifying particularly the features that differentiate the claimed design from that prior art. In the *Prestige Jewelry* case, for example, the district court refused to characterize the patented design at all, suggesting that “a jury can count the number of peripheral diamonds and observe that the peripheral diamonds are smaller than the center diamond. A jury also can easily observe that the peripheral diamonds have a different cut from the center diamond.”²¹⁰ In fact, the court was concerned that “[t]ranslating the ‘132 Patent’s drawing into words would not be helpful to the jury and might lead a jury to fixate too much on specific elements such as cut and count” – even though it was clear that cut and count were precisely the things that differentiated the patented design from the prior art.²¹¹

²⁰⁹ *Egyptian Goddess*, 543 F.3d at 678 (“Our rejection of the point of novelty test does not mean, of course, that the differences between the claimed design and prior art designs are irrelevant. To the contrary, 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. But the comparison of the designs, including the examination of any novel features, must be conducted as part of the ordinary observer test, not as part of a separate test focusing on particular points of novelty that are designated only in the course of litigation.”).

²¹⁰ *Prestige Jewelry* at 30.

²¹¹ *Id.* In *International Seaway* the Federal Circuit extended the ordinary observer test (and its rejection of the point of novelty) to the anticipation context. *Int’l Seaway Trading Corp. v. Walgreens Corp.*, 589 F.3d 1233 (Fed. Cir. 2009). There the court said that novelty would be assessed by comparing the claimed invention to the allegedly-anticipating prior art reference from the perspective of an ordinary observer familiar with the prior art (in that context, art prior to the prior art reference). Yet the court had no trouble concluding, without even mentioning a single reference that predated the prior art reference, that certain elements of the claimed design were “distinctly different” from the prior art reference while other differences were “minor or trivial.” *Id.* at 1242-43.

The fact that design patent law still contemplates a three-way comparison makes it superior to the kind of acontextual comparisons that are more common in copyright and trademark law. But we think the more explicit, side-by-side comparison of the patent, the accused product, and the prior art that was common before *Egyptian Goddess* offered courts a chance to focus on scope without an explicit definition of what is protectable, a desirable feature of the law that is unfortunately now much harder to achieve.

An integrated scope proceeding will allow courts to catch cases of overclaiming, preventing IP owners from extending their rights to things those rights were never meant to cover. At the same time, an integrated scope proceeding should enable courts to reduce or eliminate the “busted hand” form of invalidity. Courts can define the scope of an IP right in ways that cabins it appropriately. Most of the time, the result will be to preserve the validity of that narrowed legal right.

True, some IP rights have no valid scope – they are nothing more than efforts to declare ownership of something actually created by someone else or properly dedicated to the public. But outright invalidity of an IP right is relatively uncommon outside of patent law. A copyright owner, for instance, usually created something, and that something will commonly be deserving of some protection, even if not very much.²¹² But determining what it is they actually

²¹² Trademark law is somewhere in between. Some marks are generic or functional; they are not entitled to any protection at all. *See, e.g.,* *New York Pizzeria v. Syal* (SD Tex 2014) (rejecting claim to the taste of Italian food). But other marks are entitled to some protection, even if functionality or distinctiveness limit the proper scope of that protection. *See* McKenna, *DysFunctionality*, *supra* note ___, at ___.

created requires more than just looking at the work; it requires an assessment of what it is the IP owner should be entitled to protect in that work.²¹³

²¹³ The district court held in *Sheldon v. Metro-Goldwyn Pictures Corp.*, 7 F. Supp. 837, 843-44 (S.D.N.Y. 1934):

The Copyright Office does not, when a book is offered for copyright, study any prior art, as does the Patent Office when a patent is sought. It grants the copyright, thus putting the protection of the law not only over the copyrighted book as an entirety, but over the original content of the book. It is then left to the courts, if litigation ensues, to say what that original content is, and to define the zone in which the copyright owner is protected.

In defining that zone it always has to be determined:

(1) Whether some part of the zone claimed is not a part of a common ground, the heritage of all mankind, usually referred to as the public domain; or (2) whether some of the infringement claimed is not of matter which is not protected by copyright for some other reason.

Naturally the plaintiff always seeks to widen his protected zone and the defendant to narrow it.

It follows that the approach of a court to the problem of the infringement of a play cannot be purely that of an ordinary playgoer, for such a playgoer presumably has not the opportunity to determine the limits of the protected zone by the principles above outlined.

The Second Circuit reversed:

We are to remember that it makes no difference how far the play was anticipated by works in the public demesne which the plaintiffs did not use. The defendants appear not to recognize this, for they have filled the record with earlier instances of the same dramatic incidents and devices, as though, like a patent, a copyrighted work must be not only original, but new. That is not however the law as is obvious in the case of maps or compendia, where later works will necessarily be anticipated. At times, in discussing how much of the substance of a play the copyright protects, courts have indeed used language which seems to give countenance to the notion that, if a plot were old, it could not be copyrighted. But we understand by this no more than that in its broader outline a plot is never copyrightable, for it is plain beyond peradventure that anticipation as such cannot invalidate a copyright. Borrowed the work must indeed not be, for a plagiarist is not himself pro tanto an 'author'; but if by some magic a man who had never known it were to compose anew Keats's Ode on a Grecian Urn, he would be an 'author' and, if he copyrighted it, others might not copy that poem, though they might of course copy Keats's. If the copyrighted work is therefore original, the public demesne is important only on the issue of infringement.

81 F.2d 49, 53-54 (2d Cir. 1936) (Hand, J.).

With due respect to Judge Hand, however, Judge Woolsey seems to have it right. The relevant question is not merely whether there is a copyright but what the copyright covers. That question of scope cannot be simply dismissed as relevant only to infringement.

If the *Markman* experience is any indication, a scope proceeding may well resolve many of the disputes over infringement pre-trial, particularly in copyright and design patent cases. Once we know what a patent does and doesn't cover, it is a rare case in which how the defendant's product actually operates is in dispute. Copyright cases will have more disputes even after courts decide the scope of the work, because copyright incorporates some measure of market substitution as well as technical similarity into its infringement and defense analysis.²¹⁴ Trademark law is more complicated because it depends so heavily on the consumer confusion test, but even there identifying unprotectable elements, particularly in trade dress cases, may make confusion sufficiently unlikely that summary judgment is appropriate.

D. Validity/Scope Tradeoff

We think many of copyright and trademark law's current features are a consequence of the lack of an integrated scope mechanism. Current doctrines reflect tradeoffs between validity, infringement, and defenses as mechanisms to manage scope. Patent law chooses a high bar for validity, and *Markman* sets a defined meaning that controls at the infringement stage. As a result, patent law has less work to do to manage scope at the infringement stage, and it has relatively less need for defenses. Copyright is at the other end of the spectrum, setting a low bar for validity and punting the great majority of scope management to infringement and defenses and exceptions. Trademark is in between, but closer to copyright than it is to patent: it has some true validity doctrines, but it still tries to manage scope at the

²¹⁴ Fromer & Lemley, *supra* note ___ (arguing that copyright's fair use doctrine generally requires some form of market substitution as well as technical similarity before finding infringement).

infringement stage much more than patent. What this means is that copyright and trademark have a tendency to hand a lot of important scope questions to the jury.²¹⁵

That would be fine if we thought courts had good tools for managing scope at the later stages of a case. But they don't. In copyright cases, courts do analytic dissection for purposes of determining copying but not for purposes of infringement.²¹⁶ Trademark law doesn't even have (explicitly at least) anything analogous to analytic dissection – it simply counts on the likelihood of confusion factors to set the scope. And while these doctrinal structures can (and do) generate errors in both directions, we think they more commonly result in overbroad protection for works and trademarks that deserve only very narrow protection, if any.

Some kind of integrated mechanism for setting scope is likely a first-best alternative, because that would allow courts to correct both types of errors. But if no such mechanism is workable in copyright or trademark, then we think both copyright and trademark law need to rely more heavily on validity doctrines – more frequently refusing rights altogether when the scope of protection ought to be very narrow. As those doctrines are currently constituted, that's less than ideal, because it means denying protection altogether to works that are properly entitled to some protection.

A compromise might be to allow validity doctrines to be less than all-or-nothing defenses. If a defendant could prevail by showing that what they were doing with a trademark or design patent was functional, or that they were practicing the prior art in patent law, courts would implicitly be limiting the scope of the IP rights without having to make the all-or-nothing

²¹⁵ See Shyamkrishna Balganesh, Irina D. Manta, & Tess Wilkinson-Ryan, *Judging Similarity*, 100 **Iowa L. Rev.** (forthcoming 2014).

²¹⁶ Lemley, *Bizarre System*, *supra* note ____.

decision to invalidate the IP right altogether. One of the authors has suggested that approach in trademark's functionality doctrine, for instance.²¹⁷

The doctrine of virtual identity in copyright law also serves this purpose. The normal test for copyright infringement is "substantial similarity" between the two works.²¹⁸ But in some cases, where the permissible protection of a work is "thin," courts worry that the lay observer test they use to assess similarity will find infringement based on similarities in unprotectable rather than protectable elements of a work. Those courts have not invalidated the copyrights altogether under merger or originality, but they have raised the threshold for proving infringement, requiring that the defendant's work be "virtually identical" to the plaintiff's rather than only substantially similar to it.²¹⁹ The virtual identity standard offers a middle ground between invalidation and overclaiming, narrowing the effective scope of the copyright in circumstances in which overclaiming seems likely because of the limited creativity associated with the work. Virtual identity seems a logical test to apply to a variety of works in which creativity is highly constrained, from computer software to photography. Unfortunately, the application of the doctrine has so far been uneven and relatively rare.

We need, in sort, more judicial guidance about the proper scope of the patent. That guidance will sometimes take the form of identifying cases of overclaiming and weeding them out pre-trial. At other times, courts can help guide jury decisions to avoid the gaps we identify by making clear what similarities cannot be the basis for a finding of infringement. At a bare

²¹⁷ McKenna, *DysFunctionality*, *supra* note ____.

²¹⁸ As one of the authors has noted elsewhere, the term "substantial similarity" is unhelpful because it is itself used to mean two different things in copyright law. Lemley, *Bizarre System*, *supra* note ____.

²¹⁹ See, e.g., *Hoehling v. Universal City Studios*, 618 F.2d 972 (2d Cir. 1980); *Apple Computer v. Microsoft Corp.*, 35 F.3d 1435, 1443 (9th Cir. 1994).

minimum, courts can use threshold burdens like the virtual identity standard to try to weed out cases in which overclaiming is particularly likely.

IV. Conclusion

Scope is *the* critical question that underlies all IP regimes. Surprisingly, it is almost always implicit, not explicit. Because courts have not paid careful attention to the scope of IP rights, they have allowed the parties to manipulate the scope of their IP rights in socially undesirable ways. A more explicit focus on the breadth of the IP right will lead to better decisions, reducing both the endemic overclaiming of IP rights and the occasional backlash that invalidates those rights altogether as a result.