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Clear but Unconvincing: The Federal Circuit's Invalidity Standard

David O. Taylor*

ABSTRACT

The Federal Circuit's standard for proving invalidity of patent claims is clear. The Federal Circuit always requires clear and convincing evidence to prove that a patent claim is invalid. The rationale behind this standard, however, is unconvincing. There are significant reasons to believe that the United States Patent and Trademark Office ("USPTO") rarely considers the most relevant prior art and that, instead, alleged infringers often find prior art that is more relevant than the prior art considered by the USPTO. It defies logic to apply the clear and convincing burden where the USPTO considered only prior art that is less relevant than the prior art asserted in litigation. And while the Federal Circuit relies upon 35 U.S.C. § 282 as dictating the clear and convincing burden of proof, the statute includes no such burden. Indeed, every other circuit court of appeals has indicated that the statutory presumption of validity only requires a presumption that the USPTO correctly ruled upon the evidence in front of it—not that the USPTO considered the most relevant prior art or that it, illogically, correctly ruled upon evidence it did not even consider. To encourage the disclosure of relevant prior art to the USPTO, to increase patent quality, to ensure that patents serve their constitutional purpose of rewarding inventors for disclosing

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discoveries, and to reduce transaction costs associated with ultimately invalid patents, the clear and convincing burden of proving invalidity should be replaced with a preponderance burden when litigation involves unconsidered, material prior art.

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INTRODUCTION

The Federal Circuit’s standard for proving invalidity of patent claims is clear. The Federal Circuit *always* requires clear and convincing evidence to prove that a patent claim is invalid.¹ The rationale behind this standard, however, is unconvincing. The Federal Circuit requires clear and convincing evidence because it *presumes* that the United States Patent and Trademark Office (“USPTO”) has considered the most relevant prior art and still allowed the patent claims to issue.² The Federal Circuit believes courts should overturn the USPTO’s decision only if there is clear and convincing evidence that the USPTO made a mistake. The presumption underlying the Federal Circuit’s standard, however, is flawed—significantly flawed.

¹ See cases cited *infra* note 68.

² See *infra* Part I.B.

There are many reasons to believe that the USPTO *rarely* considers the most relevant prior art.³ The USPTO has limited resources and patent examiners lack incentives to find the most relevant prior art.⁴ Moreover, patent prosecution is largely an *ex parte* procedure that excludes public participation. The Federal Circuit's standard for invalidity discourages patent applicants from even investigating prior art. As a result of this confluence of factors, it is likely that, after patents issue, parties alleged to have infringed those patents *often* find prior art that is *more relevant* than the prior art considered by the USPTO.

While it is logical for courts to apply the clear and convincing burden of proof to patent claims where the USPTO considered prior art that is *more* relevant than prior art asserted in litigation—or at least just as relevant as that prior art—it is not logical to apply this burden where the USPTO considered only prior art that is *less* relevant than the prior art asserted in the litigation. And while the Federal Circuit relies upon 35 U.S.C. § 282 as requiring the clear and convincing burden of proof, the statute includes no such burden.⁵ The statute merely requires that parties asserting invalidity bear the burden of establishing invalidity and that courts and juries presume that patents are valid.⁶ While the Federal Circuit has latched onto the statutory presumption of validity in particular as requiring the clear and convincing burden of proof in all instances, every other circuit court of appeals that interpreted the presumption before the creation of the Federal Circuit came to a different conclusion.⁷ Instead, the other circuit courts concluded that the statutory presumption of validity requires only a presumption that the USPTO correctly ruled upon the evidence in front of it—not that the USPTO considered the most relevant prior art or that it, illogically, correctly ruled upon evidence it did not even consider.

This Article reviews the Federal Circuit's standard for proving invalidity of patents and its rationale for that standard, analyzes

³ See discussion *infra* Part II.B.

⁴ *Id.*

⁵ See 35 U.S.C. § 282 (2006).

⁶ See *id.*

⁷ See *infra* Part III.B.3.b.

problems associated with the standard and the rationale, and concludes that the Federal Circuit's standard should be replaced with a new standard that is supported by logic, Supreme Court precedent, and the standards articulated by every other circuit court of appeals. This Article proposes replacing the clear and convincing burden of proof with a preponderance burden of proof when litigation involves unconsidered, material prior art.

Part I of this Article examines the Federal Circuit's standard for proving invalidity of patent claims, in terms of both its historical development and the rationale allegedly supporting it. Part II considers some of the problems associated with the Federal Circuit's standard, from both a logical as well as a utilitarian standpoint. Part III proposes and evaluates the support and benefits of replacing the clear and convincing burden of proof with a preponderance burden of proof when litigation involves unconsidered, material prior art.

I. THE FEDERAL CIRCUIT'S STANDARD FOR PROVING INVALIDITY

Since its formation, the Federal Circuit has adhered to a strict standard for proving that a patent is invalid. Under that standard, a party challenging the validity of a patent, to succeed in its challenge, always must prove invalidity by clear and convincing evidence.⁸ The rationale for this strict standard is that the USPTO, in its expertise, has approved the patent in view of the most relevant prior art, and the belief that the USPTO's approval should be respected absent clear and convincing evidence that the USPTO made a mistake.⁹

A. *The Standard: Clear and Convincing Evidence in Every Circumstance*

The first paragraph of 35 U.S.C. § 282 states that a patent shall be presumed valid and that the burden of proving invalidity shall rest on the party asserting invalidity:

⁸ See cases cited *infra* note 68.

⁹ See discussion *infra* Part I.B.

A patent shall be presumed valid. Each claim of a patent (whether in independent, dependent, or multiple dependent form) shall be presumed valid independently of the validity of other claims; dependent or multiple dependent claims shall be presumed valid even though dependent upon an invalid claim. . . . The burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.¹⁰

Nowhere, however, does 35 U.S.C. § 282 explain exactly what the burden of proving invalidity is. Is the burden a preponderance of the evidence? Clear and convincing evidence?¹¹ Evidence beyond a reasonable doubt? On its face, the statute does not answer these questions. Stepping into this void, the Federal Circuit has interpreted the first sentence of 35 U.S.C. § 282—the statutory presumption of validity—to mean that an alleged infringer always must prove invalidity by clear and convincing evidence.¹² Indeed, the Federal Circuit has interpreted the statutory presumption of validity to set forth a clear and convincing burden of proof regardless of whether the USPTO actually considered the most relevant prior art.¹³

1. Historical Development Of The Standard

Congress created the Federal Circuit in 1982 and vested in it exclusive jurisdiction to resolve appeals of claims arising under the patent laws.¹⁴ It did so in response to concerns about both a lack of uniformity in the interpretation of the patent laws by the circuit

¹⁰ 35 U.S.C. § 282.

¹¹ The “clear and convincing” burden of proof is an intermediate burden that lies somewhere between “beyond a reasonable doubt” and a “preponderance of the evidence.” *Buildex, Inc. v. Kason Indus., Inc.*, 849 F.2d 1461, 1463 (Fed. Cir. 1988). “Clear and convincing” evidence is evidence that produces in the mind of the trier of fact an abiding conviction that the truth of the factual contentions are highly probable. *Id.*

¹² *See, e.g., Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359–60 (Fed. Cir. 1984).

¹³ *See, e.g., R.R. Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1517 (Fed. Cir. 1984).

¹⁴ *See Federal Courts Improvement Act of 1982*, Pub. L. No. 97-164, 96 Stat. 25 (1982); H.R. Rpt. No. 97-312, at 20–22 (1981); S. Rpt. No. 97-275, at 5 (1981).

courts and the “forum shopping” that these divergent interpretations had generated.¹⁵ The Federal Circuit quickly exercised that jurisdiction in its first two years to render a series of early opinions interpreting the statutory presumption of validity and articulating the standard for proving invalidity of patents.

a) *Solder Removal Co. v. U.S. International Trade Commission*

The Federal Circuit’s interpretation of the statutory presumption of validity traces its roots to an opinion written by Chief Judge Markey, the first chief judge of the Federal Circuit, prior to the court’s formation.¹⁶ In *Solder Removal Co. v. U.S. International Trade Commission*,¹⁷ the Federal Circuit’s predecessor court, the Court of Customs and Patent Appeals, reviewed an administrative law judge’s conclusion that the presumption of validity does not exist when the most pertinent prior art was neither presented to nor considered by the USPTO.¹⁸ The court held that this conclusion was “unsound.”¹⁹

While conceding that rebuttal of the presumption of validity may be more easily and more often achieved by relying on prior art more pertinent than the prior art considered by the USPTO, the court explained that until the prior art actually renders the claimed invention anticipated or obvious, the presumption of validity is not rebutted and “continues alive and well.”²⁰ The court interpreted 35 U.S.C. § 282 as placing the burden of coming forward with evidence and the ultimate burden of persuasion on the party

¹⁵ *Christianson v. Colt Indus. Operating Corp.*, 486 U.S. 800, 820 (1988) (Stevens, J., concurring). In the context of the subject of this Article—the standard for proving invalidity—it is ironic that the Federal Circuit was formed to resolve concerns about both the lack of uniformity in the interpretation of the patent laws and forum shopping. As discussed below, the Federal Circuit adopted an interpretation of 35 U.S.C. § 282 and an evidentiary standard for proving invalidity that conflict with the views of every other circuit court of appeals, views that are expressed plainly in numerous opinions that pre-date the establishment of the Federal Circuit. See discussion *infra* Part III.B.3.b.

¹⁶ See *Solder Removal Co. v. U.S. Int’l Trade Comm’n*, 582 F.2d 628, 632 (C.C.P.A. 1978); see also *In re Mark Indus.*, 751 F.2d 1219, 1225 (Fed. Cir. 1984).

¹⁷ 582 F.2d 628 (C.C.P.A. 1978).

¹⁸ *Id.* at 632.

¹⁹ *Id.*

²⁰ *Id.*

asserting that a patent is invalid, and concluded that the burden of persuasion *always* remains upon the party asserting invalidity, regardless of whether the most pertinent prior art was considered by the USPTO.²¹ Moreover, the court noted that the USPTO's failure to cite particular prior art does not necessarily mean that that prior art was not considered by the examiner because the examiner may have considered it and determined that it was unworthy of citation.²²

The court ultimately held that the statute does not make the presumption applicable in some situations but not in others.²³ Instead, the court indicated that the distinction between situations in which the most pertinent prior art was considered by the USPTO and situations in which it was not is "judge-made."²⁴ As a result,

²¹ *Id.* at 632–33. Notably, the court justified its holding with respect to the presumption of validity by highlighting the burden of persuasion, which is stated separately in 35 U.S.C. § 282. *Id.* at 633 n.8. Some have concluded that the presumption of validity only places the initial burden of coming forward with evidence on the alleged infringer. See B.D. Daniel, *Heightened Standards of Proof in Patent Infringement Litigation: A Critique*, 36 AIPLA Q.J. 369, 380, 387 (2008). And at least one Federal Circuit opinion supports that view. See *Lear-Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 885 (Fed. Cir. 1984) ("The presumption of patent validity found in 35 U.S.C. § 282 is but a procedural device which places on a party asserting invalidity the initial burden of going forward to establish a prima facie case on that issue."). The resolution of which party bears the initial burden of coming forward with evidence, however, fails to resolve the issue of what the exact burden of persuasion should be in any particular context.

²² *Solder Removal Co.*, 582 F.2d at 633 n.9. This statement—that the failure to cite prior art does not *necessarily* mean that it was not considered because the examiner *may* have determined that it was unworthy of citation—does not justify the court's sweeping conclusion that the burden of persuasion *always* remains upon the party asserting invalidity, regardless of whether the most pertinent prior art was considered by the USPTO. Just because a rationale is *not always* true, that fact does not justify a standard that effectively assumes that the rationale is *never* true. Nor does this statement support applying the clear and convincing burden regardless of whether the most pertinent prior art actually was considered by the USPTO. See discussion *infra* Part III.B.

²³ *Solder Removal Co.*, 582 F.2d at 633. While it is true that the statute requires the application of the presumption of validity to every patent, the statute does not indicate that the presumption of validity requires the same evidentiary burden of persuasion to apply to every piece of prior art regardless of whether the USPTO considered it.

²⁴ *Id.* This criticism lacks any force. The statutory presumption of validity simply codified the common law presumption of validity. H.R. REP. NO. 1923, 82-1923 (1952). The common law recognized the same distinction between situations in which the most pertinent prior art was considered by the USPTO and situations in which it was not. See H.F. Harmann, *Editorial Notes, The New Patent Act and the Presumption of Validity*, 21 GEO. WASH. L. REV. 575, 576–78 (1953) (cataloguing cases predating the 1952 Patent

the court criticized holdings of other courts that the presumption is “weakened,” “undercut,” “dissipated,” or “destroyed” in this situation.²⁵ Nevertheless, the court reiterated that the burden of persuasion may be more easily met by evidence consisting of more pertinent prior art than that considered by the examiner.²⁶

Viewed in context, *Solder Removal Co.* simply rejected the proposition that the burden of persuasion ever shifts from alleged infringers to patent owners. Whatever the presumption of validity means, it cannot contradict the clear statutory language that the “burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.”²⁷ Moreover, it is important to note that the court was not squarely presented with the question of the appropriate burden for proving invalidity—clear and convincing evidence, a preponderance of the evidence, or evidence proving invalidity beyond a reasonable doubt—and therefore did not resolve that question. That said, it did indicate—twice—that the burden of persuasion may be more easily met by evidence consisting of more pertinent prior art than that considered by the examiner.²⁸

Act making distinctions based on whether the most pertinent prior art was considered by the USPTO).

²⁵ *Solder Removal Co.*, 582 F.2d at 633. The court did not recognize that if the presumption of validity is restricted to placing the initial burden of coming forward with evidence on the alleged infringer, this initial burden would be destroyed if the alleged infringer is able to meet this burden. In that situation, the burden of coming forward with evidence would revert to the patent owner.

²⁶ *Id.* The court noted that the application of 35 U.S.C. § 282 has “suffered from analogy of the presumption itself to the deference due administrative agencies.” *Id.* at 633 n.10. In this way the court seemingly recognized that this “analogy”—which is actually the rationale underlying the presumption of validity itself—does not fully support its conclusion.

²⁷ 35 U.S.C. § 282 (2006).

²⁸ In the Federal Circuit’s very first opinion, *S. Corp. v. United States*, the court set a path that was doomed to conflict with every other circuit court of appeals on the issue of the standard governing allegations of invalidity. The en banc court held that the holdings of the United States Court of Customs and Patent Appeals would bind the Federal Circuit. 690 F.2d 1368, 1369 (Fed. Cir. 1982) (en banc). Thus, the holding of *Solder Removal Company v. U.S. International Trade Commission* would act as controlling precedent on future panels of the Federal Circuit.

b) *SSIH Equipment S.A. v. U.S. International Trade Commission*

In *SSIH Equipment S.A. v. U.S. International Trade Commission*,²⁹ the Federal Circuit issued its first opinion addressing the statutory presumption of validity articulated in 35 U.S.C. § 282.³⁰ The court, in an opinion by Circuit Judge Nies, began by adopting the holding of *Solder Removal Co.*, indicating that the presumption of validity is not altered by the introduction at trial of more relevant prior art than the prior art considered at the USPTO.³¹ The court then effectively restated the major holdings of *Solder Removal Co.*: the presumption of validity places both the burden of going forward with evidence and the burden of persuasion upon the party asserting invalidity, and if a party introduces prior art more relevant than that considered by the examiner, the party is more likely to carry its burden of persuasion.³²

The court went further, however, and addressed whether *any* burden of persuasion should apply to the question of invalidity. Criticizing the Commission's statement that there must be "clear and convincing evidence of invalidity," the court deemed it "inappropriate" to speak in terms of a particular burden of proof being necessary to reach a *legal* conclusion on the issue of obviousness.³³ The court went on to note that while "certain *facts* in patent litigation must be proved by clear and convincing evidence, the formulation of a legal conclusion on validity from the established facts is a matter reserved for the court."³⁴ Then the Federal Circuit noted that it was a reviewing court whose role is

²⁹ 718 F.2d 365 (Fed. Cir. 1983).

³⁰ *SSIH Equipment S.A. v. U.S. Int'l Trade Comm'n*, 718 F.2d 365, 374–75 (Fed. Cir. 1983).

³¹ *Id.* at 375.

³² *Id.* Other early Federal Circuit cases relied upon *SSIH Equip. S.A.* for one or both of these points, presumably because *SSIH Equip. S.A.* was the first Federal Circuit opinion to make the same points. *See, e.g.,* *Medtronic, Inc. v. Cardiac Pacemakers, Inc.*, 721 F.2d 1563, 1566 n.3 (Fed. Cir. 1983); *see also* *Richdel, Inc. v. Sunspool Corp.*, 714 F.2d 1573, 1579 (Fed. Cir. 1983) (holding that 35 U.S.C. § 282 permanently places the burden of proving facts necessary to a conclusion of invalidity on the party asserting such invalidity).

³³ *SSIH Equip. S.A.*, 718 F.2d at 375.

³⁴ *Id.* (citing *Radio Corp. v. Radio Labs.*, 293 U.S. 1 (1934)).

limited to determining whether the facts on which a judgment of validity or invalidity was based were satisfactorily established and whether those facts form an adequate predicate for the ultimate legal conclusion of obviousness.³⁵

When *SSIH Equipment S.A.* is viewed in context, other than adopting the holdings of *Solder Removal Co.*, the court merely noted that neither trial courts nor the Federal Circuit are bound to apply *any* burden of proof on the ultimate issue of obviousness, although the clear and convincing burden of proof does apply to “certain” unidentified facts.³⁶ Moreover, the court did not even consider the question of whether the clear and convincing burden of proof on questions of fact related to invalidity is appropriate in every instance, or whether some lesser burden of proof should apply in certain circumstances.

c) *Stratoflex, Inc. v. Aeroquip Corp.*

In *Stratoflex, Inc. v. Aeroquip Corp.*,³⁷ the Federal Circuit, in an opinion by Chief Judge Markey, the author of *Solder Removal Co.*, again held that the introduction of more pertinent prior art than that considered by the examiner does not weaken or destroy the presumption of validity or shift the burden of persuasion.³⁸ The court noted that the introduction of more pertinent prior art than that considered by the examiner nevertheless can facilitate the carrying of the burden of persuasion by the party claiming invalidity by requiring the party supporting validity to come forward with countervailing evidence.³⁹ Again, however, the court did not consider the question of the appropriate burden of proof required to prove invalidity, or whether that burden is lower in some circumstances.

³⁵ *SSIH Equip. S.A.*, 718 F.2d at 375.

³⁶ *Id.*

³⁷ 713 F.2d 1530 (Fed. Cir. 1983).

³⁸ *Id.* at 1534.

³⁹ *Id.*

d) *Connell v. Sears, Roebuck & Co.*

In *Connell v. Sears, Roebuck & Co.*,⁴⁰ the Federal Circuit, in another opinion by Chief Judge Markey, for the first time reached the question of the appropriate burden of proof required to prove invalidity. The court's discussion of this issue, however, is dicta—the issue did not influence the judgment and was neither defended nor attacked on appeal.⁴¹ Thus, it should be recognized that the court's opinion has little, if any, precedential value. Nonetheless, it is important to recognize the content and reasoning of the opinion.

The court began by again rejecting the proposition that where pertinent or relevant prior art was not considered by the USPTO the presumption of validity is severely weakened and eroded.⁴² The court justified this holding by noting that there is virtually always pertinent and relevant prior art not considered by the USPTO.⁴³ And the court again recognized that the patent challenger's burden may be carried more easily when it utilizes unconsidered prior art that is more relevant than the prior art considered by the USPTO.⁴⁴

The Court went further, however. It rejected the proposition that when “any relevant” non-considered prior art is introduced, the burden upon the patent challenger is thereby changed from a requirement for clear and convincing proof to one of proof by a mere preponderance.⁴⁵ The court concluded that the introduction

⁴⁰ 722 F.2d 1542 (Fed. Cir. 1983).

⁴¹ The court noted portions of a district court's opinion that reflected the law of the various regional circuits prior to the formation of the Federal Circuit “did not influence the judgment appealed from and are neither defended nor attacked on appeal,” and indicated its disagreement. *Id.* at 1548.

⁴² *Id.* at 1549 n.17.

⁴³ *Id.* It is unclear how the fact that there is virtually *always* pertinent and relevant prior art not considered by the USPTO justifies a holding that the presumption of validity is *never* weakened and eroded, but that is what the court held. Moreover, this concession undermines the statement in *Solder Removal Co.* that the USPTO's failure to cite particular prior art does not necessarily mean that that prior art was not considered by the examiner because the examiner may have considered it and determined that it was unworthy of citation. *Solder Removal Co. v. U.S. Int'l Trade Comm'n*, 582 F.2d 628, 633 n.9 (C.C.P.A. 1978); see discussion *infra* Part III.B.3.b.7.

⁴⁴ *Connell*, 722 F.2d at 1549.

⁴⁵ *Id.* at 1549.

of art or other evidence not considered by the USPTO does not change the burden and does not change the requirement that that evidence establish invalidity clearly and convincingly.⁴⁶

It is important to note that the court's consideration and resolution of the issue of the appropriate burden of proof to apply was limited to the question of whether *any* relevant, non-considered prior art changes the burden of proof from clear and convincing evidence to a preponderance of the evidence. The court did not address the more difficult question of whether prior art that is *more relevant* than prior art considered by the USPTO reduces the burden of persuasion. The court's reasoning, however, foreshadowed how it would decide the question.

e) *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*

In *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*,⁴⁷ the Federal Circuit, in an opinion authored by Judge Rich, rejected a jury instruction explaining that the burden of proof *shifts* from the accused infringer to the patent owner when the accused infringer cites prior art that is more pertinent than the prior art utilized by the patent examiner.⁴⁸ This instruction would have emphasized that, in this circumstance, the presumption of validity “disappears” and the *patent owner* has the burden of proof by a preponderance of the evidence.⁴⁹ The court found this instruction erroneous in two respects. First, according to the court, it misassigned the burden of proof that 35 U.S.C. § 282 mandates rests upon the party asserting invalidity whether or not the most pertinent prior art was considered by the examiner.⁵⁰ Second, according to the court, it failed to explain accurately the presumption of validity.⁵¹

On the second point, the court recognized a “prevailing confusion” in the cases over the meaning and effect of the

⁴⁶ *Id.*

⁴⁷ 725 F.2d 1350 (Fed. Cir. 1984).

⁴⁸ *Id.* at 1358.

⁴⁹ *Id.*

⁵⁰ *Id.* In this regard, the Federal Circuit rejected the contrary holding of the Ninth Circuit in *Tveter v. AB Turn-O-Matic*, 633 F.2d 831, 833 (9th Cir. 1980). The Federal Circuit court's holding reflects, yet again, the holding of *Solder Removal Co. v. U.S. Int'l Trade Comm.*, 582 F.2d 628 (C.C.P.A. 1978).

⁵¹ *Am. Hoist & Derrick Co.*, 725 F.2d at 1358.

presumption of validity, engendered by assertions that under various circumstances the presumption is retained, destroyed, strengthened, or weakened, thus resulting in the shifting of the burden of proof or the changing of the burden of proof.⁵² After reviewing the history of the codification of the presumption of validity, in which Judge Rich played a significant role,⁵³ the court emphasized that the “attacker” of a patent relying on prior art already considered by the patent examiner has the added burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job.⁵⁴ In particular, patent examiners are presumed to have some expertise in interpreting the prior art and to be familiar with the level of skill in the art and, in some cases, the Board of Patent Appeals and Interferences may have approved of the issuance of the patent.⁵⁵

The court conceded that when an attacker relies on prior art or other evidence *not* already considered by the USPTO, there is no reason to defer to the USPTO insofar as its effect on validity is concerned.⁵⁶ The court nevertheless held that the burden of proof should still be clear and convincing evidence in this situation.⁵⁷ In the court’s view, the production of new prior art not before the USPTO eliminates, or at least reduces, the element of deference due the USPTO, thereby partially, if not wholly, discharging the attacker’s burden, but neither shifting nor lightening it or changing the burden of proof.⁵⁸

⁵² *Id.* The reference to “prevailing confusion” apparently refers to the *consistent*, albeit in the Federal Circuit’s view *incorrect*, holdings of every other circuit court of appeals. See discussion *infra* Part III.B.3.b.

⁵³ *Am. Hoist & Derrick Co.*, 725 F.2d at 1359 (noting that Judge Rich was one of the authors of the Patent Act of 1952, which codified the presumption of validity at 35 U.S.C. § 282).

⁵⁴ *Am. Hoist & Derrick Co.*, 725 F.2d at 1359.

⁵⁵ *Id.*

⁵⁶ *Id.*

⁵⁷ *Id.* at 1360. In this section of the opinion, the court expressly concedes that it is interpreting the statutory presumption of validity and the statutory language governing which party has the burden of proof as “different expressions of the same thing.” *Id.* Interpreting separate statutory language to mean the same thing, of course, contradicts a fundamental tenet of statutory construction. See, e.g., *Duncan v. Walker*, 533 U.S. 167, 174 (2001) (noting the duty to give effect, if possible, to every clause and word of a statute).

⁵⁸ *Am. Hoist & Derrick Co.*, 725 F.2d at 1360.

Notably, the court's discussion of whether the burden of persuasion is reduced when an attacker relies upon prior art not considered by the USPTO appears to be dicta in light of the challenged jury instruction, which explained that the burden of proof *shifts*.⁵⁹ Furthermore, this dicta, while full of conclusions, is not supported by any statutory, logical, or policy-based analysis. Instead, the court appears to be relying solely on a Supreme Court case, *Radio Corp. v. Radio Engineering Laboratories, Inc.*,⁶⁰ that did not even address the situation in which an attacker relies upon prior art not considered by the USPTO, let alone prior art that is more relevant than prior art considered by the USPTO.⁶¹ Moreover, the court's discussion of whether the burden of persuasion is reduced when an attacker relies upon prior art not considered by the USPTO altogether fails to address the situation in which that prior art is more relevant than the prior art considered by the USPTO. Thus, the court avoided this latter situation and therefore offered no statutory, logical, or policy-based justification to apply a clear and convincing burden of proof in this situation either.

f) *Railroad Dynamics, Inc. v. A. Stucki Co.*

The Federal Circuit reached the question of whether the burden of proof can be reduced (but not shifted) based on a comparison of the relevance of prior art asserted in litigation and the relevance of prior art considered by the USPTO in *Railroad Dynamics, Inc. v. A. Stucki Co.*⁶² The court, in yet another opinion by Chief Judge Markey, held that the introduction of more pertinent prior art than that considered by the patent examiner does not entitle the party asserting invalidity to a jury instruction that its burden can be met by a preponderance of the evidence.⁶³ In language reminiscent of many of the cases discussed above, the court maintained that the presumption of validity is neither weakened nor destroyed where

⁵⁹ See *id.*

⁶⁰ 293 U.S. 1 (1934).

⁶¹ See, e.g., *Am. Hoist & Derrick Co.*, 725 F.2d at 1360 (citing *Radio Corp.*, 293 U.S. at 7–8).

⁶² 727 F.2d 1506, 1517 (Fed. Cir. 1984).

⁶³ *Id.*

prior art more pertinent than that considered by the USPTO is introduced.⁶⁴ Instead, the court explained, the party challenging validity is more likely to carry its burden of proving facts clearly and convincingly under those circumstances.⁶⁵

Although this was the first opinion by the Federal Circuit addressing whether the burden on the alleged infringer of proving invalidity should be less than clear and convincing evidence when the prior art is more relevant than prior art considered by the USPTO, the court offered no statutory, logical, or policy-based justification for its conclusion that the clear and convincing burden applies.⁶⁶ Instead, the court relied upon its precedent that traces its roots to the cases addressed above, none of which addressed this precise situation and several of which included only dicta on related circumstances.

2. Modern Treatment of the Standard

Since this series of opinions issued by the Federal Circuit in its formative years, the Federal Circuit has repeatedly rejected the contention that the presumption of validity is weakened or destroyed if there is prior art that is more pertinent than the art called to the attention of the USPTO.⁶⁷ Indeed, the Federal Circuit

⁶⁴ *Id.*

⁶⁵ *Id.* The court similarly held that the fact that the best mode requirement was not considered by the examiner did not entitle the party challenging validity to a preponderance burden of proof. *Id.*

⁶⁶ The Federal Circuit subsequently addressed this same issue in *Bio-Rad Labs., Inc. v. Nicolet Instrument Corp.*, 739 F.2d 604, 615 (Fed. Cir. 1984), *abrogated by* *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970–71 (Fed. Cir. 1995) (en banc), *aff'd on other grounds*, 517 U.S. 370 (1996). In *Bio-Rad Labs., Inc.*, an accused infringer argued that the jury should have been told that the presumption of validity may be weakened or destroyed when prior art more pertinent than that considered by the patent examiner is presented at trial, and that because prior art presented at trial was more pertinent than the prior art before the patent examiner that the jury should have been instructed that the accused infringer only had to carry its burden of proof by a preponderance of the evidence. *Id.* The court, in an opinion by Circuit Judge Baldwin, rejected these arguments, holding that the introduction of prior art not considered by the USPTO does not change the burden of proof or the requirement that evidence establish the presumption-defeating facts clearly and convincingly. *Id.* Again, however, the court failed to articulate any statutory, logical, or policy-based justification for its holding.

⁶⁷ See, e.g., *Alco Standard Corp. v. Tenn. Valley Auth.*, 808 F.2d 1490, 1497–98 (Fed. Cir. 1986); *Lear-Siegler, Inc. v. Aeroquip Corp.*, 733 F.2d 881, 885–86 (Fed. Cir. 1984);

has maintained the position that invalidity must *always* be proven by clear and convincing evidence regardless of any particular circumstances.⁶⁸ Thus, even when an invalidity defense is based on prior art not considered by the USPTO during a patent's prosecution, and even if that prior art is more relevant than the prior art considered by the USPTO, the Federal Circuit still requires that invalidity be proven by clear and convincing evidence.⁶⁹ In short, because the Federal Circuit has held that the presumption of validity "is *never* . . . destroyed, or even weakened, regardless of what facts are of record,"⁷⁰ it has held that the clear and convincing burden of proof *always* applies.

One of the Federal Circuit's most recent cases addressing whether the clear and convincing burden of proof applies in every circumstance is *z4 Technologies, Inc. v. Microsoft Corp.*⁷¹ There, the court considered a challenge to a district court's refusal to

Perkin-Elmer Corp. v. Computervision Corp., 732 F.2d 888, 894 (Fed. Cir. 1984); Lindemann Maschinenfabrik GmbH v. Am. Hoist & Derrick Co., 730 F.2d 1452, 1459 (Fed. Cir. 1984).

⁶⁸ See, e.g., Magnivision, Inc. v. Bonneau Co., 115 F.3d 956, 958 (Fed. Cir. 1997) (holding that the presumption of validity does not dissolve and the burden of proof does not change during a trial); Jamesbury Corp. v. Litton Indus. Prods., Inc., 756 F.2d 1556, 1559–60 (Fed. Cir. 1985) (holding that the clear and convincing burden of proof is "unvarying" and does not vary depending on the circumstances), *overruled on other grounds* by A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020 (Fed. Cir. 1992) (en banc); ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1574–75 (Fed. Cir. 1984) (holding that the presumption of validity "is never . . . destroyed, or even weakened, regardless of what facts are of record"); see also PowerOasis, Inc. v. T-Mobile USA, Inc., 522 F.3d 1299, 1305 (Fed. Cir. 2008) (holding that the fact that prior art was never before the USPTO does not change the presumption of validity); z4 Techs., Inc. v. Microsoft Corp., 507 F.3d 1340, 1354–55 (Fed. Cir. 2007) (holding that a jury instruction was erroneous because it might lead the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the USPTO). In a recent Federal Circuit case, the court also noted that the ultimate burden of persuasion "*never* shifts" from the party asserting invalidity to the patent owner, however much the burden of going forward may jump from one party to another. See Tech. Licensing Corp. v. Videotek, Inc., 545 F.3d 1311, 1329 (Fed. Cir. 2008) (emphasis added). Unlike the burden of proof governing invalidity, however, the ultimate burden of persuasion is expressly recited in 35 U.S.C. § 282 (2006), and the statute itself indicates that the ultimate burden of persuasion does not shift from one party to another.

⁶⁹ See, e.g., Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1050 (Fed. Cir. 1988).

⁷⁰ ACS Hosp. Sys., Inc., 732 F.2d at 1574–75.

⁷¹ 507 F.3d 1340, 1354–55 (Fed. Cir. 2007).

instruct a jury that the burden of proof on invalidity “is more easily carried when the [prior art] references on which the assertion is based were not directly considered by the examiner during prosecution.”⁷²

The court began its analysis by drawing a distinction between the proposed instruction’s use of the word “is” and the court’s view that its precedent indicates only that a party “may” more easily meet the clear and convincing evidence burden when the prior art was not before the examiner.⁷³ In the end, the court rejected the instruction for two additional reasons. First, the court relied upon the fact that none of its earlier cases required such an instruction.⁷⁴ Second, in the court’s view, the instruction might lead the jury to believe that the burden of proof is less than clear and convincing when prior art was not considered by the USPTO.⁷⁵

The court did not expressly focus on the fact that the instruction was not limited to prior art that is more pertinent than the prior art considered by the examiner, but this concept may in part explain the basis for the court’s opinion. By emphasizing that its precedent recognizes that a party more easily meets the clear and convincing evidentiary burden in only some circumstances, the court may have been making a veiled reference to the circumstance in which the prior art used in litigation is more relevant than the prior art used in prosecution.

Regardless, the court’s analysis of the issue before it—which did not distinguish between more relevant and less relevant prior art—while perhaps reaching the correct result, is not persuasive. Reliance on the fact that no case had ever required this particular jury instruction, of course, is no justification for not allowing it.⁷⁶

⁷² *Id.* at 1354.

⁷³ *Id.*

⁷⁴ *Id.*

⁷⁵ *Id.* at 1354–55.

⁷⁶ While not addressing the exact same issue, consider two earlier Federal Circuit cases. In the first, *Medtronic, Inc. v. Intermedics, Inc.*, 799 F.2d 734 (Fed. Cir. 1986), the Federal Circuit held as erroneous a jury instruction that the burden of proving invalidity is clear and convincing unless the jury finds that the prior art cited in the litigation is more pertinent than the prior art cited to the USPTO, in which case the burden is a preponderance of the evidence. *Id.* at 741. According to the court, the “burden is

And the court's reliance on possible confusion over the applicable burden of proof based on this instruction actually highlights the tension between the recognition that when prior art has not been considered by the USPTO it should be easier to prove invalidity and the clear and convincing burden of proof itself. While the court resolved this tension in favor of the clear and convincing burden of proof, it failed to offer any justification for the requirement of this stringent a burden in the situation where prior art has not been considered by the USPTO, let alone where more relevant prior art is asserted in litigation than has been considered by the USPTO. Indeed, the court failed even to consider the fact that almost every opinion discussed above addressing the invalidity standard indicates that the burden of persuasion is more easily met when the alleged infringer relies upon prior art that is more pertinent than the prior art considered by the USPTO.⁷⁷

permanent and does not change." *Id.* In the second, *Mendenhall v. Cedarapids, Inc.*, 5 F.3d 1557 (Fed. Cir. 1993), however, the Federal Circuit rejected a challenge to the following jury instruction:

Because the deference to be given the [USPTO]'s determination is related to the evidence it had before it, you should consider the evidence presented to the [USPTO] during the reissue application process, compare it with the evidence you have heard in this case, and then determine what weight to give the [USPTO]'s determinations.

Id. at 1563–64. Significantly, the instruction in *Mendenhall* highlights that the proper deference due the USPTO depends upon a comparison of the evidence the USPTO had before it during prosecution and the evidence asserted in litigation. The court concluded that this instruction concerns administrative correctness, does not undercut the presumption of validity, is consistent with Federal Circuit precedent, and, ultimately, was not erroneous. *Id.* While the court in *Mendenhall* did not set forth a rule that this instruction must be used in every case, it is significant that the court did not find this instruction to be erroneous. Indeed, the logic behind this instruction is consistent with the application of a lesser burden of proof for unconsidered, material prior art, even though the court rejected this exact proposition in *Medtronic*. The Federal Circuit did not refer to *Medtronic* or *Mendenhall* in its opinion in *z4 Techs., Inc.*

⁷⁷ See *R.R. Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1517 (Fed. Cir. 1984); *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1549 (Fed. Cir. 1983); *SSIH Equip. S.A. v. U.S. Int'l Trade Comm'n*, 718 F.2d 365, 375 (Fed. Cir. 1983); *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1534 (Fed. Cir. 1983); *Solder Removal Co. v. U.S. Int'l Trade Comm'n*, 582 F.2d 628, 632 (C.C.P.A. 1978).

B. The Rationale: The United States Patent and Trademark Office Presumably Considers the Most Relevant Prior Art

The Federal Circuit relies on the statutory presumption of validity expressed in 35 U.S.C. § 282 as justification for requiring clear and convincing evidence of invalidity in every circumstance.⁷⁸ This presumption recognizes the deference that is due to a qualified government agency presumed to have performed its job correctly.⁷⁹ In this context, for example, the court presumes that examiners have some expertise in interpreting the prior art and are familiar with the level of skill in the art.⁸⁰

For this rationale to justify a rule that the clear and convincing burden of proof applies in every circumstance, however, the court must presume that examiners search, find, and consider the most relevant prior art, compare the claims of patent applications with the most relevant prior art, and allow only valid claims to issue as patents over the most relevant prior art.⁸¹ In other words, the only reasonable rationale for the Federal Circuit's strict standard of requiring clear and convincing evidence in every situation is that the USPTO is presumed to have considered the most relevant prior art and still allowed the patent application to issue as a patent.

II. PROBLEMS WITH THE FEDERAL CIRCUIT'S STANDARD FOR PROVING INVALIDITY

There are several problems associated with requiring clear and convincing evidence to prove invalidity in all instances. As a logical matter, the only rationale for applying a clear and

⁷⁸ See, e.g., *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1360 (Fed. Cir. 1984).

⁷⁹ *Id.* at 1359.

⁸⁰ *Id.*; see also *Al-Site Corp. v. VSI Int'l, Inc.*, 174 F.3d 1308, 1323 (Fed. Cir. 1999) ("The 'presumption of validity under 35 U.S.C. § 282 carries with it a presumption that the Examiner did his duty and knew what claims he was allowing.'" (quoting *Intervet Am., Inc. v. Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1054 (Fed. Cir. 1989))).

⁸¹ Cf. Wm. Redin Woodward, *A Reconsideration of the Patent System as a Problem of Administrative Law*, 55 HARV. L. REV. 950, 951 (1942) (explaining that the reasoning behind awarding patents—that the patent does not take from the public anything that it had before the invention, while its profitability often bears a reasonable relation to the public benefit from the invention—"is wholly valid only if the [USPTO] is aware of all existing and past industrial practices").

convincing burden of proof in every instance fails to justify the scope of the Federal Circuit's application of that standard. As a factual matter, the standard is based on incorrect assumptions. In terms of incentives, the standard fails to provide proper incentives to patent owners to disclose prior art to the USPTO. And in terms of results, the standard negatively affects patent quality, unjustly rewards patent applicants, and creates unnecessary transaction costs.

A. The Standard and the Rationale Are Not Coextensive

As a logical matter, the only rationale for applying a clear and convincing burden of proof in every instance—that the USPTO always considers the most relevant prior art—fails to justify applying this burden of proof when the prior art presented in litigation is more relevant than the prior art considered by the USPTO. In other words, the rationale for the Federal Circuit's standard and the standard itself are not coextensive. When the presumption that the USPTO has considered the most relevant prior art is proven incorrect, why should the Federal Circuit's application of that presumption—the clear and convincing burden of proof—continue to apply? As a logical matter, it should not. Indeed, the Federal Circuit has failed to explain any logical rationale behind enforcing the clear and convincing burden of proof when the presumption that the USPTO considered the most relevant prior art is proven false.

B. The Standard Is Based on Incorrect Assumptions

As a factual matter, the Federal Circuit's standard is based on incorrect assumptions. The USPTO likely does not always—or even usually—find and consider the most relevant prior art. There are several bases for this conclusion: information asymmetry between patent applicants and the USPTO, the lack of incentives for examiners to find the most relevant prior art, the USPTO's limited resources, and the fact that patent prosecution largely is an *ex parte* procedure that excludes public participation.

Information asymmetry exists between patent applicants and the USPTO. Inventors typically know more about their own field

of technology than do the examiners at the USPTO.⁸² Inventors normally have better information concerning the date of their invention, any barring activities, and at least some of the prior art, particularly prior products and industry publications. Unless the inventors voluntarily provide the USPTO with this information or such information is obtained by performing searches on public information, examiners likely do not consider the most relevant information concerning patentability. By contrast, in litigation the alleged infringer has all of the tools of discovery to obtain this information; its disclosure does not depend on the good faith of patent applicants.

Examiners at the USPTO lack incentives to find the most relevant prior art. Particularly as compared to alleged infringers that wish to avoid paying damages or royalties to the patent owner or being enjoined from practicing the patented technology, examiners at the USPTO have little externally-imposed incentive to find the most relevant prior art.⁸³ In light of the disparity between the incentives on alleged infringers and examiners, it is more likely that alleged infringers find the most relevant prior art.

The USPTO has limited resources. Patent examiners spend an extremely short amount of time searching for prior art.⁸⁴ And they do not necessarily have the best access to prior art databases.⁸⁵ In

⁸² See *Abbot Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1357 (Fed. Cir. 2008) (noting that “the patent practice includes recognition that the inventor usually knows more about the field than does the ‘expert’ patent examiner”).

⁸³ See *Turzillo v. P. & Z. Mergentime*, 532 F.2d 1393, 1399 (D.C. Cir. 1976) (“[T]he proceeding before the [USPTO] . . . is dependent upon examination by an official . . . who does not have the extra spark of an economic incentive to avoid the tribute or other restraint that may be exacted by a patentee.”).

⁸⁴ FED. TRADE COMM’N, *TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY*, ch. 5, at 5 (2003) (indicating that “panelists varied in their estimates of the amount of time available to examine an application from start to finish, but all indicated that it was very short” and that the examination included reading and understanding the application, searching for prior art, evaluating patentability, communicating with the applicant, working out necessary revisions, and reaching and writing up conclusions).

⁸⁵ In his dissent in *Diamond v. Diehr*, Justice Stevens noted that the President’s Commission on the Patent System recommended against patent protection for computer programs at least in part because of the lack of requisite search files. *Diamond v. Diehr*, 450 U.S. 175, 218 n.45 (1981) (Stevens, J., dissenting). Without the ability to search the prior art, the Commission concluded that the patenting of computer programs would be

litigation, on the other hand, alleged infringers often will go to the ends of the earth—sometimes literally—to find prior art due to the relatively strong incentive to find the most relevant prior art and relatively weak constraints in terms of dollars and time. Comparing the resources available to patent examiners and alleged infringers suggests, again, that alleged infringers are more likely to find the most relevant prior art.

Patent prosecution mostly is an *ex parte* procedure that excludes public participation.⁸⁶ As a result, the public remains largely unable to identify and disclose prior art to the USPTO.⁸⁷ In litigation, by contrast, there are no restrictions on the public's ability to identify and submit prior art to alleged infringers for potential use. And even if third parties do not voluntarily assist accused infringers to find prior art, the Federal Rules of Civil Procedure provide litigation counsel with subpoena power to compel third parties to produce documents and provide testimony regarding prior art.⁸⁸ Thus, the ability of alleged infringers to utilize the public to search for and find prior art provides alleged infringers with an advantage over the USPTO.

In light of all of these factors, and particularly when compared to alleged infringers embroiled in litigation, the USPTO is less likely to find and consider the most relevant prior art.

C. The Standard Creates Improper Incentives

In terms of incentives, applying the clear and convincing burden of proof regardless of whether the USPTO actually considered the most relevant prior art discourages patent applicants from investigating prior art, and therefore from potentially finding

tantamount to mere registration and “the presumption of validity would be all but nonexistent.” *Id.*

⁸⁶ Inter partes reexamination is one exception to the rule. *See generally* 35 U.S.C. §§ 311–18 (2006).

⁸⁷ An exception is the ability of third parties, within the first two years after the publication of a patent application, to submit to the USPTO prior art in the form of patents and printed publications. 37 C.F.R. § 1.99 (2008). These submissions, however, “shall not include any explanation of the patents or publications, or any other information” such as prior art in the form of prior sales of products. *Id.* Moreover, these submissions are “limited to ten total patents or publications.” *Id.*

⁸⁸ *See* FED. R. CIV. P. 45.

and disclosing the most relevant prior art to the USPTO. During prosecution at the USPTO, the burden of proving invalidity is by a preponderance of the evidence.⁸⁹ All else being equal, a rational patent applicant who desires patent protection would prefer to have the invalidity of his or her claims decided, not under the preponderance burden of proof, but under the more stringent clear and convincing burden of proof. But if the patent applicant learns about relevant prior art, the inequitable conduct defense⁹⁰—and the specter of its remedy of unenforceability and potential attorneys' fees⁹¹—provides an overwhelming incentive for the patent applicant to disclose this relevant prior art to the USPTO. A rational patent applicant, therefore, may altogether avoid learning about potentially relevant prior art, for example by not searching for prior art until after a patent application issues as a patent.⁹² By doing so, the patent applicant may avoid both the preponderance burden of proof for invalidity and the remedies of the inequitable conduct defense. Thus, applying the clear and convincing burden without regard to whether the most relevant prior art has been considered by the USPTO creates a perverse incentive for patent applicants *not* to find and disclose relevant prior art to the USPTO.

The public, however, would benefit if the patent owner would search for prior art and disclose the most relevant prior art to the USPTO. Indeed, this behavior would fortify the presumption upon

⁸⁹ *In re Swanson*, 540 F.3d 1368, 1377 (Fed. Cir. 2008).

⁹⁰ *Warner-Lambert Co. v. Teva Pharm. USA, Inc.*, 418 F.3d 1326, 1342 (Fed. Cir. 2005) (“Inequitable conduct occurs when a patentee breaches his or her ‘duty of candor, good faith, and honesty’ to the [US]PTO.” (quoting *Molins PLC v. Textron, Inc.*, 48 F.3d 1172, 1178 (Fed. Cir. 1995))).

⁹¹ *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059, 1070 (Fed. Cir. 1998) (citing 35 U.S.C. §§ 282, 285 (2006)). The remedy for a finding of inequitable conduct with respect to one or more claims of a patent application is unenforceability of the *entire patent*. *Kingsdown Med. Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 877 (Fed. Cir. 1988) (relevant portion en banc). In addition, *related patents* also may be held unenforceable. *Nilssen v. Osram Sylvania, Inc.*, 504 F.3d 1223, 1227, 1230 (Fed. Cir. 2007).

⁹² Generally speaking, there is not a requirement that patent applicants search for prior art. See 35 U.S.C. § 111(a) (2006) (listing the requirements for a non-provisional patent application). One exception is when a patent applicant desires to accelerate prosecution of an application. U.S. PATENT AND TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 708.02 (8th ed. 2001, Jul. 2008 rev.), available at <http://www.uspto.gov/web/offices/pac/mpep/mpep.htm>.

which the clear and convincing burden of proof is based. In short, the Federal Circuit's standard is self-defeating—the standard itself undermines the very presumption on which it relies: that the USPTO considered the most relevant prior art.⁹³

D. Poor Patent Quality, Unjust Rewards, and Unnecessary Costs

In terms of results, the Federal Circuit's standard negatively affects patent quality, unjustly rewards patent applicants, and creates unnecessary transaction costs. The primary effect of the incentive structure discussed above—encouraging patent applicants not to search for and disclose prior art to the USPTO—is a reduction in the quality of patents in terms of their validity. To the extent that the USPTO does not consider the most relevant prior art before allowing patent applications to issue as patents, the validity of the issued patents is undetermined. Indeed, the perverse incentive created by the application of the clear and convincing burden of proof at all times likely results in the awarding of at least some, and perhaps many, patents to applicants that would not otherwise obtain protection for their disclosure.

In this situation, the quid pro quo at the very heart of the patent system is turned on its head. The patent applicant discloses nothing new or nonobvious but nevertheless receives a reward for his or her disclosure.⁹⁴ The patent owner may charge a premium for a product or service and collect monopoly profits despite his or her failure to provide beneficial disclosure to the public. In other words, patent applicants are unjustly rewarded, and the constitutional purpose of patents—to promote the progress of science and useful arts⁹⁵—is thwarted.

This unjust award of a patent comes at a significant cost. To the extent that the patent owner is able to collect monopoly profits, these profits are at the public's expense. In addition, competitors

⁹³ One proposal that would address this misalignment is to “grant a presumption of validity” only when prior art is disclosed to the USPTO. See Jay P. Kesan, *Carrots and Sticks to Create a Better Patent System*, 17 BERKELEY TECH. L.J. 763, 770–76 (2002). In the context of this proposal, the elimination of the grant of a presumption of validity involves lowering the burden of proof below clear and convincing evidence. *Id.* at 776.

⁹⁴ See 35 U.S.C. § 102(a)–(b).

⁹⁵ U.S. CONST. art. I, § 8, cl. 8.

may be required to raise prices on their own products or services to offset the cost of negotiating license agreements or litigation with the patent owner. Litigation of ultimately invalid patents may be required, costing significant sums of money to the parties as well as the public in terms of the costs of the judicial process.⁹⁶ Moreover, to the extent that the standard for proving invalidity in litigation is too strict, a patent that might never have been issued by the USPTO may ultimately survive a challenge to its validity. In short, the anticompetitive costs of a patent may be unleashed on the public, either temporarily or “permanently,”⁹⁷ when those costs could have been prevented by the USPTO had it made a more fully informed decision regarding the patentability of the patent application in the first instance.

III. REPLACING THE CLEAR AND CONVINCING BURDEN WITH A PREPONDERANCE BURDEN FOR UNCONSIDERED, MATERIAL PRIOR ART

To correct for the significant problems associated with the Federal Circuit’s standard for proving invalidity—including its logical shortcomings, incorrect assumptions, perverse incentives, negative effects on patent quality, unjust rewards, and unnecessary transaction costs—that standard, which requires clear and convincing evidence of invalidity in every circumstance, should be replaced with a preponderance burden of proof when the USPTO did not consider material prior art.

⁹⁶ In 2009, the median total cost to the parties of a patent infringement lawsuit with between \$1 million and \$25 million at risk was \$2.5 million. AM. INTELL. PROP. L. ASS’N, 2009 REPORT OF THE ECONOMIC SURVEY 29 (2009). This cost, while high, does not count the expenses borne by juries and courts. *Id.*

⁹⁷ The “temporary” effects of a patent in this situation refers to the time period between which the USPTO issues the patent and the patent is finally invalidated in court. The “permanent” effects of a patent in this situation refers to the time period between which the USPTO issues the patent and the patent expires at the conclusion of its the statutory term—now twenty years from the date on which the patent application was filed in the United States. *See* 35 U.S.C. § 154(a)(2) (2006).

A. The Concept: A Preponderance Burden for Unconsidered, Material Prior Art

The Federal Circuit's standard, which requires clear and convincing evidence to prove invalidity in every circumstance, should be replaced with a standard that reflects whether the USPTO actually considered the most relevant prior art at the time the patent was issued. If an alleged infringer asserts unconsidered and material prior art in litigation, the preponderance burden of proof should apply to the question of invalidity. Otherwise, the clear and convincing burden of proof should apply.

1. "Unconsidered" Prior Art

Under this proposal, a first threshold determination would be whether the prior art asserted in litigation has been considered by the USPTO. Only if the prior art was not considered by the USPTO would the preponderance burden of proof potentially apply. Consideration of prior art by the USPTO could be determined, in the first instance, by reference to the face of the patent at issue. The "References Cited" section of every patent will identify prior art considered by the USPTO.⁹⁸ The prosecution history, however, also should be consulted to determine whether the USPTO considered additional prior art references that, due to an error, were omitted from the face of the patent.

The view that the only references considered by the USPTO are those cited on the face of patents was criticized in *Solder Removal Co.* There, the court noted that the USPTO's failure to cite particular prior art does not necessarily mean that that prior art was not considered by the examiner because the examiner may have considered it and determined that it was unworthy of citation.⁹⁹ The court did not cite any support for this proposition.

⁹⁸ See U.S. PATENT AND TRADEMARK OFFICE, MANUAL OF PATENT EXAMINING PROCEDURE § 1302.12 (8th ed. 2001, Jul. 2008 rev.), available at <http://www.uspto.gov/web/offices/pac/mpep/mpep.htm>. The references listed on the face of the issued patent include references cited by the patent applicant in Information Disclosure Statements and references cited by the patent examiner on form PTO-892. *Id.*

⁹⁹ *Solder Removal Co. v. U.S. Int'l Trade Comm'n*, 582 F.2d 628, 633 n.9 (C.C.P.A. 1978).

Moreover, even if the failure to cite particular prior art does not *necessarily* mean that that prior art was not considered by the examiner, it seems more likely than not that in *most situations* when an examiner does not cite particular prior art, the failure to cite that prior art means that that it was not considered by the examiner. Thus, in terms of setting a default rule, it makes more sense to presume that prior art references not cited on the face of a patent were not considered by the USPTO. Indeed, in *Connell*, the Federal Circuit conceded that there is virtually always pertinent and relevant prior art not considered by the USPTO.¹⁰⁰ A default rule should not presume the opposite.¹⁰¹

2. “Material” Prior Art

If the prior art asserted in litigation has not been considered by the USPTO, a second threshold determination would be made: whether the unconsidered prior art is material to patentability.¹⁰² This materiality analysis should include two prongs. First, a determination should be made concerning whether the prior art is relevant to the claimed invention. For example, information should be considered material “where there is a substantial

¹⁰⁰ *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1549 (Fed. Cir. 1983).

¹⁰¹ Others have proposed an alternative reform that would modify the burden of proving invalidity based on the extent to which the USPTO has considered any particular prior art. See Doug Lichtman & Mark A. Lemley, *Rethinking Patent Law’s Presumption of Validity*, 60 STAN. L. REV. 45, 49–51 (2007) (proposing a preponderance burden of proof for traditional USPTO consideration of prior art and a clear and convincing burden of proof for enhanced USPTO consideration of prior art). That proposal would require the implementation of new USPTO procedures to obtain an enhanced burden of proof, regardless of prior consideration of prior art by the USPTO. *Id.* The reform proposed here would not require implementation of any new USPTO procedures.

¹⁰² Materiality is a concept central to the issue of inequitable conduct, and in the context of inequitable conduct it can be measured under various standards: (1) a “subjective but for” standard; (2) an “objective but for” standard; (3) a “but it may have” standard; (4) the reasonable examiner standard; and (5) the standard currently set by 37 C.F.R. § 1.56. *Digital Control, Inc. v. Charles Mach. Works*, 437 F.3d 1309, 1315–16 (Fed. Cir. 2006). Some of these standards are more strict than others. In the context of gauging the relevance of prior art for purposes of setting the invalidity standard, the relevant issues are whether the prior art is relevant and non-cumulative, as discussed below. And while any of these standards could be adopted for purposes of the invalidity analysis, note that the reasonable examiner standard is the least difficult to satisfy, while the standard currently set by 37 C.F.R. § 1.56 already expressly includes the concept of non-cumulativeness.

likelihood that a reasonable examiner would consider it important in deciding whether to allow the application to issue as a patent.”¹⁰³ Only if the prior art asserted in litigation is “important,” or relevant, would the preponderance burden of proof potentially apply.

Second, an analysis should be made concerning whether the prior art is cumulative to prior art already considered by the USPTO. “Cumulativeness” refers to the situation where information teaches no more than what a reasonable examiner would consider to be taught by prior art already before the USPTO.¹⁰⁴ Non-cumulativeness, then, refers to the situation where information teaches more than what a reasonable examiner would consider to be taught by prior art already before the USPTO. Only if the prior art asserted in litigation is non-cumulative should the preponderance burden of proof potentially apply.

Applying these concepts, if prior art asserted in litigation (1) was not considered by the USPTO and is both (2)(a) relevant to the claimed invention and (2)(b) non-cumulative, then the preponderance burden of proof should apply to the question of invalidity. On the other hand, if prior art asserted in litigation (1) was considered by the USPTO or is either (2)(a) not relevant to the claimed invention or (2)(b) cumulative, then the clear and convincing burden of proof should apply to the question of invalidity. Stated more concisely, this proposal would replace the clear and convincing burden of proof with a preponderance burden of proof when the USPTO did not consider material prior art.¹⁰⁵

¹⁰³ 37 C.F.R. § 1.56(a) (1991). This is the reasonable examiner standard of materiality.

¹⁰⁴ *University of Cal. v. Eli Lilly & Co.*, 119 F.3d 1559, 1575 (Fed. Cir. 1997).

¹⁰⁵ Some have advocated this same position—that the proper evidentiary burden is preponderance of the evidence when material evidence was not considered by the USPTO. *See, e.g., Charles E. Phipps, The Presumption of Administrative Correctness: The Proper Basis for the Clear and Convincing Evidence Standard*, 10 FED. CIR. B.J. 143, 162 (2000). Others, however, have proposed applying the preponderance burden of proof when prior art asserted in litigation raises a “substantial new question of patentability.” *See, e.g., Clarence J. Fleming, Should the Clear & Convincing Evidence Standard for Rebutting the Presumption of Validity Apply when the Challenger Raises a Substantial New Question of Patentability?*, 80 J. PAT. & TRADEMARK OFF. SOC’Y 146, 149 (1998). The “substantial new question of patentability” test—used by the USPTO to determine whether to grant a request for reexamination pursuant to 35 U.S.C. § 304—has proven unworkable in practice. The USPTO almost always finds a “substantial new

3. Who Determines Which Burden of Proof Applies?

There are two possible answers to the question of who would determine which burden of proof to apply: the jury or the trial judge. There are also two possible approaches to determining whether the jury or the trial judge will make this decision.

One approach would allow the factfinder on the ultimate invalidity issue to determine which burden of proof to apply. Anticipation is a question of fact.¹⁰⁶ Thus, a jury might be provided instructions on how to determine whether to apply the clear and convincing burden of proof or the preponderance burden of proof.¹⁰⁷ Obviousness, however, is a question of law based on underlying questions of fact.¹⁰⁸ Sometimes juries are called upon to answer the ultimate question of whether a patent claim is obvious, and other times juries are only given special interrogatories on the underlying factual questions with the trial

question of patentability.” See, e.g., UNITED STATES PATENT AND TRADEMARK OFFICE, *EX PARTE* REEXAMINATION FILING DATA—MARCH 31, 2010, available at <http://reexamcenter.com/wp-content/uploads/2010/02/2010-03-31-Ex-Parte.pdf> (indicating that the USPTO grants requests for *ex parte* reexamination more than 90% of the time). The problem with the “substantial new question of patentability” test may be that it does not expressly take into account whether new prior art is cumulative compared to prior art already resolved by the USPTO.

¹⁰⁶ *Marrin v. Griffin*, 599 F.3d 1290, 1293 (Fed. Cir. 2010).

¹⁰⁷ One practitioner, citing *Chiron Corp. v. Genentech, Inc.*, 363 F.3d 1247 (Fed. Cir. 2004), has advocated the opposite position: omitting any jury instruction regarding the presumption of validity and limiting the court’s instruction to the admonition that the alleged infringer has the burden of proving invalidity by clear and convincing evidence. David C. Bohrer, *Knocking the Eagle Off the Patent Owner’s Shoulder: Chiron Holds that Jurors Don’t Have to be Told that a Patent Is Presumed Valid*, 21 SANTA CLARA COMPUTER & HIGH TECH. L.J. 259, 284–85 (2004). This position, however, is based on an unsupported assumption that, when the jury is left in the dark regarding the presumption of validity, the jury “will have little or no understanding of how much evidence is required” to satisfy the clear and convincing standard, and therefore that the alleged infringer will find it “much easier to convince the jury” to invalidate patents. *Id.* Moreover, it is based on a questionable belief that the jury will reject the judge’s instruction on the burden of proof and set a lower hurdle for the alleged infringer: “If the jury does not understand the reasons for shifting burdens and higher standards, the likelihood is that the jury would set the hurdle much lower than they would if they knew the full story.” *Id.* at 285. Instructing the jury on “the full story”—and in particular instructing the jury to apply a preponderance burden of proof when prior art has not been considered by the USPTO—quite obviously would make it much more likely that a jury actually applies this lower hurdle to the question of invalidity when appropriate.

¹⁰⁸ *Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1351 (Fed. Cir. 2010).

judge deciding in the first instance the ultimate question of whether a patent claim is obvious.¹⁰⁹ In the former circumstance, the jury—again through the use of jury instructions—might be tasked with determining which burden of proof to apply.¹¹⁰ In the latter circumstance, the trial judge would take on this task.

An alternative approach would allow the trial judge to determine which burden of proof the ultimate factfinder should apply. The trial judge always would decide the appropriate burden of proof under this alternative implementation and instruct the jury to apply that burden of proof on anticipation and, to the extent the issue is put to the jury, obviousness.

B. The Support

There is logical and precedential support for the application of a preponderance burden of proof when the USPTO does not consider material prior art. This proposal would make the standard and its appropriate rationale coextensive, recognize the realities of examination of patent applications by the USPTO, and reflect the precedent of the Supreme Court and every other circuit court of appeals.

¹⁰⁹ See, e.g., The National Jury Instruction Project, MODEL PATENT JURY INSTRUCTIONS §§ 5.9–10 (2009), available at <http://www.nationaljuryinstructions.org> (providing separate model jury instructions for instances in which the jury will rule upon the ultimate issue of obviousness and instances in which the jury will answer only special interrogatories regarding the underlying factual issues).

¹¹⁰ For example, a jury instruction adopting this proposed reform might recite:

If you find that prior art asserted in this case was not considered by the USPTO, is relevant to the claimed invention, and is not cumulative, then you should apply the preponderance burden of proof to the question of invalidity. On the other hand, if you find that prior art asserted in this case was considered by the USPTO or is not relevant to the claimed invention or is cumulative, then you should apply the clear and convincing burden of proof to the question of invalidity. Prior art is cumulative where that prior art teaches no more than what a reasonable examiner would consider to be taught by prior art already considered by the USPTO.

The complexity of this jury instruction is a factor favoring an implementation in which the trial judge selects the appropriate burden of proof.

1. Making the Standard and Its Rationale Coextensive

The rationale behind the decision of which burden of proof to apply to the issue of invalidity is twofold: (1) that the USPTO correctly rules upon evidence in front of it and (2) that a patent applicant is entitled to a patent only if the applicant's claims cannot be proven invalid in the first instance by a preponderance of the evidence. Applying the clear and convincing burden of proof—when the USPTO has already considered the same prior art relied upon in litigation or prior art just as relevant as the prior art relied upon in litigation—would reflect the belief that the USPTO, absent clear and convincing evidence to the contrary, correctly ruled upon the validity of the patent application in light of the evidence in front of it. On the other hand, applying the preponderance burden of proof—when the USPTO has not already considered prior art relied upon in litigation and that prior art is more relevant than the prior art the USPTO did consider—would reflect the belief that a patent applicant is entitled to a patent in the first instance only if invalidity of the applicant's claims cannot be shown by a preponderance of the evidence. In short, this proposal would make the standard and its appropriate rationale coextensive.

The first part of the rationale, that the USPTO correctly rules upon the validity of the patent application in light of the evidence in front of it, is articulated in Federal Circuit cases. In *American Hoist & Derrick Co.*, for example, the court focused on the deference that is due to a qualified government agency presumed to have properly done its job, but conceded that when an attacker relies on prior art or other evidence not already considered by the USPTO, there is no reason for deference.¹¹¹ While this analysis alone does not support the Federal Circuit's invalidity standard—applying the clear and convincing burden of proof in every instance, regardless of whether the attacker relies on better prior art than the prior art considered by the USPTO—this analysis supports applying the clear and convincing burden of proof when the USPTO has already considered the same prior art relied upon in litigation or prior art just as relevant as the prior art relied upon in

¹¹¹ *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1359 (Fed. Cir. 1984).

litigation.¹¹² Built into this first part of the rationale, of course, is the understanding that the USPTO does not always consider the most relevant, and certainly not *all of the*, prior art.¹¹³

The second part of the rationale, that a patent applicant is entitled to a patent only if the applicant's claims cannot be proven invalid in the first instance by a preponderance of the evidence, also is supported by Federal Circuit cases. The Federal Circuit has held that, during prosecution, the USPTO must prove invalidity by a preponderance of the evidence.¹¹⁴ Thus, when patent applications are reviewed in the first instance, the burden for proving that the statutory requirements of patentability are not met is a preponderance of the evidence.¹¹⁵ Moreover, *in the absence of a statutory presumption of validity*, the Federal Circuit would apply a preponderance burden of proof to invalidity issues raised in litigation.¹¹⁶

The Federal Circuit, however, has interpreted the statutory presumption of validity as mandating that the clear and convincing burden of proof applies regardless of any other consideration.¹¹⁷

¹¹² For this rationale to support the Federal Circuit's standard, a false presumption must be made that the USPTO considers the most relevant prior art. See discussion *supra* Part II.B.

¹¹³ See Woodward, *supra* note 81, at 959 (highlighting problems associated with the "failure to realize fully that the American patent system . . . leaves to private litigation the resolution of vital matters of fact that rarely appear in commensurate fullness in [USPTO] proceedings—if indeed they are involved there at all—and that consequently the decision on the issue of patent validity in an infringement suit is not simply judicial review of administrative findings").

¹¹⁴ *In re Swanson*, 540 F.3d 1368, 1377 (Fed. Cir. 2008).

¹¹⁵ *Id.*

¹¹⁶ The Federal Circuit has indicated that invalidity for lack of written description is proven by a preponderance of the evidence due to the lack of a statutory presumption with respect to patent applications. See *Agilent Techs., Inc. v. Affymetrix, Inc.*, 567 F.3d 1366, 1379 (Fed. Cir. 2009); *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1365 (Fed. Cir. 2004). Similarly, the court has held that the presumption of validity does not apply to patents involved in interference proceedings, resulting in the application of burden of proof of a preponderance of the evidence, unless it is a priority contest between an issued patent and an application that was filed after the issuance of the patent. *Apotex U.S., Inc. v. Merck & Co.*, 254 F.3d 1031, 1037 n.1 (Fed. Cir. 2001); *Bruning v. Hirose*, 161 F.3d 681, 686 (Fed. Cir. 1998); *Price v. Symsek*, 988 F.2d 1187, 1193–94 (Fed. Cir. 1993).

¹¹⁷ See *Magnivision, Inc. v. Bonneau Co.*, 115 F.3d 956, 958 (Fed. Cir. 1997) (holding that the presumption of validity does not dissolve and the burden of proof does not

To the extent that the presumption of validity even addresses the appropriate burden of proof,¹¹⁸ the presumption of validity should be interpreted and understood to mean that, in the absence of clear proof to the contrary, the USPTO correctly rules upon evidence in front of it. It should not be interpreted to mean, contrary to reality and in an irrebuttable fashion, that the USPTO always considers the most relevant prior art. As discussed below, interpreting the presumption of validity to mean that, in the absence of clear proof to the contrary, the USPTO correctly rules upon evidence in front of it, is more consistent with reality, Supreme Court precedent, and the law of every other circuit court of appeals.

2. Recognizing the Realities of the United States Patent and Trademark Office Examination

Adoption of a standard that applies the preponderance burden of proof on the issue of invalidity when a determination has been made that the USPTO did not consider the most relevant prior art would recognize the realities of the examination of patent applications by the USPTO. As discussed above, the USPTO likely does not always, or even usually, find and consider the most relevant prior art due to the information asymmetry between patent applicants and the USPTO, the lack of incentives for examiners to find the most relevant prior art, the USPTO's limited resources, and the fact that patent prosecution largely is an *ex parte* procedure that excludes public participation.¹¹⁹ Because it is likely that litigation often involves an analysis of the patentability of patent claims based on evidence considered in the first instance, the law

change during a trial); *Jamesbury Corp. v. Litton Indus. Prods., Inc.*, 756 F.2d 1556, 1559–60 (Fed. Cir. 1985) (holding that the clear and convincing burden of proof is “unvarying” and does not change depending on the circumstances), *overruled on other grounds by* *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.*, 960 F.2d 1020, 1038–39 (Fed. Cir. 1992) (en banc); *ACS Hosp. Sys., Inc. v. Montefiore Hosp.*, 732 F.2d 1572, 1574–75 (Fed. Cir. 1984) (holding that the presumption of validity “is never . . . destroyed, or even weakened, regardless of what facts are of record”).

¹¹⁸ Again, note that some have argued that the presumption of validity simply puts the initial burden of coming forward with evidence on the issue of validity on the alleged infringer. See, e.g., B.D. Daniel, *Heightened Standards of Proof in Patent Infringement Litigation: A Critique*, 36 AIPLA Q.J. 369, 380 (2008).

¹¹⁹ See discussion *supra* Part II.B.

should allow the invalidity analysis to proceed under the preponderance burden of proof in that circumstance.

3. Precedent

The Federal Circuit appears to rely on two bases for its requirement that clear and convincing evidence be shown in every instance to prove invalidity: (1) Supreme Court precedent supposedly requiring this standard and (2) the statutory presumption of validity expressed in 35 U.S.C. § 282.¹²⁰ Neither basis has merit. The Supreme Court has not squarely addressed the proper interpretation of the presumption of validity and the proper burden of proof when more relevant prior art is asserted in litigation than the prior art considered by the USPTO.¹²¹ Furthermore, the “social disutility” analysis the Supreme Court uses to determine appropriate burdens of proof supports the application of the preponderance standard in this situation. Moreover, the other circuit courts that have interpreted the statutory presumption of validity effectively have concluded that it

¹²⁰ See, e.g., *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1360 (Fed. Cir. 1984) (citing *Radio Corp. v. Radio Eng'g Labs., Inc.*, 293 U.S. 1, 7–8 (1934) (interpreting the statutory presumption of validity)).

¹²¹ Shortly before this Article went to press, the Supreme Court granted certiorari in *i4i Ltd. P'ship v. Microsoft Corp.*, 598 F.3d 831 (Fed. Cir. 2010), *cert. granted*, 79 U.S.L.W. 3128 (Nov. 29, 2010) (No. 10-290). This case may squarely address the issues raised in this Article, as shown by Microsoft's petition for writ of certiorari:

The Patent Act provides that “[a] patent shall be presumed valid” and that “[t]he burden of establishing invalidity of a patent or any claim thereof shall rest on the party asserting such invalidity.” 35 U.S.C. § 282. The Federal Circuit held below that Microsoft was required to prove its defense of invalidity under 35 U.S.C. § 102(b) by “clear and convincing evidence,” even though the prior art on which the invalidity defense rests was not considered by the Patent and Trademark Office prior to the issuance of the asserted patent. The question presented is: Whether the court of appeals erred in holding that Microsoft's invalidity defense must be proved by clear and convincing evidence.

Petition for Writ of Certiorari, *i4i Ltd. v. Microsoft Corp.* (No. 10-290), 2010 WL 3413088, at *ii (Aug. 27, 2010). As this Article explains, the Supreme Court should require consideration of not just whether the USPTO considered during the original prosecution the prior art raised in litigation, but also whether that prior art is material when compared to the prior art the USPTO did consider during prosecution. When prior art was not considered and is material, then the preponderance burden, not the clear and convincing burden, should apply.

requires only a presumption that the USPTO correctly ruled upon the evidence in front of it—not that the USPTO considered the most relevant prior art or that it, illogically, correctly ruled upon evidence that it did not even consider. Indeed, some of the other circuit courts have concluded that the preponderance burden of proof applies when more relevant prior art is asserted in litigation than the prior art considered by the USPTO.

a) Supreme Court Precedent

The Supreme Court has not squarely addressed the proper interpretation of the presumption of validity or the proper burden of proof when more relevant prior art is asserted in litigation than the prior art considered by the USPTO. Yet there is reason to believe that, if it did, it might adopt a preponderance standard in this situation.

i. Supreme Court Opinions Prior to *Radio Corp. v. Radio Engineering Laboratories, Inc.*

Prior to its decision in the oft-cited case of *Radio Corp.*, the Supreme Court issued a multitude of opinions that addressed the presumption of validity.¹²² Significantly, those cases do not attach

¹²² See *Westinghouse Elec. & Mfg. Co. v. Formica Insulation Co.*, 266 U.S. 342, 348 (1924) (“The patent of the exclusive right against the public carries with it a presumption of its validity. It is not conclusive but the presumption gives the grant substance and value.” (citation omitted)); *Hollister v. Benedict & Burnham Mfg. Co.*, 113 U.S. 59, 71 (1885) (“In reaching this conclusion, we have allowed its due weight to the presumption in favor of the validity of the patent arising from the action of the patent-office in granting it”); *Imhaeuser v. Buerk*, 101 U.S. 647, 662 (1879) (“Where the patent in suit is introduced in evidence it affords a prima facie presumption that the invention is new and useful”); *Roemer v. Simon*, 95 U.S. 214, 215 (1877) (“Patentees or assignees in a suit for infringement, where the patent described in the bill of complaint is introduced in evidence, are presumed to be the original and first inventors of the described improvement; and, if they have proved the alleged infringement, the burden of proof is cast upon the respondents to show that the patent is invalid, unless the patent is materially defective in form.”); *Smith v. Goodyear Dental Vulcanite Co.*, 93 U.S. 486, 499 (1876) (“To sustain this position the defendant must overcome the presumption against him arising from the decision of the Commissioner of Patents”); *Mitchell v. Tilghman*, 86 U.S. (19 Wall.) 287, 390 (1873) (“Power to issue letters-patent is conferred upon the commissioner of patents, and inasmuch as such grants are executed by public authority and in pursuance of an act of Congress, the rule is that the patent, when introduced in evidence by the complaining party in a suit for infringement, affords a prima facie presumption that the patentee is the original and first inventor of what is

any particular burden of proving invalidity to this presumption of validity, nor do they address the question of whether the burden of proof changes when more relevant prior art is asserted in litigation than the prior art considered by the USPTO.

One of the earliest of these cases is *Philadelphia & Trenton Railroad Co. v. Stimpson*.¹²³ While the Court did not address the particular burden of proof required to prove that a patent is invalid, it did highlight that the presumption of validity is dependent upon whether the evidence was “laid before the officer”—that is, presented to the USPTO. The Court, in an opinion by Justice Story, explained that there is a presumption of compliance with the patent laws upon issuance of the patent itself.¹²⁴ According to the Court, the fact that a public officer has granted a patent is *prima facie* evidence that the requirements of the patent laws have been met, and no other tribunal is at liberty to reexamine or controvert the satisfaction of these requirements *if the evidence was laid before the officer*.¹²⁵ In addition to deeming a patent on an invention to be *prima facie* evidence of compliance with the patent

therein described and claimed as his invention.”); *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 538–39 (1870) (“Power to grant letters patent is conferred by law upon the Commissioner of Patents, and when that power has been lawfully exercised, and a patent has been duly granted, it is of itself *prima facie* evidence that the patentee is the original and first inventor of that which is therein described, and secured to him as his invention. . . . [The] effect as evidence is to cast the burden of proof upon the respondents to show that the respective patentees are not the original and first inventors of the improvements embodied in the several letters patent”); *Agawam Co. v. Jordan*, 74 U.S. (7 Wall.) 583, 596–97 (1868) (“[T]he rule of law is that the letters patent afford a *prima facie* presumption that the patentee is the original and first inventor of what is therein described as his improvement. . . . Application for a patent is required to be made to the commissioner appointed under authority of law, and inasmuch as that officer is empowered to decide upon the merits of the application, his decision in granting the patent is presumed to be correct.”); *Philadelphia & Trenton R.R. Co. v. Stimpson*, 39 U.S. (14 Pet.) 448, 459 (1840) (noting that “[p]atents for lands, equally with patents for inventions, have been deemed *prima facie* evidence that they were regularly granted”).

¹²³ 39 U.S. (14 Pet.) 448 (1840).

¹²⁴ *Id.* at 458.

¹²⁵ *Id.* The Court would later reject the proposition that the decisions of the USPTO are conclusive and not open to examination in the courts. *Reckendorfer v. Faber*, 92 U.S. 347, 354–55 (1875). Instead, the Court explained that “the allowance and issuance of a patent creates a *prima facie* right only” and “the validity of the patent is subject to an examination by the courts.” *Id.*

laws,¹²⁶ the Court noted that, in light of the requirement that patent applicants provide an oath asserting that the inventor is the first inventor, courts in this country have deemed the patent's issuance prima facie evidence that the inventor is in fact the first inventor.¹²⁷

Later, in *Corona Cord Tire Co. v. Dovon Chemical Corp.*,¹²⁸ the Supreme Court addressed the argument that a patent secured by false evidence is not entitled to the presumption of validity.¹²⁹ The Court rejected this argument, but only because the false evidence did not form the basis for the granting of the patent, nor was it "essentially material" to the patent's issuance.¹³⁰ As a result, the Court concluded that the "presumption of validity furnished by the grant of the patent . . . would not seem to be destroyed."¹³¹ In this way, the Court implied that the presumption of validity would be "destroyed" if false evidence was "essentially material" to the patent's issuance. While limited to the *introduction* of "essentially material" *false evidence*, the holding leaves open the possibility that the *withholding* of "essentially material" *prior art* similarly would "destroy" the presumption of validity. Moreover, this holding indicates that the presumption of validity is not absolute but can be eliminated in certain circumstances.

Thus, at least some Supreme Court opinions prior to *Radio Corp.* indicate that the presumption of validity depends upon whether prior art was presented to the USPTO and that the presumption of validity may be "destroyed" in some circumstances.

¹²⁶ The Court compared patents for inventions with patents for lands, which when produced "under the great seal of the government" have been deemed prima facie evidence that they were regularly granted without any evidence that the law's prerequisites were met. *Philadelphia & Trenton R.R. Co.*, 39 U.S. at 459.

¹²⁷ *Id.* But see *Seymour v. Osborne*, 78 U.S. (11 Wall.) 516, 543 (1870) (explaining that, pursuant to a subsequent statute, "the fact of the granting of [a] reissued patent closed all inquiry into the existence of inadvertence, accident, or mistake").

¹²⁸ 276 U.S. 358 (1928).

¹²⁹ *Id.* at 373–74.

¹³⁰ *Id.* at 374.

¹³¹ *Id.*

ii. *Radio Corp. v. Radio Engineering Laboratories, Inc.*

The Federal Circuit has relied upon the Supreme Court's opinion in *Radio Corp.* as supporting the proposition that the burden of proof for invalidity does not change and requires clear and convincing evidence.¹³² It is important, therefore, to understand the context in which the Supreme Court considered the appropriate burden of proof to apply to the question of invalidity. That context reveals that the Supreme Court was not presented with the question of whether the burden of proof changes when more relevant prior art is asserted in litigation compared to the prior art considered by the USPTO. To the contrary, the Supreme Court was addressing a case in which *the same invalidity issue* was being raised *for the fourth time*—and one of the prior cases resolved an interference proceeding between the parties at the USPTO.

In *Radio Corp.*, the Court faced a longstanding dispute between two inventors, Armstrong and De Forest, over which one of them was the first inventor and thus entitled to patent protection over their invention.¹³³ The Court's opinion provides a detailed explanation of the long history of the dispute between Armstrong and De Forest, including both an interference proceeding at the USPTO and litigation in various courts.¹³⁴ Four separate proceedings pitted Armstrong's priority claim against De Forest's priority claim: (1) an infringement lawsuit commenced by Armstrong; (2) an interference proceeding involving patent applications filed by Armstrong and De Forest; (3) a declaratory judgment action brought by De Forest; and (4) an infringement lawsuit filed by De Forest.¹³⁵

The first proceeding, the infringement lawsuit filed by Armstrong, related to a patent that had issued from a first patent application filed by Armstrong, and it resulted in an interlocutory

¹³² *Am. Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 1360 (Fed. Cir. 1984). *Radio Corp.* is one of the two bases for the Federal Circuit's invalidity standard. The other basis is the statutory presumption of validity. *Id.* at 1359–60.

¹³³ *Radio Corp. v. Radio Eng'g Labs., Inc.*, 293 U.S. 1, 2–3 (1934).

¹³⁴ *Id.* at 2–7.

¹³⁵ *Id.*

finding on the issue of priority in favor of Armstrong that was affirmed by the Second Circuit.¹³⁶

The second proceeding, the interference, involved a second patent application filed by Armstrong, and it resulted in a finding by the Commissioner of Patents giving Armstrong priority.¹³⁷ The D.C. Circuit, however, reversed and decreed priority in favor of De Forest.¹³⁸

In the third proceeding, the declaratory judgment action, De Forest sought to invalidate Armstrong's patent that had issued from the first patent application in light of the holding of the D.C. Circuit.¹³⁹ De Forest succeeded in the district court on the basis that Armstrong failed to overcome the presumption of validity attaching to the De Forest patents in light of the administrative ruling in the D.C. Circuit and the fact that the Second Circuit had only affirmed an interlocutory finding related to Armstrong's first patent application, i.e., that no final judgment had been entered.¹⁴⁰ The Third Circuit affirmed, holding that Armstrong had not overcome the presumption of validity attaching to De Forest's patents.¹⁴¹ The Supreme Court affirmed in light of two lines of cases.¹⁴² The first holds that a decision by the USPTO between two parties as to priority "must be accepted as controlling upon that question of fact in any subsequent suit between the same parties, unless the contrary is established by testimony [that] in character and amount carries thorough conviction."¹⁴³ The second

¹³⁶ *Id.* at 3–4.

¹³⁷ *Id.* at 4.

¹³⁸ *Id.*

¹³⁹ *Id.* at 4–5.

¹⁴⁰ *Id.* at 5. It is ironic that a case standing for the presumption of validity and the deference due the USPTO, at its heart, is based on a *reversal* of the USPTO's decision on the issue of priority by a court. *See id.*

¹⁴¹ *Id.*

¹⁴² *Id.*

¹⁴³ *Id.* at 5–6 (citing *Morgan v. Daniels*, 153 U.S. 120 (1894)). Notably, this basis for the Supreme Court's conclusion relies upon a concept similar to *res judicata*. Indeed, in the earlier case upon which it relied, *Morgan v. Daniels*, the Court found that the USPTO's resolution of priority between two parties should be upheld in subsequent litigation *between the same two parties* unless error can be shown by a burden similar to clear and convincing evidence: "thorough conviction." *Id.* at 125 ("[W]here the question decided in the [USPTO] is one between contesting parties as to priority of invention, the

holds that findings of lower courts will be accepted by the Supreme Court “unless clear error is shown.”¹⁴⁴

In the fourth proceeding, the lawsuit filed by the assignee of De Forest’s patents, Radio Corporation of America (“RCA”) alleged infringement by Radio Engineering Laboratories, Inc. (“REL”), a third party unrelated to Armstrong.¹⁴⁵ REL, however, aligned itself with Armstrong, and Armstrong funded its defense.¹⁴⁶ Significantly, the Court noted that the “evidence in this suit . . . is a repetition, word for word, of the evidence in the earlier suits, so far as material to the conflicting claims of Armstrong and De Forest.”¹⁴⁷ The district court held that REL did not succeed in invalidating De Forest’s patents.¹⁴⁸ The Second Circuit, however, reversed and held—as the same court did eleven years before—that Armstrong was the first inventor.¹⁴⁹ The Supreme Court granted review.¹⁵⁰

With all of this history in mind, the Supreme Court proceeded to address the question raised: whether to affirm the Second Circuit’s invalidation of De Forest’s patents. After recognizing that the judgments in the lawsuits between Armstrong and De Forest and their respective assignees were not *res judicata* as to REL, the Court explained that the standard for proving invalidity of the De Forest patents was high:

A patent regularly issued, and even more obviously a patent issued after a hearing of all the rival claimants, is presumed to be valid until the

decision there made must be accepted as controlling upon that question of fact in any subsequent suit between the same parties, unless the contrary is established by testimony which in character and amount carries thorough conviction.”). Thus, the holding of *Morgan* does not stand for the proposition that a broad presumption of validity attaches to every patent, requiring clear and convincing evidence to invalidate the patent in every instance.

¹⁴⁴ *Radio Corp.*, 293 U.S. at 6 (citing *United States v. State Inv. Co.*, 264 U.S. 206, 211 (1924)).

¹⁴⁵ *Radio Corp.*, 293 U.S. at 6.

¹⁴⁶ *Id.*

¹⁴⁷ *Id.*

¹⁴⁸ *Id.*

¹⁴⁹ *Id.* at 6–7.

¹⁵⁰ *Id.* at 7.

presumption has been overcome by convincing evidence of error. . . . [O]ne otherwise an infringer who assails the validity of a patent fair upon its face bears a heavy burden of persuasion, and fails unless his evidence has more than a dubious preponderance.¹⁵¹

Thus, the Court indicated that a patent “*regularly issued*,” and even more so one issued “after a hearing of *all of the rival claimants*,” is presumed to be valid until this presumption of validity is overcome by “convincing evidence of error.”¹⁵² Moreover, the Court indicated that an alleged infringer challenging the validity of a patent “*fair upon its face*” bears a “heavy” burden of proof that is higher than a mere “preponderance.”¹⁵³

The Court went on to focus on the appropriateness of this standard in various circumstances:

If that is true where the assailant connects himself in some way with the title of the true inventor, it is so a fortiori where he is a stranger to the invention, without claim of title of his own. If it is true where the assailant launches his attack with evidence different, at least in form, from any theretofore produced in opposition to the patent, it is so a bit more clearly where the evidence is even verbally the same.¹⁵⁴

The first sentence indicates that this standard applies regardless of whether the alleged infringer claims to be a prior inventor. The second sentence indicates that this standard applies regardless of whether the alleged infringer uses evidence “different in form” or exactly the same as evidence previously used against the patent at issue.

In the end, the Court determined that it would not contradict its previous holding as to priority between De Forest and

¹⁵¹ *Id.* at 7–8.

¹⁵² *Id.* (emphasis added).

¹⁵³ *Id.* at 8 (emphasis added).

¹⁵⁴ *Id.*

Armstrong.¹⁵⁵ In the prior appeal raising the priority dispute, it had determined that the evidence was insufficient to overcome the presumption of validity “in any clear or certain way,” and in this case its reexamination of the record failed to convince it that its prior determination was wrong.¹⁵⁶

Several points concerning *Radio Corp.* are important to consider. The first and most significant point is that, as shown by the detailed summary of the case presented above, the facts addressed by the Court concerned a matter litigated repeatedly in various courts, between the rival claimants, and using the same evidence. Any of the statements in *Radio Corp.* must be understood in this context. The Court was not addressing a case involving new evidence of invalidity, let alone *better* evidence of invalidity.

Second, in the end, even the Court’s statements concerning application of the clear and convincing burden of proof focused on patents “regularly issued,” patents “fair upon [their] face,” and patents “issued after a hearing of all the rival claimants.” Only in these circumstances did the Court conclude that there is a presumption of validity that requires clear and convincing evidence to overcome.¹⁵⁷ Thus, the Court left open the door to a lesser burden of proof in certain circumstances.

In particular, the qualifications “regularly issued” and “after a hearing of all of the rival claimants” indicate that a patent is not “presumed to be valid until the presumption has been overcome by convincing evidence of error” if (a) the patent is not *regularly issued* or (b) the USPTO did not consider *all of the rival claimants*. Moreover, the reference to “convincing evidence of error” indicates that the *actions of the USPTO* should be reviewed for error, not necessarily that the *invalidity of the patent* should be reviewed under a clear and convincing burden of proof. Similarly, the qualification “fair upon its face” indicates that an alleged infringer challenging the validity of a patent does not bear a heavy

¹⁵⁵ *Id.* at 10.

¹⁵⁶ *Id.*

¹⁵⁷ See also *Corona Cord Tire Co. v. Dovon Chem. Corp.*, 276 U.S. 358, 373–74 (1928) (noting that the submission to the USPTO of false evidence material to the issuance of the patent may overcome or at least affect the application of the presumption of validity).

burden of proof that is higher than a “mere preponderance” if the patent is not fair upon its face. Moreover, while “regularly issued” and “fair upon its face” are phrases subject to interpretation, one reasonable interpretation of these phrases is that the patent applicant disclosed the most relevant prior art to the USPTO for its consideration before issuing the patent. In the absence of this disclosure, one might reasonably conclude that the patent did not “regularly issue” or was not “fair upon its face.”

Third, it is important to understand the precedent relied upon in *Radio Corp.* That precedent related to instances in which an alleged infringer relied upon mere testimony of witnesses to prove prior invention.¹⁵⁸ The holdings of those cases focus on the question of corroboration of an alleged prior invention and, in particular, corroboration of an alleged reduction to practice.¹⁵⁹ In the absence of corroboration of prior invention, the Court effectively held in those cases, doubt existed that should be resolved against the alleged prior inventor.¹⁶⁰ To the extent that an

¹⁵⁸ See *Washburn & Moen Mfg. v. Beat 'Em All Barbed-Wire Co.*, 143 U.S. 275, 285 (1892); *Cantrell v. Wallick*, 117 U.S. 689, 696 (1886); *Coffin v. Ogden*, 85 U.S. (18 Wall.) 120, 123–24 (1873).

¹⁵⁹ *Washburn*, 143 U.S. at 285 (holding that “the frequency with which testimony is tortured, or fabricated outright, to build up the defense of a prior use of the thing patented” justifies placing the burden of proving prior use on the alleged infringer and resolving every reasonable doubt against him); *Cantrell*, 117 U.S. at 696 (noting that every reasonable doubt should be resolved against a party asserting prior invention when the proof depended upon the testimony of two witnesses who did not produce a working device or model of a working device but instead merely presented drawings made six years after one of the witnesses claimed to have sold the device to the second witness); *Coffin*, 85 U.S. at 123–24 (holding that every reasonable doubt should be resolved against an alleged infringer attempting to prove prior invention based on the testimony of four witnesses and that the focus of the analysis of the alleged infringer’s proof should be on whether the alleged prior use was “embryonic or inchoate; if it rested in speculation or experiment; if the process pursued for its development had failed to reach the point of consummation”); see also *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993) (citing *Washburn* for the proposition that “without some type of corroborating evidence, an alleged inventor’s testimony cannot satisfy the ‘clear and convincing evidence’ standard”); *Campbell v. Spectrum Automation Co.*, 513 F.2d 932, 936 (6th Cir. 1975) (explaining that while “the source of the ‘clear and convincing’ standard springs from these early decisions . . . [they] seem to have confined this strict standard to those cases where a prior use was undertaken to be proved by oral testimony” and noting “[a]n apparent expansion of this rationale” in *Radio Corp.*).

¹⁶⁰ In response to the proposal by the Federal Trade Commission that the preponderance burden of proof apply in litigation to the issue of invalidity in all instances, FED. TRADE

alleged infringer attempts to rely on oral testimony alone, the same result—a finding of no invalidity—can be achieved if the law makes clear that uncorroborated testimony regarding invalidity cannot as a matter of law rise to the level of a preponderance of the evidence.

Fourth, the Supreme Court's holding in *Radio Corp.* fails to address or resolve the issue of whether the burden of proving invalidity should be a preponderance of the evidence when more relevant prior art is asserted in litigation than the prior art considered by the USPTO.

iii. Supreme Court Opinions After *Radio Corp. v. Radio Engineering Laboratories, Inc.*

The Supreme Court has issued a number of opinions after *Radio Corp.* that highlight how the Court and its members understand the presumption of validity and *Radio Corp.* itself. These opinions indicate that disagreement and unresolved questions remain over the meaning and effect of the presumption of validity and the holding in *Radio Corp.* itself.

In *Williams Manufacturing Co. v. United Shoe Machinery Co.*,¹⁶¹ for example, the Court affirmed a judgment that a patent was infringed and not invalid without addressing the presumption of validity or *Radio Corp.* Justice Black, however, dissented, with Justices Douglas and Murphy concurring in the dissent. The dissent expressed disagreement with the lower courts' application of *Radio Corp.*¹⁶² In particular, Justice Black disagreed with their

COMM'N, TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY, ch. 5, at 26–28 (2003), the American Intellectual Property Law Association (“AIPLA”) focused its response on *Radio Corp.* and Supreme Court case law addressing the need for corroboration of oral testimony of prior uses and prior invention, AM. INTELL. PROP. L. ASS'N, AIPLA RESPONSE TO THE OCTOBER 2003 FEDERAL TRADE COMMISSION REPORT—“TO PROMOTE INNOVATION: THE PROPER BALANCE OF COMPETITION AND PATENT LAW AND POLICY,” 6–16 (2004). Notably, the AIPLA ignored the precedent of every circuit court other than the Federal Circuit. But even the AIPLA concluded that once the existence, authentication, availability, and scope of evidence is established by clear and convincing evidence, “the burden should be that the persuasive force of such facts demonstrates patent invalidity by a fair preponderance, not some elevated standard.” *Id.* at 16.

¹⁶¹ 316 U.S. 364 (1942).

¹⁶² *Id.* at 392 (Black, J., dissenting).

determination that the patent-in-suit was “a patent fair upon its face” and that the evidence of non-patentability amounted to “no more than a ‘dubious preponderance.’”¹⁶³ Importantly, Justice Black found no reason for extending the presumption of validity arising from the mere issuance of a patent “beyond the narrow compass” indicated by *Radio Corp.* absent a statutory prescription to the contrary.¹⁶⁴ Rather, he found several reasons for not extending the presumption any further: (1) a patent is a grant of an exclusive privilege yet it is normally issued in a non-adversary proceeding; (2) at the time the USPTO kept patent applications on file in secrecy until the time of issuance; (3) the public is represented only insofar as the enormous volume of business permits the examining staff of the USPTO to watch out for the public interest; (4) patent examiners, unlike courts, do not have the benefit of the results of investigations into the state of the prior art by adversaries; and (5) even where the USPTO conducts interference proceedings, the parties are not permitted to prove that a third party was the first inventor.¹⁶⁵

Significantly, Justice Black expressed the view that the presumption arising from the issuance of a patent should be given “small weight.”¹⁶⁶ Moreover, he explained that, at very best, the presumption might be permitted to tip the scale when other considerations leave the issue of patentability in equilibrium.¹⁶⁷ In this way, Justice Black highlighted that, in his view, the presumption of validity only places a preponderance burden of proof on an alleged infringer.

¹⁶³ *Id.* Presumably Justice Black concluded that the “prerequisites for establishing a presumption of validity are not here present” because the patent-in-suit was not “fair upon its face,” and not because the evidence of invalidity exceeded a preponderance of the evidence. Otherwise, Justice Black was putting the cart (whether the evidence of invalidity rises to the required level) before the horse (whether the presumption of validity applies). This assumes, however, that the presumption of validity dictates the level of proof required to invalidate a patent. If the presumption of validity is synonymous with the ultimate question of validity, Justice Black may have concluded that the fact that the evidence of invalidity exceeded a preponderance of the evidence meant that the presumption of validity did not apply.

¹⁶⁴ *Id.*

¹⁶⁵ *Id.* at 392–93.

¹⁶⁶ *Id.* at 393.

¹⁶⁷ *Id.*

Even after Congress codified the presumption of validity in 1952 after *Williams Manufacturing Co.*,¹⁶⁸ some Supreme Court justices continued to voice their concern with the application of the presumption of validity by the lower courts. In *Shultz v. Moore*,¹⁶⁹ for example, Justice Douglas—still on the bench thirty-two years after he joined Justice Black’s dissent in *Williams Manufacturing Co.*—dissented from the denial of a petition for writ of certiorari.¹⁷⁰ Justice Douglas in part faulted the Tenth Circuit for holding that patents carry a presumption of validity that can be overcome “only be clear and convincing evidence.”¹⁷¹ He explained that courts cannot rely on the USPTO always to issue valid patents, because (1) patent prosecution proceedings are non-adversarial; (2) applicants are persistent; (3) applicants may appeal adverse administrative decisions but no corresponding check is available to overturn erroneous findings of patentability; (4) as a practical matter errors on the side of patentability “slip through [the] process”; and (5) litigation of patent validity presents the only opportunity for “judicial correction of the errors of generosity.”¹⁷² Thus, in both *Williams Manufacturing Co.* and *Shultz*, Supreme Court justices indicated their disagreement with broad interpretations or applications of *Radio Corp.* to require clear and convincing evidence to overcome the presumption of validity.

Later, in *Cardinal Chemical Co. v. Morton International, Inc.*,¹⁷³ the Court itself—no longer just dissenting justices—noted that the strength of the presumption of validity varies depending on the particular circumstances.¹⁷⁴ In particular, the Court held that the presumption of validity “lack[ed] some of its earlier strength” when the Federal Circuit vacated a judgment of invalidity based

¹⁶⁸ Act of July 19, 1952, ch. 950, 66 Stat. 792 (codified as amended in various sections of Title 35 of the United States Code).

¹⁶⁹ 419 U.S. 930 (1974).

¹⁷⁰ *Id.* at 930–32 (Douglas, J., dissenting).

¹⁷¹ *Id.* at 930.

¹⁷² *Id.* at 932.

¹⁷³ 508 U.S. 83 (1993).

¹⁷⁴ *See id.* at 94 n.15.

upon its affirmance of a judgment of noninfringement of the same patent.¹⁷⁵

The most recent Supreme Court case addressing the presumption of validity is *KSR International Co. v. Teleflex Inc.*¹⁷⁶ There, the Court did not reach the question of whether the failure to disclose a prior art reference during prosecution voids the presumption of validity given to issued patents.¹⁷⁷ It did, however, note that “the rationale underlying the presumption—that the [USPTO], in its expertise, has approved the claim—seems much diminished” in this situation.¹⁷⁸

Viewed as a whole, the opinions that have issued since *Radio Corp.* reveal that the Supreme Court and its members may interpret the presumption of validity and *Radio Corp.* differently than has the Federal Circuit. In particular, the Court might hold that the presumption of validity only requires invalidity to be proven by a preponderance of the evidence in at least some circumstances, that the presumption of validity does not require clear and convincing evidence of invalidity, or that the strength of the presumption of validity varies depending on the circumstances.

iv. Social Disutility Analysis

While all of the Supreme Court precedent discussed above addresses the presumption of validity, there is other Supreme Court precedent relevant to the question of the appropriate invalidity standard. In particular, as the Federal Circuit has recognized,¹⁷⁹ the Supreme Court has repeatedly utilized the “social disutility” analysis to determine appropriate burdens of proof.¹⁸⁰

¹⁷⁵ *Id.* (“Under 35 U.S.C. § 282, all patents are presumed valid. Although that presumption is obviously resurrected after the Federal Circuit vacates a finding of invalidity, Morton’s current situation makes clear that the revived presumption lacks some of its earlier strength.”).

¹⁷⁶ 550 U.S. 398 (2007).

¹⁷⁷ *Id.* at 426.

¹⁷⁸ *Id.*

¹⁷⁹ *See Price v. Symsek*, 988 F.2d 1187, 1193–94 (Fed. Cir. 1993).

¹⁸⁰ *See Santosky v. Kramer*, 455 U.S. 745, 754–55 (1982); *California v. Mitchell Bros.*, Santa Ana Theater, 454 U.S. 90, 92–93 (1981); *Addington v. Texas*, 441 U.S. 418, 427 (1979); *In re Winship*, 397 U.S. 358, 370 (1970) (Harlan, J., concurring).

The social disutility analysis can be used to determine the appropriate burden of proof to apply to an issue in litigation. It requires an assessment of the social disutility of erroneous findings on that issue.¹⁸¹ In the context of invalidity of patents, for example, the social disutility of an erroneous finding that a patent is invalid must be compared with the social disutility of an erroneous finding that a patent is not invalid. This comparison explains the appropriate burden of proof, which in the civil context will be either a preponderance of the evidence or clear and convincing evidence.¹⁸² A preponderance of the evidence burden of proof indicates that the social disutility of an erroneous finding that a truly valid patent is invalid is comparable to the social disutility of an erroneous finding that a truly invalid patent is not invalid.¹⁸³ A clear and convincing evidence burden of proof indicates that the social disutility of an erroneous finding that a truly valid patent is invalid is much greater than the social disutility of an erroneous finding that a truly invalid patent is not invalid.¹⁸⁴

In the invalidity context, as discussed above, the USPTO applies the preponderance of the evidence burden of proof to the issue of invalidity in the first instance.¹⁸⁵ Viewed in light of the social disutility analysis, the application of the preponderance of the evidence burden of proof reflects a comparable level of social disutility when a truly valid patent is found invalid and when a truly invalid patent is found not invalid. On the one hand, a patent is designed to serve the public purpose of promoting the “Progress of Science and useful Arts.”¹⁸⁶ On the other hand, a patent is an exception to the general rule against monopolies and to the right to access to a free and open market, with “far-reaching social and economic consequences.”¹⁸⁷ The social disutility analysis

¹⁸¹ *In re Winship*, 397 U.S. at 370.

¹⁸² *Id.*

¹⁸³ *See generally id.*

¹⁸⁴ *See generally id.*

¹⁸⁵ *See, e.g., In re Swanson*, 540 F.3d 1368, 1377 (Fed. Cir. 2008).

¹⁸⁶ *Precision Instrument Mfg. Co. v. Auto. Maint. Mach. Co.*, 324 U.S. 806, 816 (1945) (quoting U.S. CONST. art. I, § 8, cl. 8).

¹⁸⁷ *Id.* In *Precision Instrument Manufacturing Co.*, the Supreme Court explained that both of these factors favor ensuring that patents issue free from fraud. *Id.* These same

indicates that the application of the preponderance burden of proof to the issue of invalidity reflects an equilibrium behind failing to promote the progress of science and useful arts when its promotion is appropriate and failing to prevent the unnecessary exception to the general rule against monopolies and exclusive access to open markets.

While the social disutility analysis focuses on the *social disutility* resulting from incorrect findings on issues, the analysis should also consider the *likelihood* that a jury or court might come to an incorrect conclusion on an issue given any particular burden of proof. In other words, the analysis should weigh the disutility of incorrect conclusions only after considering the likelihood that either disutility will, in fact, occur. Normally—when no unbiased, expert third party has exercised its judgment on an issue—it is not possible to consider this likelihood factor. But when an examiner at the USPTO has considered prior art and exercised his or her judgment on the issue, based on his or her presumed experience and expertise, it is reasonable to conclude that the USPTO has come to the correct conclusion.

Applying this likelihood factor to the social disutility analysis in the context of invalidity, a finding of invalidity by a jury or court under a preponderance burden of proof is presumptively incorrect when it is based on evidence considered by the USPTO because it is at odds with the USPTO's conclusion. Thus, the disutility associated with finding truly valid patents invalid is likely to occur more often when compared to the disutility associated with finding a truly invalid patent not invalid. Factoring in the likelihood of the disutility, then, favors applying a clear and convincing burden of proof in this situation. Thus, the clear and convincing burden of proof should be used to require the jury or court to supplant the expert USPTO's judgment only when the jury is convinced that the USPTO made a mistake. In other words, the clear and convincing burden of proof should apply when the jury or court is considering an issue already ruled upon by the USPTO.

factors, however, neatly capture the interests at stake in *issuing valid* patents and *not issuing invalid* patents.

But when the USPTO has not considered the patentability of claims in light of the most relevant prior art, there is no deference involved. That is, there is no basis to conclude that the jury or court is less likely to make a mistake on the ultimate issue of validity, and so a preponderance burden of proof should apply in this circumstance, consistent with the burden of proof applied by the USPTO itself when it considers an issue in the first instance.

To summarize, when factoring in the likelihood that a jury or court might come to an incorrect conclusion given any particular burden of proof, the social disutility analysis supports applying a clear and convincing burden of proof on the issue of invalidity when the USPTO considered the most relevant prior art. But in the absence of any ability to judge the likelihood that a jury or court might come to an incorrect conclusion, i.e., when the USPTO did not consider the most relevant prior art and that prior art is presented to the jury or court, the social disutility analysis supports applying the preponderance of the evidence burden of proof.¹⁸⁸

b) The Law of Every Regional Circuit Prior to Creation of the Federal Circuit

After *Radio Corp.* and the codification of the presumption of validity in 35 U.S.C. § 282 but prior to the formation of the Federal Circuit, the circuit courts had interpreted and applied *Radio Corp.* and 35 U.S.C. § 282. Significantly, their interpretations and applications conflict with those of the Federal Circuit.¹⁸⁹ Every

¹⁸⁸ Adoption of a burden of proof on the issue of invalidity that depends upon consideration of prior art by the USPTO also would comport with application of the Administrative Procedure Act (“APA”) to the question of the appropriate level of deference to be given to findings of validity by the USPTO. See Stuart Minor Benjamin & Arti K. Rai, *Who’s Afraid of the APA? What the Patent System Can Learn from Administrative Law*, 95 GEO. L.J. 269, 293, 299 (2007) (concluding that 35 U.S.C. § 282 does not displace the APA, that no deference is owed to USPTO factfinding not done in light of the introduction of new prior art, and that the legal conclusion of validity is subject to the sliding scale of *Skidmore* deference). Indeed, in *Skidmore v. Swift & Co.*, 323 U.S. 134 (1944), the Supreme Court recognized that the weight given to an administrative judgment will depend upon, inter alia, “the thoroughness evident in its consideration.” *Id.* at 140.

¹⁸⁹ Others have recognized the conflicting treatment of the presumption of validity by the Federal Circuit and the other circuit courts. See, e.g., Glynn S. Lunney, Jr., *Patent*

other circuit court of appeals has concluded that the presumption of validity is at least weakened in some situations, such as when “relevant,” “significant,” “pertinent,” “more pertinent,” or the “most pertinent” prior art was not considered by the USPTO. In this way, the courts have effectively concluded that the statutory presumption of validity only requires a presumption that the USPTO correctly ruled upon the evidence in front of it—not that the USPTO considered the most relevant prior art or that it, illogically, correctly ruled upon evidence that it did not even consider. Furthermore, many of the other courts have adopted a cumulativeness test, requiring the uncited prior art to be non-cumulative as compared to the cited prior art before finding the presumption of validity overcome. And some of the other circuit courts have concluded that alleged infringers may prove invalidity by a preponderance of the evidence, rather than by clear and convincing evidence, in at least some situations.¹⁹⁰

The law of each circuit court of appeals will be analyzed in detail below.

i. The First Circuit

The First Circuit has held that prior art not considered by the USPTO—especially in combination with evidence of omissions or inaccuracies in prior art presented—as well as “highly pertinent” but uncited prior art “eviscerates,” “overcomes,” or “weakens” the

Law, the Federal Circuit, and the Supreme Court: A Quiet Revolution, 11 SUP. CT. ECON. REV. 1, 18–19 (2004).

¹⁹⁰ While at least one professor has indicated that the Sixth Circuit is the only circuit to “squarely” adopt a burden of proof less than clear and convincing evidence in any situation, see Mark D. Janis, *Reforming Patent Validity Litigation: The “Dubious Preponderance,”* 19 BERKELEY TECH. L.J. 923, 928 (2004), a careful review of the case law indicates that many circuits applied a burden less than clear and convincing evidence when the most relevant prior art was not considered by the USPTO, as shown below. The analysis below is supported by more contemporary analysis. See also Gerald Sobel, *The Court of Appeals for the Federal Circuit: A Fifth Anniversary Look at Its Impact on Patent Law and Litigation*, 37 AM. U. L. REV. 1087, 1092–93 (1988) (indicating that the Second and Eighth Circuits required alleged infringers to overcome the presumption of validity only by a “preponderance of the evidence, or by substantial evidence” and that various other circuits qualified application of a clear and convincing burden by acknowledging that alleged infringers “could weaken the presumption of validity by demonstrating that the patent examiner did not review all of the relevant prior art references during prosecution of the application for patent”).

presumption of validity.¹⁹¹ In one case, the court held that the presumption of validity is strengthened where a district court holds that the claims are not invalid.¹⁹² And in another case, the court applied a burden of proof *less than clear and convincing evidence* because the USPTO was not directed to instances of relevant prior art.¹⁹³

ii. The Second Circuit

The Second Circuit has held that the presumption of validity is “weakened,” “undercut,” “severely undercut,” “substantially weakened,” or that there is “no strong presumption” at all when the USPTO has not considered prior art, “relevant prior art,” “significant prior art,” “important prior art,” or “much of the prior art.”¹⁹⁴ According to the Second Circuit, the fact that prior art relied upon in litigation was not before the examiner “detracts” from the presumption of validity.¹⁹⁵

Conversely, the Second Circuit has held that the presumption of validity is “strengthened,” “heightened,” or “entitled to particular weight” by the USPTO’s consideration, “adequate consideration,” or “careful consideration” of a prior art

¹⁹¹ See, e.g., *Codex Corp. v. Milgo Elec. Corp.*, 717 F.2d 622, 628 (1st Cir. 1983); *Shanklin Corp. v. Springfield Photo Mount Co.*, 521 F.2d 609, 616–18 (1st Cir. 1975); *Boyajian v. Old Colony Envelope Co.*, 279 F.2d 572, 575 n.4 (1st Cir. 1960); see also *Gross v. Gen. Motors Corp.*, 521 F.2d 45, 49 (1st Cir. 1975) (noting that the USPTO did not have before it the evidence of lack of utility, including the admission of the plaintiff, and affirming the district court’s factual finding as not clearly erroneous); *Marasco v. Compo Shoe Mach. Corp.*, 325 F.2d 695, 697 (1st Cir. 1963) (holding that the presumption of validity gathered from the fact that the examiner cited the prior art at issue was “sufficiently overcome”).

¹⁹² *Int’l Paper Box Mach. Co. v. Specialty Automatic Mach. Corp.*, 414 F.2d 1254, 1262 (1st Cir. 1969).

¹⁹³ *Futorian Mfg. Corp. v. Dual Mfg. & Eng’g, Inc.*, 528 F.2d 941, 943–44 (1st Cir. 1976).

¹⁹⁴ See *Julie Research Labs., Inc. v. Guildline Instruments, Inc.*, 501 F.2d 1131, 1136 (2d Cir. 1974); *Lemelson v. Topper Corp.*, 450 F.2d 845, 849 (2d Cir. 1971); *Reeves Bros., Inc. v. U.S. Laminating Corp.*, 417 F.2d 869, 872 (2d Cir. 1969); *Cont’l Can Co. v. Old Dominion Box Co.*, 393 F.2d 321, 326 n.8 (2d Cir. 1968); *Audio Devices, Inc. v. Armour Research Found.*, 293 F.2d 102, 107 (2d Cir. 1961); see also *Triax Co. v. Hartman Metal Fabricators, Inc.*, 479 F.2d 951, 954 (2d Cir. 1973); see, e.g., *Zoomar, Inc. v. Paillard Prods., Inc.*, 258 F.2d 527, 530 (2d Cir. 1958).

¹⁹⁵ See *Formal Fashions, Inc. v. Braiman Bows, Inc.*, 369 F.2d 536, 539 (2d Cir. 1966).

reference.¹⁹⁶ In one case, the court indicated that, while the presumption of validity “may be slight in the light of the normal procedures of the [USPTO],” it is heightened by a showing that the prior art was “adequately considered.”¹⁹⁷

The Second Circuit has noted, however, that the weight to be attached to the determination of examiners “must be very limited,” and is “totally unlike” the weight accorded the determination of an administrative agency after an adversary proceeding.¹⁹⁸ Likewise, it has recognized that “nothing is more common” in a suit for infringement than to find that “all the important references are turned up for the first time by the industry of a defendant whose interest animates his search,” and that “[i]t is a reasonable caution not to tie the hands of a whole art until there is at least the added assurance which comes from such an incentive.”¹⁹⁹ Indeed, the court has held that the presumption of validity serves to place the burden of proof on the person who asserts invalidity and that, “in the usual case,” *a preponderance of the evidence determines the issue*.²⁰⁰

In one of its last opinions on the subject, the Second Circuit recognized that the reason for the presumption of validity is that the USPTO is staffed by expert and experienced personnel uniquely qualified to determine patentability, but that its “heavy workload” requires “searching review” by courts.²⁰¹

iii. The Third Circuit

¹⁹⁶ See *Rooted Hair, Inc. v. Ideal Toy Corp.*, 329 F.2d 761, 763 (2d Cir. 1964); see also *Shackelton v. J. Kaufman Iron Works, Inc.*, 689 F.2d 334, 339 n.3 (2d Cir. 1982); *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 258 F.2d 124, 132–33 (2d Cir. 1958).

¹⁹⁷ *Ling-Temco-Vought, Inc. v. Kollsman Instrument Corp.*, 372 F.2d 263, 268 (2d Cir. 1967); see also *Rich Prods. Corp. v. Mitchell Foods, Inc.*, 357 F.2d 176, 181 (2d Cir. 1966) (explaining that the presumption is strengthened where the same questions raised in litigation were raised in prosecuting the patent in the USPTO and there successfully met).

¹⁹⁸ *Lorenz v. F.W. Woolworth Co.*, 305 F.2d 102, 105–06 n.6 (2d Cir. 1962).

¹⁹⁹ *Carter-Wallace, Inc. v. Davis-Edwards Pharmacal Corp.*, 443 F.2d 867, 871 (2d Cir. 1971).

²⁰⁰ *Rains v. Niaqua, Inc.*, 406 F.2d 275, 278 (2d Cir. 1969).

²⁰¹ *Howes v. Great Lakes Press Corp.*, 679 F.2d 1023, 1028–29 (2d Cir. 1982); see also *Kahn v. Dynamics Corp.*, 508 F.2d 939, 942 (2d Cir. 1974) (indicating that the presumption has been weakened in recent years by the fact that the USPTO is too overworked to give adequate attention to patent applications).

On the one hand, the Third Circuit has held that the presumption of validity is “weakened” or “overcome” when a party asserts “significant,” “pertinent,” or “relevant” prior art—or “important portions” of a prior art reference—in litigation that was not considered by the USPTO.²⁰² On the other hand, the Third Circuit has held that, where the USPTO considered prior art invoked in litigation by an alleged infringer, the presumption of validity is “further reinforced.”²⁰³ And it has specified that when the USPTO allows a patent after interference proceedings the presumption of validity is “strengthened.”²⁰⁴

In one particular opinion, the Third Circuit explained that where pertinent prior art has been considered by the USPTO the presumption of validity is “often strengthened,” that where relevant prior art has not been considered by the USPTO the presumption is “weakened or overcome,” and that where “relevant prior art has not been considered “the degree by which the presumption is weakened depends on a balancing of the pertinence of the newly cited art against the pertinence of the art actually considered by the [USPTO].”²⁰⁵ In that case, the court found that *non-cumulative* prior art rendered an asserted patent invalid.²⁰⁶

iv. The Fourth Circuit

The Fourth Circuit has held that the presumption of validity is “weakened,” “weakened or destroyed,” or “very much weakened”

²⁰² See *N. Eng’g & Plastics Corp. v. Eddy*, 652 F.2d 333, 337–38 (3d Cir. 1981); *Arrow Safety Device Co. v. Nassau Fastening Co.*, 496 F.2d 644, 646 (3d Cir. 1974); *Layne-N.Y. Co. v. Allied Asphalt Co.*, 501 F.2d 405, 407 (3d Cir. 1974); *U.S. Expansion Bolt Co. v. Jordan Indus., Inc.*, 488 F.2d 566, 569 (3d Cir. 1973); *Hadco Prods., Inc. v. Walter Kidde & Co.*, 462 F.2d 1265, 1272 n.33 (3d Cir. 1972); *Philips Elec. & Pharm. Indus. Corp. v. Thermal & Elecs. Indus., Inc.*, 450 F.2d 1164, 1176 (3d Cir. 1971); *Chem. Constr. Corp. v. Jones & Laughlin Steel Corp.*, 311 F.2d 367, 374 n.1 (3d Cir. 1962); *Dole Refrigerating Co. v. Amerio Contact Plate Freezers, Inc.*, 265 F.2d 627, 629 (3d Cir. 1959); see also *Scripto, Inc. v. Ferber Corp.*, 267 F.2d 308, 308 (3d Cir. 1959) (indicating that the fact that “a wealth of relevant prior art had not been called to the attention” of the examiner “detracted materially from the importance of the presumption” of validity).

²⁰³ *Universal Athletic Sales Co. v. Am. Gym, Recreational & Athletic Equip. Corp.*, 546 F.2d 530, 540 n.28 (3d Cir. 1976).

²⁰⁴ *United Mattress Mach. Co. v. Handy Button Mach. Co.*, 207 F.2d 1, 3 (3d Cir. 1953).

²⁰⁵ *Aluminum Co. v. Amerola Prods. Corp.*, 552 F.2d 1020, 1024–25 (3d Cir. 1977).

²⁰⁶ *Id.* at 1025.

when “relevant” or “pertinent” prior art was not considered by the examiner, and that the presumption “can be given little weight” when the examiner considered “none of the devices found in the prior art.”²⁰⁷

The court has also held that the presumption of validity is “strengthened” or “reinforced” where the “principal references” were considered by the examiner, where the alleged infringer cites the same prior art considered by the examiner, where alleged infringers are unable to come up with any prior art “more pertinent” than prior art considered by the examiner, or where there were “extensive administrative proceedings” concerned with the prior art.²⁰⁸ In one case, the Fourth Circuit distinguished Supreme Court precedent requiring proof of invalidity beyond a reasonable doubt or by clear and convincing evidence, including *Radio Corp.*, because in those cases the issue was priority of the same invention between two inventors rather than invalidity “by reason of relevant disclosures of prior art.”²⁰⁹ The court went on to state that the presumption of validity is strengthened to some extent by “the more than usual consideration given to the problem of patentability in the [USPTO]” and weakened to some extent because the USPTO did not consider some of the prior art asserted in the litigation.²¹⁰

v. The Fifth Circuit

In 1970, the Fifth Circuit recognized that the opinions of the various circuit courts “are in a morass of conflict” on the issue of

²⁰⁷ See *Christopher J. Foster, Inc. v. Newport News Shipbuilding & Dry Dock Co.*, 531 F.2d 1243, 1245 (4th Cir. 1975); *Blohm & Voss AG v. Prudential-Grace Lines, Inc.*, 489 F.2d 231, 244 (4th Cir. 1973); *Blumcraft of Pittsburgh v. Citizens & S. Nat’l Bank of S.C.*, 407 F.2d 557, 561 (4th Cir. 1969); *Marston v. J.C. Penney Co.*, 353 F.2d 976, 982 (4th Cir. 1965); *Heyl & Patterson, Inc. v. McDowell Co.*, 317 F.2d 719, 722 (4th Cir. 1963); *B.F. Goodrich Co. v. U.S. Rubber Co.*, 244 F.2d 468, 470 (4th Cir. 1957).

²⁰⁸ See *Marston*, 353 F.2d at 982; see also *Power Curbers, Inc. v. E.D. Etnyre & Co.*, 298 F.2d 484, 493 (4th Cir. 1962); *Manville Boiler Co. v. Columbia Boiler Co.*, 269 F.2d 600, 604 (4th Cir. 1959); *Otto v. Koppers Co.*, 246 F.2d 789, 801 (4th Cir. 1957); *Brown v. Brock*, 240 F.2d 723, 727 (4th Cir. 1957); *S.H. Kress & Co. v. Aghnides*, 246 F.2d 718, 721 (4th Cir. 1957); *Reynolds v. Whittin Mach. Works*, 167 F.2d 78, 83 (4th Cir. 1948).

²⁰⁹ *Universal Inc. v. Kay Mfg. Corp.*, 301 F.2d 140, 148 (4th Cir. 1962).

²¹⁰ *Id.*

the appropriate burden of proof on invalidity.²¹¹ This recognition, however, related to the ultimate burden of proof—clear and convincing evidence, preponderance of the evidence, or proof beyond a reasonable doubt, even after *Radio Corp.*—and not whether the presumption of validity is weakened when more pertinent prior art is advanced in litigation when compared to the prior art considered by the USPTO.²¹²

Indeed, like every other regional circuit at the time, the Fifth Circuit's precedent held that the presumption of validity "vanishes" or is "measurably weakened," "seriously weakened," "mitigated," "weakened," "greatly weakened," "severely weakened," "weakened, if not destroyed," or "greatly weakened if not dispelled" if the USPTO did not consider "pertinent," "a particular," "more similar," "all," "an important element of," or "highly pertinent" prior art—or simply when prior art was not submitted to the USPTO.²¹³

Two of the last few Fifth Circuit cases to address the presumption of validity and its effect on the burden of proof on the issue of invalidity, prior to exclusive jurisdiction over these cases being lodged in the Federal Circuit, are noteworthy. In the first, the Fifth Circuit indicated that, to rebut the presumption of validity, a party seeking to invalidate a patent must show, not only that the USPTO failed to consider pertinent prior art, *but also that the evidence is not cumulative.*²¹⁴ Yet the court in that case still

²¹¹ *Stamicarbon, N.V. v. Escambia Chem. Corp.*, 430 F.2d 920, 924–25 (5th Cir. 1970).

²¹² *Id.*

²¹³ *See, e.g.*, *Reed Tool Co. v. Dresser Indus., Inc.*, 672 F.2d 523, 526 (5th Cir. 1982); *Farmhand, Inc. v. Anel Eng'g Indus., Inc.*, 693 F.2d 1140, 1143 (5th Cir. 1982); *Ebeling v. Pak-Mor Mfg. Co.*, 683 F.2d 909, 913 n.11 (5th Cir. 1982); *Cont'l Oil Co. v. Cole*, 634 F.2d 188, 195 (5th Cir. 1981); *Ludlow Corp. v. Textile Rubber & Chem. Co.*, 636 F.2d 1057, 1059 (5th Cir. 1981); *Arbrook, Inc. v. Am. Hosp. Supply Corp.*, 645 F.2d 273, 276 n.1 (5th Cir. 1981); *Huron Mach. Prods., Inc. v. A. & E. Warbern, Inc.*, 615 F.2d 222, 224 (5th Cir. 1980); *John Zink Co. v. Nat'l Airoil Burner Co.*, 613 F.2d 547, 551 (5th Cir. 1980); *Catholic Prot. Serv. v. Am. Smelting & Ref. Co.*, 594 F.2d 499, 505 (5th Cir. 1979); *Bird Provision Co. v. Owens Country Sausage, Inc.*, 568 F.2d 369, 377 (5th Cir. 1978); *Steelcase, Inc. v. Delwood Furniture Co.*, 578 F.2d 74, 77 (5th Cir. 1978); *Parker v. Motorola, Inc.*, 524 F.2d 518, 521 (5th Cir. 1975); *Rosaire v. Baroid Sales Div., Nat'l Lead Co.*, 218 F.2d 72, 75 (5th Cir. 1955); *Fritz W. Glitsch & Sons, Inc. v. Wyatt Metal & Boiler Works*, 224 F.2d 331, 335 (5th Cir. 1955).

²¹⁴ *May v. Am. S.W. Waterbed Distribs., Inc.*, 715 F.2d 876, 879 (5th Cir. 1983).

required that the proof of invalidity—even in light of a non-cumulative reference—“be more than a preponderance of the evidence.”²¹⁵ In the second case, however, the Fifth Circuit, breaking with its own precedent,²¹⁶ held that the introduction of evidence that the USPTO failed to consider relevant prior art *reduces the burden of proof from clear and convincing evidence to a preponderance of the evidence.*²¹⁷ Thus, while there are cases in the Fifth Circuit holding that the failure of the USPTO to consider prior art reduces the burden to prove invalidity from clear and convincing evidence to a preponderance of the evidence, the Fifth Circuit has issued opinions directly contradicting one another on this issue.²¹⁸

vi. The Sixth Circuit

The Sixth Circuit has held that the presumption of validity is “greatly strengthened” where “the most pertinent prior art” has been considered by the USPTO.²¹⁹ The court also has held that the presumption of validity is “largely if not wholly vitiated,” “greatly weakened,” “greatly weakened and largely dissipated,” “seriously weakened,” “weakened or destroyed,” or just “weakened” if “the

²¹⁵ *Id.*

²¹⁶ *See, e.g., id.; Reed Tool Co.*, 672 F.2d at 526; *Ludlow Corp.*, 636 F.2d at 1059.

²¹⁷ *A.B. Baumstimler v. Rankin*, 677 F.2d 1061, 1066, 1068 (5th Cir. 1982).

²¹⁸ *Compare Gaddis v. Calgon Corp.*, 506 F.2d 880, 885 (5th Cir. 1975) (“[P]ertinent prior art not considered by the [USPTO] weakens the presumption of validity which normally attaches to a patent and requires a court to scrutinize the patent more closely. Nevertheless, the presumption of validity is a strong one and is not to be overthrown except by clear and cogent evidence, that is, ‘evidence (which) has more than a dubious preponderance.’” (quoting *Radio Corp. v. Radio Eng’g Labs.*, 293 U.S. 1, 8 (1934))) *with A.B. Baumstimler*, 677 F.2d at 1066–68 (“Where the validity of a patent is challenged for failure to consider prior art, the bases for the presumption of validity, the acknowledged experience and expertise of the [USPTO] personnel and the recognition that patent approval is a species of administrative determination supported by evidence, no longer exist and thus the challenger of the validity of the patent need no longer bear the heavy burden of establishing invalidity either ‘beyond a reasonable doubt’ or ‘by clear and convincing evidence.’ . . . Given the introduction of evidence that the [USPTO] failed to consider relevant prior art . . . the standard of proof required . . . to overcome the presumption of validity of the patents was not ‘clear and convincing’ but simply a preponderance of the evidence.” (citation omitted)).

²¹⁹ *Stewart-Warner Corp. v. City of Pontiac*, 717 F.2d 269, 276 (6th Cir. 1983); *Nat’l Rolled Thread Die Co. v. E.W. Ferry Screw Prods., Inc.*, 541 F.2d 593, 597 (6th Cir. 1976); *Bolkcom v. Carborundum Co.*, 523 F.2d 492, 498 (6th Cir. 1975).

most relevant,” “applicable,” “pertinent,” “highly relevant,” or “most pertinent” prior art is not considered by the USPTO.²²⁰ In one case the court indicated that “it is axiomatic” that the “limited force” of the presumption of validity can be weakened or destroyed where it is shown that the most relevant prior art was not disclosed to the examiner.²²¹

The Sixth Circuit, like the Third Circuit, has explained that the degree by which the presumption is weakened when relevant prior art was not considered by the USPTO depends upon a balancing of the pertinence of the newly cited prior art and the pertinence of the prior art considered by the patent examiner.²²² In addition, the Sixth Circuit—again like the Third Circuit—has applied a *cumulativeness test* to prior art not considered by the USPTO, noting that it must be prior art that would “ordinarily be expected to influence the examiner with respect to the patentability of the invention” but not prior art that is cumulative to cited prior art.²²³

Moreover, the Sixth Circuit has held that the presumption of validity merely serves to allocate to the party claiming invalidity the burden of proof and that that burden in the typical case is proof by a preponderance of the evidence.²²⁴

²²⁰ *Kwik-Site Corp. v. Clear View Mfg. Co.*, 758 F.2d 167, 176 (6th Cir. 1985); *Dollar Elec. Co. v. Syndevco, Inc.*, 688 F.2d 429, 432 (6th Cir. 1982); *Universal Elec. Co. v. A.O. Smith Corp.*, 643 F.2d 1240, 1245 (6th Cir. 1981); *Park-Ohio Indus., Inc. v. Letica Corp.*, 617 F.2d 450, 453 (6th Cir. 1980); *Eltra Corp. v. Basic Inc.*, 599 F.2d 745, 754 n.18 (6th Cir. 1979); *Reynolds Metals Co. v. Acorn Bldg. Components, Inc.*, 548 F.2d 155, 160 (6th Cir. 1977); *Nat. Rolled Thread Die Co.*, 541 F.2d at 597; *Bolkcom*, 523 F.2d at 498; *Dunlop Co. v. Kelsey-Hayes Co.*, 484 F.2d 407, 413 (6th Cir. 1973).

²²¹ *Eltra Corp.*, 599 F.2d at 754 n.18; *Wolverine Fabricating & Mfg. Co. v. Detroit Gasket & Mfg. Co.*, 148 F.2d 399, 402 (6th Cir. 1945).

²²² *Am. Seating Co. v. Nat'l Seating Co.*, 586 F.2d 611, 615 (6th Cir. 1978); *Tee-Pak, Inc. v. St. Regis Paper Co.*, 491 F.2d 1193, 1196 (6th Cir. 1974). The Sixth Circuit has also explained that, while the presumption of validity is weakened if applicable prior art is not considered by the USPTO, it is not necessarily destroyed because the alleged infringer “must do more to invalidate the presumption than merely showing the [prior art] was not cited by the [USPTO].” *Preformed Line Prods. Co. v. Fanner Mfg. Co.*, 328 F.2d 265, 271 (6th Cir. 1964).

²²³ *Schnading Corp. v. Gaines Mfg. Co.*, 494 F.2d 383, 390–91 (6th Cir. 1974).

²²⁴ *See Saginaw Prods. Corp. v. E. Airlines, Inc.*, 615 F.2d 1136, 1140 (6th Cir. 1980) (“The patent was presumed to be valid because it was regularly issued by the [USPTO]. Offering the patent in evidence, as the plaintiff did, established a *prima facie* case of validity. . . . The burden of proof was upon the defendant to establish its affirmative

vii. The Seventh Circuit

The Seventh Circuit has held that the presumption of validity is “largely if not wholly” dissipated when “pertinent” prior art is not considered by the USPTO, and that the degree by which it is weakened depends on a balancing of the pertinence of the newly cited prior art with the pertinence of the prior art considered by the USPTO.²²⁵ In this regard, it has held that the presumption is “destroyed” when the examiner did not consider “the most pertinent” prior art.²²⁶ Interestingly, the issue of cumulativeness is addressed in some Seventh Circuit cases, but using different terminology. In those cases the issue is “*equivalency*”—whether the prior art asserted in litigation is “equivalent” to prior art considered by the examiner.²²⁷

While, as mentioned, some Seventh Circuit cases indicate that balancing of the pertinence of prior art is required, other Seventh Circuit cases have not balanced the pertinence of the prior art at all and instead have found that the presumption does not exist simply because prior art was not before the USPTO.²²⁸ The court has gone so far as to say that “even one prior art reference” not

defenses by a preponderance of evidence.”); *Eltra Corp. v. Basic Inc.*, 599 F.2d 745, 750 (6th Cir. 1979) (“The presumption has no independent evidentiary significance, however, as it merely serves to allocate to the party claiming invalidity the burden of proving it. In the typical case such as this, where the bulk of the evidence of the prior art is contained in documents, the party claiming obviousness need only do so by a preponderance of the evidence.” (citations omitted)).

²²⁵ *National Bus. Sys., Inc. v. AM Int’l, Inc.*, 743 F.2d 1227, 1230, 1233 (7th Cir. 1984).

²²⁶ *Moore v. Wesbar Corp.*, 701 F.2d 1247, 1252 (7th Cir. 1983); *see also Shemitz v. Deere & Co.*, 623 F.2d 1180, 1184 (7th Cir. 1980) (holding that where anticipating prior art was not before the examiner there is no longer a presumption of validity). The Seventh Circuit has even indicated that the presumption may be diminished by the submission to the USPTO of a long list of prior art “without identifying the most relevant prior art.” *Mooney v. Brunswick Corp.*, 663 F.2d 724, 731–32 (7th Cir. 1981).

²²⁷ *Dickey-John Corp. v. Int’l Tapetronics Corp.*, 710 F.2d 329, 337 (7th Cir. 1983); *Deere & Co. v. Int’l Harvester Co.*, 658 F.2d 1137, 1144 (7th Cir. 1981).

²²⁸ *Saunders v. Air-Flo Co.*, 646 F.2d 1201, 1208 (7th Cir. 1981); *Hyster Co. v. Hunt Foods, Inc.*, 263 F.2d 130, 133 (7th Cir. 1959); *Hobbs v. Wis. Power & Light Co.*, 250 F.2d 100, 105 (7th Cir. 1957).

considered by the USPTO can “overthrow” the presumption of validity.²²⁹

A particularly important Seventh Circuit case is *Chicago Rawhide Manufacturing Co. v. Crane Packing Co.*²³⁰ In an opinion by then-Judge Stevens that issued just three months prior to his escalation to the Supreme Court, the court explained that the presumption of validity includes two aspects. First, the presumption places a burden of persuasion on the alleged infringer that remains upon the alleged infringer throughout the proceeding and “is in no sense dependent on the character of the proceedings before the [USPTO] or the amount of prior art cited to, or considered by, the Patent Examiner.”²³¹ Second, the presumption requires the alleged infringer to make a “clear and cogent” showing of invalidity in order to prevail when the prior art cited to establish invalidity has already been considered by the USPTO.²³² Then-Judge Stevens explained that this additional aspect to the presumption relates to the deference due the technical expertise possessed by the USPTO.²³³

Significantly, then-Judge Stevens went on to explain that consideration of prior art by the USPTO justifies the clear and convincing burden of proof but not some higher burden of proof.²³⁴ Conversely, he explained that the requirement that invalidity be established by clear and convincing evidence “is largely, if not wholly, dissipated when pertinent prior art is shown not to have been considered by the [USPTO].”²³⁵ He explained why:

For then the Examiner’s expertise may have been applied to an incomplete set of data and there can be no certainty that he would have arrived at the same conclusion in the face of the evidence and argument presented to the court. Nor may we safely assume

²²⁹ *Dual Mfg. & Eng’g, Inc. v. Burris Indus., Inc.*, 619 F.2d 660, 665 (7th Cir. 1980); *Henry Mfg. Co. v. Commercial Filters Corp.*, 489 F.2d 1008, 1013 (7th Cir. 1972).

²³⁰ 523 F.2d 452 (7th Cir. 1975).

²³¹ *Id.* at 457–58.

²³² *Id.* at 458.

²³³ *Id.*

²³⁴ *Id.*

²³⁵ *Id.*

that the Examiner has considered art which is not cited. On the contrary, we have held that the failure to cite pertinent prior art implies that it was overlooked by the Examiner.²³⁶

In this way, then-Judge Stevens focused on whether the examiner applied his or her expertise in any particular case and highlighted that it is not safe to assume that an examiner considers prior art that he or she does not cite. Accordingly, the Seventh Circuit presumes that uncited prior art was overlooked by the examiner.²³⁷

In light of *Chicago Rawhide Manufacturing Co.*, it is not surprising that a later Seventh Circuit case expressly held that the burden of proof is “*less stringent*” than *clear and convincing* when “non-equivalent, uncited prior art” was not considered by the USPTO,²³⁸ or that in another case the court held that the presumption of validity “and its commensurate level of proof is largely, if not wholly, dissipated when pertinent prior art is not considered by the [USPTO].”²³⁹

viii. The Eighth Circuit

Like the other circuit courts, the Eighth Circuit has held that “relevant,” “pertinent,” “the most relevant,” or “applicable” prior art not considered by the USPTO, or several prior art references not considered by the USPTO, “weakens,” “weakens if not completely destroys,” “greatly weakens if not completely destroys,” or “substantially weakens” the presumption of validity.²⁴⁰ In one case, the court went so far as to say that an alleged infringer does not bear the “heavy burden necessary to

²³⁶ *Id.*

²³⁷ *Id.*

²³⁸ *Dickey-John Corp. v. Int'l Tapetronics Corp.*, 710 F.2d 329, 337 (7th Cir. 1983).

²³⁹ *Med. Lab. Automation, Inc. v. Labcon, Inc.*, 670 F.2d 671, 674 (7th Cir. 1981).

²⁴⁰ *See Black & Decker Mfg. Co. v. Ever-Ready Appliance Mfg. Co.*, 684 F.2d 546, 548 (8th Cir. 1982); *Bolt, Beranek & Newman, Inc. v. McDonnell Douglas Corp.*, 521 F.2d 338, 340 (8th Cir. 1975); *Ralston Purina Co. v. Gen. Foods Corp.*, 442 F.2d 389, 390 (8th Cir. 1971); *Am. Infra-Red Radiant Co. v. Lambert Indus., Inc.*, 360 F.2d 977, 989 (8th Cir. 1966); *Imperial Stone Cutters, Inc. v. Schwartz*, 370 F.2d 425, 429 (8th Cir. 1966); *Piel Mfg. Co. v. George A. Rolfes Co.*, 363 F.2d 57, 60 n.4 (8th Cir. 1966); *John Deere Co. v. Graham*, 333 F.2d 529, 530 (8th Cir. 1964); *L.S. Donaldson Co. v. La Maur, Inc.*, 299 F.2d 412, 420 (8th Cir. 1962).

overcome a presumption at its full strength” when the USPTO has not considered the most relevant of all prior art.²⁴¹ And it has also held that “the presumption of validity is entitled to great weight where it appears that the [USPTO] gave careful consideration to the applicable prior art.”²⁴²

One case in particular deserves thorough discussion. In *E.I. du Pont de Nemours & Co. v. Berkley & Co.*,²⁴³ the Eighth Circuit issued an opinion authored by Chief Judge Markey, who sat by designation from the Court of Customs and Patent Appeals.²⁴⁴ In this case, the court indicated that the presumption of validity is not limited to references actually cited by the examiner.²⁴⁵ Citing *Solder Removal Co.* and additional precedent from other circuits, Chief Judge Markey noted that the burden of persuasion remains upon the party asserting invalidity whether relevant prior art was or was not considered by the USPTO.²⁴⁶ Significantly, the court held that the presumption of validity requires courts to find that the examiner’s prior art search is “prima facie evidence that the examiner considered all of the references classified in the classes and subclasses searched” and that the examiner left uncited those references he or she regarded as less relevant than those cited.²⁴⁷ Moreover, the court, without citing any authority, expressed its view that by enacting the presumption of validity Congress chose to assume that an oversight of relevant prior art did not occur.²⁴⁸ Otherwise, the court explained, in view of the large number of patents in a single class or subclass, the requirement to cite every patent inspected would “unreasonably retard the examination process.”²⁴⁹ “Thus,” the court concluded, “absent contrary evidence, it is improper to conclude that references not specifically cited by the examiner, but classified in areas he searched, were not

²⁴¹ *Am. Infra-Red Radiant Co.*, 360 F.2d at 989.

²⁴² *L.S. Donaldson Co.*, 299 F.2d at 420.

²⁴³ 620 F.2d 1247 (8th Cir. 1980).

²⁴⁴ *Id.* at 1254.

²⁴⁵ *Id.* at 1266.

²⁴⁶ *Id.* at 1266 n.30 (citing *Solder Removal Co. v. U.S. Int’l Trade Comm’n*, 582 F.2d 628 (C.C.P.A. 1978)).

²⁴⁷ *Id.* at 1267.

²⁴⁸ *Id.*

²⁴⁹ *Id.*

considered by him.”²⁵⁰ In this regard, Chief Judge Markey directly contradicted then-Judge Stevens’ opinion in *Chicago Rawhide Mfg. Co.*²⁵¹

Chief Judge Markey concluded that the trial court’s instruction that the presumption of validity “does not extend or exist as to prior art patents or publications which do not appear from the record of the file wrapper” and its refusal to give an instruction that it is “assumed that the examiner reviewed the prior art which was in the files which he searched” left the jury “unapprised of the full extent of the statutory presumption of validity.”²⁵²

ix. The Ninth Circuit

In one of the last Ninth Circuit cases to address the presumption of validity, the court held that a patent simply “was not presumed to be valid” when prior art was not considered by the USPTO.²⁵³ Indeed, in some cases the court held that the burden of proof on invalidity *shifts to the patentee* if the examiner did not review prior art later asserted in litigation or if the uncited prior art contains disclosure closer to the patented device than the disclosures of the prior art considered by the examiner.²⁵⁴ And some cases emphasized that “even one” unconsidered prior art reference may “overthrow the presumption of validity.”²⁵⁵

Other cases, however, did not go quite that far. For example, the Ninth Circuit also held that the presumption of validity “will disappear” only if the applicant failed to disclose “relevant” prior art to the USPTO.²⁵⁶ Other cases indicate that the presumption is “dissipated” when the examiner fails to consider “pertinent” prior art or that uncited prior art discloses “something not disclosed” by

²⁵⁰ *Id.*

²⁵¹ *See Chicago Rawhide Mfg. Co. v. Crane Packing Co.*, 523 F.2d 452, 458 (7th Cir. 1975).

²⁵² *E.I. du Pont de Nemours & Co.*, 620 F.2d at 1266–67.

²⁵³ *Rite-Nail Packaging Corp. v. Berryfast, Inc.*, 706 F.2d 933, 935 (9th Cir. 1983).

²⁵⁴ *Penn Int’l Indus., Inc. v. New World Mfg., Inc.*, 691 F.2d 1297, 1300–02 (9th Cir. 1982); *Tveter v. AB Turn-O-Matic*, 633 F.2d 831, 833 (9th Cir. 1980).

²⁵⁵ *Jaybee Mfg. Corp. v. Ajax Hardware Mfg. Corp.*, 287 F.2d 228, 229 (9th Cir. 1961).

²⁵⁶ *Bristol Locknut Co. v. SPS Techs., Inc.*, 677 F.2d 1277, 1281 (9th Cir. 1982).

cited prior art.²⁵⁷ Furthermore, numerous cases in the Ninth Circuit applied a cumulativeness test to unconsidered prior art.²⁵⁸

x. The Tenth Circuit

The Tenth Circuit has held that the presumption of validity is “considerably weakened if the patent examiner did not consider relevant prior art.”²⁵⁹ Indeed, it has held that the “strong presumption of validity” attributable to a “properly issued patent” is greatly diminished when the USPTO fails to consider relevant prior art.²⁶⁰ The court also has held that the presumption is strengthened when the trial court examined the “pertinent” prior art and concluded that the patent was not invalid.²⁶¹

Two of the Tenth Circuit opinions deserve special attention. In the first case, *Plastic Container Corp. v. Continental Plastics of Oklahoma, Inc.*,²⁶² the court held that the USPTO’s “decision to issue a patent is entitled to deference only to the extent that it is based on relevant facts and on correct principles of law.”²⁶³ The court noted that if the USPTO failed to consider relevant prior art then “the basis for according deference vanishes.”²⁶⁴ It concluded that when unconsidered prior art reveals a substantial basis for challenging the USPTO’s decision to issue the patent, the district court must make a fresh assessment of validity, and that such a basis exists (1) if the USPTO overlooked prior art that is more pertinent than the art that it did consider or (2) if the USPTO overlooked prior art that is less pertinent than the art that it did

²⁵⁷ *Smith Int’l, Inc. v. Hughes Tool Co.*, 664 F.2d 1373, 1376 (9th Cir. 1982); *NDM Corp. v. Hayes Prods., Inc.*, 641 F.2d 1274, 1277 (9th Cir. 1981).

²⁵⁸ *Carpet Seaming Tape Licensing Corp. v. Best Seam, Inc.*, 694 F.2d 570, 575 (9th Cir. 1982); *Carson Mfg. Co. v. Carsonite Int’l Corp.*, 686 F.2d 665, 667 (9th Cir. 1981); *Hammerquist v. Clarke’s Sheet Metal, Inc.*, 658 F.2d 1319, 1323 (9th Cir. 1981); *Houston v. Polymer Corp.*, 637 F.2d 617, 619–20 (9th Cir. 1980).

²⁵⁹ *Lam, Inc. v. Johns-Manville Corp.*, 668 F.2d 462, 469 (10th Cir. 1982).

²⁶⁰ *Norfin, Inc. v. Int’l Bus. Machs. Corp.*, 625 F.2d 357, 363 (10th Cir. 1980); *see also M.B. Skinner Co. v. Cont’l Indus., Inc.*, 346 F.2d 170, 173 (10th Cir. 1965) (indicating that the presumption of validity is rebuttable “particularly where” much of the prior art relied upon in litigation was not considered by the USPTO, but that commercial success may be considered as properly strengthening the presumption of validity).

²⁶¹ *Lam, Inc.*, 668 F.2d at 469.

²⁶² 708 F.2d 1554 (10th Cir. 1983).

²⁶³ *Id.* at 1558.

²⁶⁴ *Id.*

consider but that nevertheless substantially undermines its decision.²⁶⁵ Finally, the court also indicated that the “crucial inquiry” is not the relative pertinence of the unconsidered prior art but instead is whether the unconsidered art leads the court to reasonably question the USPTO’s decision.²⁶⁶ If this threshold level of doubt is reached, the Tenth Circuit explained, then the court must reassess the patent and conduct an independent examination of all pertinent prior art.²⁶⁷

In the second case, *Sidewinder Marine, Inc. v. Starbuck Kustom Boats and Products, Inc.*,²⁶⁸ the court explained that the rationale for a strong presumption of validity is the expertise of the USPTO in determining when the conditions for patentability have been satisfied.²⁶⁹ Therefore, the court reasoned, when the USPTO has failed to take into account relevant prior art, “it cannot be said that that agency has fully brought its expertise to bear on the task at hand and the statutory presumption [of validity] is diminished or dissipated altogether.”²⁷⁰ Overcoming the presumption, however, does not, without more, invalidate the patent.²⁷¹ Instead, the court explained, “once any highly relevant but unconsidered prior art is introduced, a fresh assessment of all the art new and old must be carried out without benefit to the patentee of the presumption.”²⁷² Also at issue in *Sidewinder* was the effect of a prior adjudication concerning the validity of the patent-in-suit. The court noted the “high presumption of validity”²⁷³ ordinarily afforded to a prior adjudication favorable to the patentee, but held that “where relevant prior art was not before the court rendering the earlier adjudication of validity, that decision has little precedential value.”²⁷⁴

²⁶⁵ *Id.*

²⁶⁶ *Id.*

²⁶⁷ *Id.*

²⁶⁸ 597 F.2d 201 (10th Cir. 1979).

²⁶⁹ *Id.* at 205.

²⁷⁰ *Id.* at 206.

²⁷¹ *Id.* at 206 n.6.

²⁷² *Id.*

²⁷³ *Id.* at 206.

²⁷⁴ *Id.* at 207.

xi. The Eleventh Circuit

The Eleventh Circuit was formed in 1981, just one year prior to the formation of the Federal Circuit in 1982.²⁷⁵ In one of the Eleventh Circuit's only cases addressing the presumption of validity—if not the only one—the court adopted the view that when pertinent, non-cumulative prior art was not considered by the USPTO, the burden upon the challenging party is *lessened to a preponderance of the evidence*.²⁷⁶

The Court addressed nuanced issues with respect to the application of this standard. In particular, the court addressed the issue of what degree of relevance uncited prior art must have before the burden is reduced to a preponderance of the evidence, and how to determine if the USPTO considered prior art.²⁷⁷ The patentee contended that the uncited prior art must be more pertinent than the prior art considered by the USPTO, and that the uncited prior art must be outside the patent classification areas of the prior art considered by the USPTO.²⁷⁸ The court rejected both of these positions.

First, the court held that the presumption of validity is seriously eroded (and the preponderance burden of proof applies) if the patent challenger brings forward any relevant, uncited prior art.²⁷⁹ The court cited the lack of any contrary authority, the duty of candor of patent applicants, and the anticompetitive effects of a patent as justification for such a strict rule.²⁸⁰ Significantly, however, the court noted that cumulative prior art references will not weaken the presumption of validity.²⁸¹

²⁷⁵ See Federal Courts Improvement Act of 1982, Pub. L. No. 97-164, 96 Stat. 25; Fifth Circuit Court of Appeals Reorganization Act of 1980, Pub. L. No. 96-452, 94 Stat. 1994.

²⁷⁶ *Mfg. Research Corp. v. Graybar Elec. Co.*, 679 F.2d 1355, 1360–61, 1363–64 (11th Cir. 1982). The court noted that the Ninth Circuit had gone even further than reducing the burden on the party challenging validity, instead holding that the failure to cite relevant prior art to the USPTO completely overturns the presumption of validity and shifts the burden of proof to the patent holder to demonstrate validity. *Id.* at 1361 (citing *Tveter v. AB Turn-O-Matic*, 633 F.2d 831, 833 (9th Cir. 1980)).

²⁷⁷ *Id.* at 1363–64.

²⁷⁸ *Id.* at 1363.

²⁷⁹ *Id.*

²⁸⁰ *Id.*

²⁸¹ *Id.* at 1364.

Second, the court rejected the contention that a reference to a patent classification area compels the inference that the patent examiner considered and rejected all prior art in that classification.²⁸² The court explained the impropriety of this inference, pointing to the large number of patents within each patent classification area and the testimony of the patentee's own expert witness that patent examiners will sometimes miss highly pertinent prior art when searching.²⁸³

xii. The District of Columbia Circuit

The District of Columbia Circuit has held that the presumption of validity does not apply to prior art not cited by the USPTO and, like the Seventh and Ninth Circuits, that even one uncited prior art reference overcomes the presumption.²⁸⁴ Similarly, the court has ruled that the presumption is weakened when an issue was either not the subject of a USPTO finding or an assumption underlying its finding is "demonstrably inaccurate in a material degree."²⁸⁵ And again, the court has held that the presumption of validity is "weakened" where the examiner did not consider closely prior art invoked in litigation.²⁸⁶

By contrast, the court has found that a strong presumption of validity results from the fact that the USPTO is "an expert body pre-eminently qualified to determine" validity, that this presumption is reinforced where a district court sustains the USPTO, and that the appellate review is limited to searching for the lack of a "rational basis" for the conclusion on the issue of invalidity or the presence of a "thorough conviction" of error on this issue.²⁸⁷ Moreover, the court has held that unless new evidence brings "thorough conviction" that the USPTO was wrong, the court should accord to the USPTO a presumption of validity.²⁸⁸

²⁸² *Id.*

²⁸³ *Id.*

²⁸⁴ *Turzillo v. P. & Z. Mergentime*, 532 F.2d 1393, 1399 (D.C. Cir. 1976).

²⁸⁵ *Corning Glass Works v. Brenner*, 470 F.2d 410, 412 (D.C. Cir. 1972).

²⁸⁶ *Filmon Process Corp. v. Spell-Right Corp.*, 404 F.2d 1351, 1353 (D.C. Cir. 1968).

²⁸⁷ *Pro-Col Corp. v. Comm'r of Patents*, 436 F.2d 296, 297 (D.C. Cir. 1970).

²⁸⁸ *Nat'l Distillers & Chem. Corp. v. Brenner*, 389 F.2d 927, 928 (D.C. Cir. 1967); *Hays v. Brenner*, 357 F.2d 287, 289 (D.C. Cir. 1966); *see also Railex Corp. v. Joseph*

C. The Benefits

There are many benefits to reducing the burden of proof on the issue of invalidity for unconsidered, material prior art from clear and convincing evidence to a preponderance of the evidence. Patent applicants would have an incentive to search for and disclose the most relevant prior art to the USPTO; patent quality would increase; patents would more often serve their constitutional purpose of rewarding inventors for disclosing their discoveries; and transaction costs associated with the licensing and litigation of ultimately invalid patents would be reduced. These benefits reflect the policy-based support for a preponderance burden of proof for unconsidered, material prior art.

1. Creating an Incentive to Search for and Disclose Relevant Prior Art

Reduction of the burden of proof from clear and convincing evidence to a preponderance of the evidence for unconsidered, material prior art would create an incentive for patent applicants to search for and disclose relevant prior art to the USPTO. As a reward for presenting prior art to the USPTO, the patent applicant would obtain (1) a higher burden of proof on the issue of invalidity if an alleged infringer later asserted the same prior art in litigation and (2) a higher burden of proof on the issue of invalidity if an alleged infringer latter asserted equally material or less material prior art in litigation. Thus, to the extent a patent applicant could find and present to the USPTO prior art that is just as material as or more material than any other unknown prior art, the examiner's consideration of the disclosed prior art would create an absolute clear and convincing burden of proof in litigation. As discussed above, this behavior would fortify the presumption of validity upon which the clear and convincing burden of proof is based.²⁸⁹

Guss & Sons, Inc., 382 F.2d 179, 182 n.3 (D.C. Cir. 1967) (noting that it is "clear beyond doubt" that while a patent is presumed valid that presumption is rebuttable particularly where the prior art was not available or considered by the USPTO); *Reynolds v. Aghnides*, 356 F.2d 367, 368 (D.C. Cir. 1966) (holding that doubt should be resolved in favor of the correctness of administrative action and reversing a district court order requiring the USPTO to issue a patent).

²⁸⁹ See *supra* Part II.C.

2. Increased Patent Quality, Just Rewards, and Reduced Costs

By creating an incentive for patent applicants to find and disclose prior art to the USPTO, the quality of patents, in terms of their validity, would increase.²⁹⁰ The quid pro quo at the heart of the patent system would be justified more often; that is, more often the USPTO would consider patent applications in light of the most relevant prior art, and so more often it would issue patents only in exchange for disclosure of truly new and nonobvious inventions. Thus, the constitutional purpose of patents, to promote the progress of science and useful arts,²⁹¹ would be more often and more fully realized. In addition, significant costs would be avoided by preventing the unjust award of a patent in the first place. The ability to collect monopoly profits based on truly invalid patents would be reduced, and there would be fewer expenses associated with license negotiations and less litigation involving truly invalid patents.²⁹²

CONCLUSION

The Federal Circuit's standard for proving invalidity, while clear, is not supported by any convincing rationale. And while the Federal Circuit has held that Supreme Court precedent and the statutory presumption of validity require a clear and convincing burden of proof in every circumstance, neither does. The Federal Circuit's invalidity standard—clear and convincing evidence in

²⁹⁰ One school of thought is that the best examination of patent claims is in patent infringement litigation, not at the USPTO. See Mark A. Lemley, *Rational Ignorance at the Patent Office*, 95 NW. U. L. REV. 1495, 1497 (2001) (concluding that “the [USPTO] doesn’t do a very detailed job of examining patents, but we probably don’t want it to” because of the cost and the fact that “the overwhelming majority of patents are never litigated or even licensed”). But if the USPTO is going to examine patent applications at all—and there is no indication that a registration system rather than an approval system is on the horizon—then the USPTO should be considering the most relevant prior art.

²⁹¹ U.S. CONST. art. I, § 8, cl. 8.

²⁹² The Supreme Court has held that the statutory presumption of validity does not preclude application of estoppel in situations where a court previously held a patent invalid. *Blonder-Tongue Labs., Inc. v. Univ. of Ill. Found.*, 402 U.S. 313, 349 (1971). In so ruling, the Court noted its precedent encouraging the authoritative testing of patent validity in light of severe economic consequences of assertions of invalid patents, including the expense of patent infringement litigation. *Id.* at 344–48.

every circumstance—should be replaced with a standard that reflects whether the factfinder believes the USPTO considered the most relevant prior art. If the factfinder believes it did, then the clear and convincing burden of proof should apply. If the factfinder believes it did not, then the preponderance burden of proof should apply. The adoption of this new standard would recognize the realities of USPTO examination, reflect the precedent of the Supreme Court and all of the circuit courts other than the Federal Circuit itself, increase patent quality, and reduce transaction costs associated with licensing and litigating ultimately invalid patents. In the end, patents would more often serve their constitutional purpose of rewarding inventors for disclosing true discoveries rather than recycled and obvious ideas.

Notes & Observations