

INTRODUCTION

THE CHALLENGE AHEAD: INCREASING PREDICTABILITY IN FEDERAL CIRCUIT JURISPRUDENCE FOR THE NEW CENTURY

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I am pleased to offer this introductory article for *The American University Law Review's* annual volume devoted to recent decisions of the United States Court of Appeals for the Federal Circuit. By producing this volume, the Review provides a service to the Federal Circuit, its bar, government officials, commentators, and others. Because *The American University Law Review* began publishing this volume soon after the creation of our country's only federal appellate court based on subject matter jurisdiction, it is the "review of record" for the Federal Circuit. This year, as before, the many fine contributions to the volume manifest the high quality of our bar, as well as the skill of the Review's staff. The thoughts presented in this Article, however, should be attributed neither to the Review, to other contributors to this volume, nor to the court. They are strictly my own.

INTRODUCTION

By the start of its second decade in 1992,¹ the Federal Circuit had unified and clarified decisional law in the eight principal subject areas Congress entrusted to this new, national, semispecialized court.²

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1. The Court of Appeals for the Federal Circuit was created in 1982 by the Federal Courts Improvement Act, 28 U.S.C. § 1295 (1988 & Supp. V 1993).

2. The court's specific grants of appellate jurisdiction are contained largely in 28 U.S.C. § 1295, which covers, *inter alia*, the following subject matters:

- a. patent, trademark, and related cases, § 1295(a)(1), (4), (8);
- b. suits against the United States for money in the district court and in the United States Court of Federal Claims (except cases under the Federal Tort Claims Act), § 1295(a)(2)-(3);
- c. cases from the International Trade Commission, United States Court of International Trade, and under the Tariff Act, § 1295(a)(5)-(7);
- d. appeals in Merit Systems Protection Board cases, § 1295(a)(9);

Clarification of once ambiguous doctrine may have gone about as far as it can go. Unification has been concluded with the overruling of aberrant rules. The court had also done much to bring litigation of private patent cases, as well as government contract, personnel, and Court of Federal Claims tax cases, more into the mainstream of American civil litigation. Given the idiosyncrasies of each of these specialized areas, the court has done about all that can be done. Further simplification is not feasible, further integration not possible. So too in the other smaller, but no less important, areas: international trade, trademark registration, veterans' benefits, and vaccine compensation cases. According to commentators, the court has completed this work successfully.³

Internally, the process of unifying appellate jurisdiction was completed by merging together two specialized courts, the Court of Claims and the Court of Customs and Patent Appeals (CCPA), each unrelated to the ninety-four district courts, into one standard circuit court that reviews district court decisions as well as those of some twenty other tribunals. Along the way, the court gained control over its growing docket—reducing the backlog and speeding dispositions—through the leadership of former Chief Judge Markey and former Chief Judge Nies, and through the industry of its individual members. Despite repeated and significant additions of subject matter jurisdiction, especially in 1988 and 1992,⁴ and increased filings

e. cases under the Contract Disputes Act of 1978, § 1295(a)(10), (b), (c);

f. cases transferred from the now abolished Temporary Emergency Court of Appeals (TECA), which includes actions under the Economic Stabilization Act of 1970, Emergency Petroleum Allocation Act of 1973, Natural Gas Policy Act of 1978, and Energy Policy and Conservation Act, § 1295(a)(11)-(14).

In addition, Congress granted the court certain jurisdiction elsewhere, including jurisdiction over vaccine cases arising under the National Childhood Vaccine Injury Act, 42 U.S.C. § 300aa-12 (1988), and cases arising under the Veterans' Judicial Review Act, 38 U.S.C. § 7292 (1988). 28 U.S.C. § 1295. For purposes of this Article, these grants are consolidated into eight principal areas of jurisdiction.

3. See Rochelle C. Dreyfuss, *The Federal Circuit: A Case Study in Specialized Courts*, 64 N.Y.U. L. REV. 1, 8-64 (1989) (providing thoughtful and comprehensive analysis of Federal Circuit's performance); see also Donald W. Banner, *Witness at the Creation*, 14 GEO. MASON U. L. REV. 557, 562-63 (1992) (reviewing Federal Circuit's attempts to clarify and unify diverse areas of law); Pauline Newman, *The Federal Circuit - A Reminiscence*, 14 GEO. MASON U. L. REV. 513, 531-43 (1992) (evaluating impact of Federal Circuit on eight areas of law).

4. See *supra* note 2 (providing citations for Congress' grant of jurisdiction to Federal Circuit over vaccine and veterans' benefits cases). In 1992, Congress expanded the Federal Circuit's jurisdiction to include appeals under § 211 of the Economic Stabilization Act of 1970, 12 U.S.C. § 1904 note (1988); § 5 of the Emergency Petroleum Allocation Act of 1973, 15 U.S.C. §§ 751-760(h) (1988); § 506(c) of the Natural Gas Policy Act of 1978, 15 U.S.C. §§ 3301-3432 (1988); and § 523 of the Energy Policy and Conservation Act, 42 U.S.C. § 6201 (1988). Pub. L. No. 102-572, tit. 1, § 102(c), 106 Stat. 4506, 4507 (codified at 28 U.S.C. § 1295 (Supp. V 1993)). Congress transferred this jurisdiction to the Federal Circuit as the successor court to the Temporary Emergency Court of Appeals, which was abolished in 1993.

in its original areas, especially during the late 1980s,⁵ the court presently has little more than a six-month backlog, which closely approaches the American Bar Association's model for appellate court dockets.⁶ On average, the court disposes of appeals in less than eight months from filing, faster than nearly any other circuit court, including the District of Columbia Circuit, its closest analogue as a semispecialized court burdened with complex civil cases.⁷ Basically, the Federal Circuit is a story of success.

Nonetheless, I believe the court has failed in one respect. While greatly improving doctrinal clarity and national consistency, we have done little to increase predictability. By doctrinal "clarity," I mean the clear articulation of the rules of law, the standards, and the tests. By "predictability," I mean that the actual outcome of potential litigation may be accurately forecast through the consistent application of clearly stated legal principles to new factual situations. As to "national consistency," it was achieved almost automatically once Congress gave our court exclusive nationwide jurisdiction over certain types of lawsuits.

Because five of the eight subject areas concern financial relationships between legal or real persons and the Federal Government,⁸ predictability in the Federal Circuit may be unusually important, even more so than clarity and consistency. Two of the three remaining areas concern government grants of financially valuable rights in patents and trademarks. Because at least in theory these grants are governed by statutory criteria, the patentability of an invention or the registrability of a trademark is a matter of entitlement.⁹ As with other entitlements, it is imperative that all persons affected know their rights and obligations, if any, as early as possible. That is, patent and

5. See REPORTS OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT: THE EIGHTH YEAR (1990); REPORTS OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT: THE SEVENTH YEAR (1989); REPORTS OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT: THE FIRST TWO THOUSAND DAYS (1988).

6. See Clerk's Office of the Court of Appeals for the Federal Circuit, Inventory Control Index for 1983 to 1993 (1994) (unpublished statistical compilation). The index is based on the standard, established by the ABA Commission on Standards for Judicial Administration, that for an appellate court to be current in its work, it should be turning over its inventory of pending cases twice a year. The Federal Circuit figures fluctuate between six and seven months for disposal of all pending cases.

7. See Clerk's Office of the Court of Appeals for the Federal Circuit, Median Disposition Times, 1983 to 1993 (1994) (unpublished statistical compilation).

8. These are claims against the United States, government contracts, international trade cases, petroleum cases, and vaccine cases.

9. 35 U.S.C. § 102 (1988) (providing that person is entitled to patent unless he or she falls into one of several disqualification categories); 15 U.S.C. § 1052 (1988) ("No trademark by which the goods of the applicant may be distinguished from the goods of others shall be refused registration on the principal register on account of its nature *unless . . .*") (emphasis added).

trademark examiners could more often make correct decisions at the outset if Federal Circuit outcomes were more predictable. Similarly, if trial level judges were able to predict what the Federal Circuit will do, they could provide litigants with a correct decision earlier in the process. Thus, in seven of eight areas, predictability is at a premium for both the executive branch actors who initially decide matters and for the business persons who must alter their behavior accordingly. As I will endeavor to demonstrate in later sections of this Article, however, predictability is even more important in the Federal Circuit's eighth area of jurisdiction, which encompasses private suits in district court to enforce patent rights.

If the parties to disputes in all of the eight areas are able to ascertain their rights and obligations prior to litigation by applying rules set forth in precedent, they can alter their behavior accordingly. After all, this is commercial law, which is very different from civil rights, criminal, or libel law. In commercial law, parties can often settle their disputes without filing lawsuits. Or, if the facts are unclear, the parties may settle privately as soon as discovery is completed.

In such a system, filings, trials, and appeals should be less frequent than they are concerning the Federal Circuit today. In addition to saving clients considerable time and litigation expense, such a body of precedent empowers parties themselves to decide their futures, rather than judicial officers who inevitably are less familiar with the parties' circumstances and do not have the extra incentive of having to live with the consequences of their decisions.

If the ultimate outcome of litigation were more foreseeable, these commercial disputes would seldom require litigation. Indeed, most disputes, much less the resulting lawsuits, could be avoided altogether. Armed with the knowledge of the rights involved, the actors could simply adjust their business behaviors to avoid transgressing one another's rights in the first place, and they would have ample economic incentive to do so.

Some observers, however, might argue that the costs of less predictability are justified by the benefits of greater fairness. They might tolerate inefficiencies in the operation of the adjudicatory system in return for more just results, especially when an individual person or even corporate business is squared off against the powerful sovereign. While this may often be the case in the area of personal and constitutional rights, it is rarely so in cases concerning commercial rights.

I submit that in the eight areas of Federal Circuit jurisdiction, Congress has reserved for itself much of the classical common-law function of courts: creating legal rules and tests that in turn should make rights and obligations ascertainable. Because most of the basic policy choices have already been made by the legislature, often the court's role is limited to reviewing whether a particular citizen was put in the correct legal category by an executive branch or judicial decisionmaker. This function may be analogized, rather unglamorously, to resurveying a national border to confirm whether, based on place of residence, one's citizenship was correctly determined. Decisional danger then arises from the temptation, borne of subjective sympathy for a party, to stretch the established border of the more favorable "state" to include that party. I would argue that except when equitable doctrines control, equities should not determine litigation outcomes. While adjudication according to the particular equities may benefit one party, it may also undermine the larger system: in my analogy, large numbers of other residents thereby become uncertain of their "citizenship." Predictability then wanes, which can multiply litigation, and which can, in turn, decrease predictability still further. Such a cycle can ultimately impede the very commerce our court was created to promote.

I therefore argue that our court works best when it so defines generic legal rights that, in most individual situations, the parties to a potential lawsuit could, if willing, reason together and agree on the likely outcome of prospective litigation. Specifically, the parties' lawyers could reliably predict how our court would ultimately rule on the matter in dispute. Surely, moving in the opposite direction—toward more uncertainty of rights, more unpredictability of adjudicatory outcomes, and therefore more lawsuits—is an undesirable and ultimately an unsustainable result.

In the balance of this introductory Article, I illustrate my thesis with several practices that I think foster needless uncertainty, and I suggest several means by which the court could increase certainty. In the articles that follow, other authors may help prove or disprove my thesis as they survey the court's output over the past year. I begin this analysis with patent laws because Congress created the court primarily to improve that area of the law.

I. DESPITE A CLAIM-BASED SYSTEM OF PATENTING INVENTIONS, THE SCOPE OF PATENT PROTECTION IS HIGHLY UNPREDICTABLE

Section 112 of the Patent Act establishes the claims allowed by the Patent and Trademark Office (PTO) as defining the scope of the

inventor's right to exclude others from making, using, or selling her invention.¹⁰ Nonetheless, in nearly every infringement case, the patentee also seeks, and often secures, a broader scope of protection under the doctrine of equivalents where the claims as written are not infringed.¹¹ The court often allows juries to apply the doctrine with little guidance. Indeed, the court often leaves the issue of the scope of protection under the literal claim language of § 112 entirely to the discretion of unguided juries. In both circumstances, predictability decreases.

A. The Application of the Doctrine of Equivalents Is Too Uncertain

Although certain limitations on the doctrine¹² are well established, they seldom seem to apply. Prosecution history estoppel¹³ and the rule against extending the scope of protection so as to invade the prior art are decisive doctrines when they are applicable but irrelevant when they are not.¹⁴ A third possible limitation on the doctrine of equivalents is the rule that requires the extension of protection beyond literal claim language to be within an "available range of equivalents" that is somehow proportionate to the scope of the claimed invention viewed against the prior art.¹⁵ Thus, the more

10. 35 U.S.C. § 112 (1988).

11. See Kendrew H. Colton & Michael W. Haas, *Patent Law Developments in the United States Court of Appeals for the Federal Circuit During 1992*, 42 AM. U. L. REV. 909, 985-86 (1993) (defining "doctrine of equivalents" as test in which equivalency results from insubstantial change that adds nothing of significance to claimed invention).

12. See *Charles Greiner & Co. v. Mari-Med Mfg.*, 962 F.2d 1031, 1036, 22 U.S.P.Q.2d (BNA) 1526, 1529 (Fed. Cir. 1992) (tracing judicial limits placed on doctrine of equivalents); see also *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538, 20 U.S.P.Q.2d (BNA) 1456, 1458 (Fed. Cir. 1991) (stating application of doctrine of equivalents is "exception . . . not the rule").

13. See *Texas Instruments Inc. v. United States Int'l Trade Comm'n*, 988 F.2d 1165, 1173, 26 U.S.P.Q.2d (BNA) 1018, 1024 (Fed. Cir. 1993) (defining "prosecution history estoppel" as preventing patentee from later claiming infringement under doctrine of equivalents of subject matter that corresponds to portion of claim that was surrendered during patent examination process); *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452, 227 U.S.P.Q. (BNA) 293, 296 (Fed. Cir. 1985) (describing how prosecution history estoppel excludes any interpretation of claim that was disclaimed or disavowed during prosecution).

14. See *Wilson Sporting Goods Co. v. David Geoffrey & Assocs.*, 904 F.2d 677, 683, 14 U.S.P.Q.2d (BNA) 1942, 1947 (Fed. Cir. 1990) (stating that although doctrine of equivalents permits some protection beyond literal wording of claims, it is prior art that provides outer limits of expanded protection under doctrine). Under the doctrine of equivalents, a patentee should not be able to obtain coverage that he could not have lawfully obtained from the PTO by literal claims. *Id.* at 684, 14 U.S.P.Q.2d (BNA) at 1948. The question then becomes whether a "hypothetical" patent claim just broad enough to read on the accused device could have been allowed by the PTO over the prior art. If not, then the patentee is not entitled to that coverage under the doctrine of equivalents. *Id.*

15. See *Scaled Air Corp. v. United States Int'l Trade Comm'n*, 645 F.2d 976, 984, 209 U.S.P.Q. (BNA) 469, 477 (C.C.P.A. 1981) (holding that pioneer invention is entitled to broad range of equivalents).

pioneering the invention, the broader the protection.¹⁶ Unfortunately, the utter vagueness of this third limitation has made it all but useless to judges in deciding outcomes and to practitioners in predicting them.

Uncertainty is further compounded when the element-by-element equivalence test, which our court has approved en banc,¹⁷ may in practice be bypassed in the trial court because the patentee may be permitted to prevail by showing only overall equivalence. If the patentee effectively avoids the element-by-element test, the patentee can improve his or her chances of winning. Those chances, however, remain uncertain, for even if the jury instructions are good, lay jurors must struggle to grasp the meaning of such limitations as the "available range of equivalents" and such tests as the "all elements" test. When the jury instructions are poor, the jury's task seems impossible. Even as a judge, I am occasionally baffled by the more basic question under the doctrine of whether an accused device with structurally different components nevertheless works in "substantially the same way" under the third part of the *Graver Tank* test.¹⁸

Furthermore, because the court's instructions fail to construe the claims literally, the court does not usually explain to the jury the baseline from which protection would be equitably extended under the doctrine of equivalents. Without a baseline, of course, there is no way jurors, however bright, can possibly calculate the range of equivalents sought beyond the scope of literal protection and decide its "availability." Moreover, while the Federal Circuit has enjoined trial judges and jurors from using the doctrine to "erase a plethora of meaningful . . . limitations,"¹⁹ the court does not tell them how to discern which claim limitations are meaningful and which ones are

16. See *Sun-Studs, Inc. v. ATA Equip. Leasing, Inc.*, 872 F.2d 978, 987, 10 U.S.P.Q.2d (BNA) 1338, 1346 (Fed. Cir. 1989) (asserting that wide range of technological advance between pioneering breakthrough and modest improvement accommodates gradations in scope of equivalency).

17. See *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 934, 4 U.S.P.Q.2d (BNA) 1737, 1738 (Fed. Cir. 1987) (en banc), *cert. denied*, 485 U.S. 961 (1988) (setting out "all elements" test). Under this test, each limitation must be viewed in the context of the entire claim, and, in order to find infringement under the doctrine of equivalents, the plaintiff must show the presence of every element of the claimed device or its substantial equivalent in the accused device. *Id.*

18. See *Graver Tank & Mfg. v. Linde Air Prods.*, 339 U.S. 605, 608 (1950) (stating that infringement may be found if accused device performs substantially same function in substantially same way to achieve substantially same result); see also *Pennwalt Corp.*, 833 F.2d at 934, 4 U.S.P.Q.2d (BNA) at 1738 (holding that meeting *Graver Tank* test does not necessarily require finding of infringement by equivalents).

19. *Perkin-Elmer Corp. v. Westinghouse Elec. Corp.*, 822 F.2d 1528, 1532, 3 U.S.P.Q.2d (BNA) 1321, 1324 (Fed. Cir. 1987).

not.²⁰ Additionally, some of our cases state that all limitations are material and thus presumably "meaningful."²¹ For all these reasons, jury findings are unpredictable concerning possible infringement under the doctrine of equivalents, and certainty in applying the doctrine is not appreciably higher in bench trials.

Hopefully, the en banc rehearing this year of *Hilton Davis Chemical Co. v. Warner-Jenkinson Co.*²² will yield a decision that reduces uncertainty regarding the doctrine of equivalents. Because the case is under review at this writing, I express no opinion about whether, much less how, the doctrine of equivalents should be modified. It may be justified in its present form by other virtues relating to fairness to the inventor. It is not, however, justifiable on the grounds that it assures predictability.

*B. Even Literal Infringement Findings Are Unpredictable, Primarily
Because the Metes and Bounds of the Claim Are Seldom
Defined by the Trial Court*

In the jury verdict appeals I have reviewed, I cannot recall even one in which the trial judge defined the literal scope of the claim for the jury in clear, comprehensive, and mandatory instructions, despite the fact that this seems to be the duty strongly implied in our precedent.²³ Instead, judges routinely delegate the tasks of claim construction, as well as infringement findings, to the jury. By acquiescence, however, the Federal Circuit has condoned this practice,

20. See *id.* (discussing claim limitations). The court stated:

One must start with the claim, and, though a "non-pioneer" invention may be entitled to some range of equivalents, a court may not, under the guise of applying the doctrine of equivalents, erase a plethora of meaningful structural and functional limitations of the claim on which the public is entitled to rely in avoiding infringement. Nor . . . should a court convert a multi-limitation claim to one of two limitations to support a finding of equivalency.

Id.

21. See *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1561, 19 U.S.P.Q.2d (BNA) 1500, 1504 (Fed. Cir. 1991).

22. No. 93-1088, 1993 WL 502162 (Fed. Cir. Dec. 3, 1993) (pending rehearing en banc).

23. See *Lemelson v. General Mills, Inc.*, 968 F.2d 1202, 1206, 23 U.S.P.Q.2d (BNA) 1284, 1287 (Fed. Cir. 1992) (describing claim construction process). The court asserted:

[W]hen a question of infringement is given to a jury, there is a special burden placed on the trial judge—as well as the parties—to ensure that the second step in the process, that of comparing the claims to the accused product or process, does not cause the first step, interpreting the claims properly, to get short shrift.

Id.; see also *Unique Concepts*, 939 F.2d at 1561, 1564, 19 U.S.P.Q.2d (BNA) at 1503, 1505 (stating that claim construction is issue of law, reviewed *de novo*, while determination of infringement by accused device is issue of fact that in bench trial is reviewed under clearly erroneous standard); *McGill Inc. v. John Zink Co.*, 736 F.2d 666, 672, 221 U.S.P.Q. (BNA) 944, 951 (Fed. Cir. 1984) ("If, however, the meaning of a term of art in the claims is disputed and extrinsic evidence is needed to explain the meaning, construction of the claims could be left to the jury.").

apparently on the assumption that the issue of claim construction is somehow necessarily bound up with issues of historical fact. Some argue that, much like statutory construction, claim construction is usually a matter of defining the meaning of operative terms in a legal document in light of the underlying official documents.²⁴ The specification and prior art patents and publications of record are thus the "legislative history" of the patent. No issue of historical fact is present in many cases, as we impliedly recognized in *McGill Inc. v. John Zink Co.*²⁵

When the court delegates both construction and infringement to the jury's discretion, the jury is free to do almost anything it wishes. Whether this is good legal policy, good economics, or even faithful to the Seventh Amendment are questions that will remain unanswered here because they may be addressed by the court en banc in *Pall Corp. v. Micron Separations* and *Herbert Markman and Positek, Inc. v. Westview Instruments*,²⁶ which will be reheard in 1994. For present purposes, I simply note the lack of predictability when juries are left without guidance to construe patent claims.

II. PATENT VALIDITY IS OFTEN EQUALLY UNCERTAIN

Because the Federal Circuit gives little priority to the goal of predictability, patent invalidity for obviousness, for failure to disclose the best mode of practicing the invention, and for being on sale or in public use for over one year before filing of the application are areas that have become less, not more, certain as the court has decided more cases. Previously, the inequitable conduct doctrine

24. See, e.g., Colton & Haas, *supra* note 11, at 909 (explaining that courts frequently refer to patent's prosecution history to interpret its claims); Donald S. Chisum, *Recent Developments in Patent Law—January 1 to September 15, 1992*, in 3 CALIFORNIA MCLE MARATHON WEEKEND 13 (PLI Corp. Law & Practice Course Handbook Series No. 804, 1993) (citing decisions suggesting that jury may resolve disputes about claim meaning); V. Bryan Medlock, Jr., *Jury Trials of Patent Cases*, in PATENT LITIGATION 1990, at 115 (Patents, Copyright, Trademarks, and Literary Property Course Handbook Series No. 299, 1990) (suggesting that claim construction involves examining claim language itself, specification, prosecution history, prior art, other claims of patent, and testimony of expert witnesses as to how one of ordinary skill in art would understand terms); Kenneth R. Adamo, *Basic Motion Practice for the Accused Infringer*, 15 AIPLA QJ. 124, 172 (1987) (explaining that when "'language of a claim is not disputed, then the scope of the claim may be construed as matter of law.' But 'when the meaning of a term in the claim is disputed and extrinsic evidence is necessary to explain that term, then . . . construction of the claim should be left to the trier or jury under appropriate instruction.'") (quoting *Palumbo v. Don-Joy Co.*, 762 F.2d 969, 974, 226 U.S.P.Q. 5, 8 (Fed. Cir. 1985)).

25. 736 F.2d 666, 221 U.S.P.Q. (BNA) 944 (Fed. Cir. 1984).

26. *Pall Corp.*, No. 91-1393, and *Markman*, No. 92-1049, are companion cases pending rehearing en banc.

suffered from a similar lack of predictability.²⁷ In 1988, our court, sitting en banc, clarified the test by holding that the requisite intent, for which a threshold quantum must be shown, is deception.²⁸ Perhaps in the same way, the relationship between reduction to practice and the possibility of subsequent experimental use could be clarified.²⁹ Perhaps too the fog can be lifted from the question of whether a patentee suffers invalidation only for deliberately concealing the best mode when unknown to other artisans,³⁰ as opposed to failing to disclose it when it is routine in the art.³¹

As to obviousness, which is a deep and vast subject that must await exploration on another day, let me simply observe that, like the tripartite test of *Graver Tank*, the quadri-partite test of *Graham v. John Deere Co.*³² can sometimes bewilder judges in its actual application. For example, while the four factors under the fourth part of the *Graham* test, such as commercial success, are advertised as "objective,"

27. Inequitable conduct requires a two-part analysis of materiality and intent. But the relationship between materiality and intent was not always clear. *Compare In re Jerabek*, 789 F.2d 886, 891, 229 U.S.P.Q. (BNA) 530, 533 (Fed. Cir. 1986) (asserting that finding of gross negligence mandates finding of intent for inequitable conduct purposes) with *FMC Corp. v. Manitowoc Co.*, 835 F.2d 1411, 1415 n.9, 5 U.S.P.Q.2d (BNA) 1112, 1116 n.9 (Fed. Cir. 1987) (stating that finding of gross negligence alone does not mandate finding of requisite intent).

28. See *Kingsdown Medical Consultants v. Hollister Inc.*, 863 F.2d 867, 876, 9 U.S.P.Q.2d (BNA) 1384, 1392 (Fed. Cir. 1988) (en banc) (finding that inequitable conduct requires showing of intent to deceive).

29. The experimental use exception negates the public use or on sale bar of 35 U.S.C. § 102(b) (1988), but the required sequence with respect to reduction to practice is unclear. *Compare UMC Elecs. Co. v. United States*, 816 F.2d 647, 656, 2 U.S.P.Q.2d (BNA) 1465, 1471 (Fed. Cir. 1986) (holding that reduction to practice of claimed invention before critical date is not required to invoke "on sale" bar) with *RCA Corp. v. Data Gen. Corp.*, 887 F.2d 1056, 1061, 12 U.S.P.Q.2d (BNA) 1449, 1453 (Fed. Cir. 1989) (stating that experimental use exception ends upon reduction to practice).

30. See *Shearing v. Iolab Corp.*, 975 F.2d 1541, 1545, 24 U.S.P.Q.2d (BNA) 1133, 1137 (Fed. Cir. 1992) (stating that to prove failure to disclose best mode, defendant must show both that inventor contemplated better mode for practicing invention at time of patent application and that inventor concealed that mode from public) (quoting *Chemcast Corp. v. Arco Indus.*, 913 F.2d 923, 927-28, 16 U.S.P.Q.2d (BNA) 1033, 1036-37 (Fed. Cir. 1990)).

31. See *Amgen, Inc. v. Chugai Pharmaceutical Co.*, 927 F.2d 1200, 1209-10, 18 U.S.P.Q.2d (BNA) 1016, 1024 (Fed. Cir. 1991) (stating that best mode requirement of 35 U.S.C. § 112 consists of two-part analysis). The court held:

The first is a subjective one, asking whether, at the time the inventor filed his patent application, he contemplated a best mode of practicing his invention. If he did, the second inquiry is whether his disclosure is adequate to enable one skilled in the art to practice the best mode or, in other words, whether the best mode has been concealed from the public.

Id.

32. 383 U.S. 1, 148 U.S.P.Q. (BNA) 459 (1966) (applying four-part analysis to determine obviousness). The test for § 103 obviousness is a determination based on findings of: (1) the scope and content of the prior art; (2) the differences between the prior art and claims; (3) the level of ordinary skill in the art at the time of invention; and (4) objective evidence of nonobviousness. *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 U.S.P.Q. (BNA) 459, 467 (1966).

the ultimate question of what the hypothetical ordinary artisan would have invented without undue experimentation had he known all pertinent prior art can get rather subjective and elusive. I pity the poor juror! Again, failure of the trial court to define the claims compounds uncertainty. The Federal Circuit's insistence on reviewing both PTO and district court obviousness determinations *de novo* only further increases the inherent unpredictability in this area.³³

III. THE CONSEQUENCES OF SUCH UNCERTAINTY ARE NO LESS HARMFUL FOR BEING INVISIBLE

A. *Why Uncertainty Is Harmful*

Although unpredictability is invisible, it pervades our case law and harms not only particular potential litigants but also others in the same industry. Uncertain litigation outcomes have several ramifications on technological invention. If an invention's patentability is uncertain, individual and corporate inventors alike may elect not to disclose it in a patent application that, under present law, becomes public upon allowance. Instead, they may decide to maintain it as a trade secret. Similarly, if the sustainability of a patent is uncertain, the incentive to file is diminished, if not eliminated. As a result, the benefit of disclosure of the invention, both as something others may make or use (under license) and as a clue to further technological advances, is lost. Even worse, a company assessing uncertain legal outcomes may be sufficiently discouraged from investing in the necessary research—often costing tens of millions of dollars—that the invention is simply never made.

The same disincentives, also stemming from uncertainty, plague the patentee's competitor. The competitor must ask, "Can I manufacture my product without infringing another's patent? How can I know in advance?" Even if no reasonable construction of the claims suggests literal infringement, the competitor will still wonder whether the court may nevertheless someday find infringement under the doctrine of equivalents. Unless the competitor finds adequate assurances against liability in an opinion letter from counsel, he may elect not to market a product. The public may thereby be deprived of a significant improvement. Thus, even though the patent law system is

33. See *In re Beattie*, 974 F.2d 1309, 1311, 24 U.S.P.Q.2d (BNA) 1040, 1041 (Fed. Cir. 1992) (stating that determinations of obviousness in prosecutions are reviewed *de novo*, while underlying factual findings are reviewed for clear error).

supposed to encourage improvements and "design arounds,"³⁴ the assurance of non-liability must outweigh the risk of liability and related damages or the competitor will cease efforts to offer the public better, or cheaper, devices.

Moreover, damages themselves may be both large and unpredictable. Of course, a finding of willful infringement can support trebling actual damages.³⁵ Even a finding of non-willful infringement can result in huge damages, partly because of the entire market value rule³⁶ (even where only one component is patented), and non-infringing associated products may support damages under the doctrine of convoyed goods.³⁷

Aspects of these issues are at this writing before the court en banc in *King Instrument Corp. v. Perego*³⁸ and *Rite-Hite v. Kelley Co.*³⁹ For that reason, I cannot comment further. But I can note that infringement findings also support both preliminary and permanent injunctions that may lead to plant closings or even business failures. On top of such potential catastrophic consequences, the competitor must add the large and uncontrollable legal fees and expenses that may be needed as a result of his activities. In addition, the competitor may need to consider other costs, such as the cost to redesign the product further versus the increased level of assurance that the product successfully "designs around" the competitor, thereby avoiding a dispute. If competitors view application of that rule as uncertain, then the calculation may become too speculative. The result again may be to deprive the public of desirable products. Who

34. See *State Indus., Inc. v. A.O. Smith Corp.*, 751 F.2d 1226, 1236, 224 U.S.P.Q. (BNA) 418, 424 (Fed. Cir. 1985) (asserting that one benefit provided by patent system is "negative incentive" to design around another's patented product, thus assuring steady flow of innovations to marketplace). Although designing around patents to make new inventions is encouraged, piracy is not. *London v. Carson Pirie Scott & Co.*, 946 F.2d 1534, 1538, 20 U.S.P.Q.2d (BNA) 1456, 1458 (Fed. Cir. 1991). Hence, the doctrine of equivalents evolved. *Id.* Undeniably, tension exists between these two doctrines. *Id.*

35. 35 U.S.C. § 284 (1988); see *Beatrice Foods Co. v. New England Printing & Lithographing Co.*, 923 F.2d 1576, 1578, 17 U.S.P.Q.2d (BNA) 1553, 1555 (Fed. Cir. 1991) (stating that although statute does not provide basis on which district court may increase damages, "[i]t is well-settled that enhancement of damages must be premised on willful infringement or bad faith").

36. See *State Indus. v. Mor-Flo Indus.*, 883 F.2d 1573, 1580, 12 U.S.P.Q.2d (BNA) 1026, 1031 (Fed. Cir. 1989) (defining "entire market value rule" as allowing recovery of damages based on value of patentee's entire apparatus containing several features, where patent-related feature is basis for customer demand), *cert. denied*, 493 U.S. 1022 (1990).

37. *Beatrice Foods*, 899 F.2d at 1175, 14 U.S.P.Q.2d (BNA) at 1023-24 (holding that scope of damages is extended to cover separate unpatented products that are customarily sold along with patented invention). This transaction is termed a "convoyed" sale. *Id.*

38. No. 91-1125, -1132 (pending rehearing en banc).

39. No. 92-1206, -1260, -1460 (pending rehearing en banc).

can blame the businessperson for holding back when damages often run into the tens or hundreds of millions of dollars?

Indeed, the businessperson may also need to factor in future changes and trends in court decisions, including trends in the Federal Circuit, thereby creating triple uncertainty. First, the businessperson must consider whether she can predict what the trial court would do today. Second, she must determine what the court would do years in advance when the possible lawsuit would actually be tried. Finally, she must consider whether the ultimate decision on appeal, which likewise is years away, is predictable.

Clearly, what both patentees and their competitors need is to ascertain their rights and liabilities *in advance*. For that, they need legal rules that foster maximum predictability of litigation outcomes. Of course, in some circumstances, outcomes will never be predictable because the facts will straddle the legal borderline. In others, equitable doctrines will be dispositive. But if courts casually make the legal line indistinct—an unmarked border—then the inherent problem is greatly exacerbated. Even worse, if appellate rulings allow a shifting borderline whose temporary placement depends on the composition of the appellate panel, then the problem becomes potentially paralyzing. Moreover, if the outcome remains unclear until the final court has spoken, more lawsuits will likely ensue, as well as more appeals.

B. Why the Ultimate Consequences of Uncertainty Are Invisible to Us

Both trial and appellate courts are limited to the record before them for grounds of decision. Such records rarely contain much information about the economic and scientific consequences of possible adjudications beyond the lawyers' arguments. Because attorneys for the opposing sides normally assert opposite practical consequences, how is the court to assess them without a factual record?

While Congress has made the broad choices, the Federal Circuit necessarily "legislates," if only at the margin. Furthermore, with a statute as general as the 1952 Patent Act,⁴⁰ the court unavoidably fills in gaps and develops fine points. We do so, however, without the benefit of the testimony and documents about cause and effect that are the staple of legislative committee hearings. The Federal Circuit, like all appellate courts, must articulate general legal rules, principles, tests, and standards that are intended to govern the results in other

40. 35 U.S.C. § 112 (1988).

cases, both pending and future. Because we are a national appellate court, today's decision, unless distinguishable, governs cases nationwide. Moreover, we receive less guidance from the Supreme Court than do our sister circuits, for the Court rarely decides substantive issues in our assigned areas.⁴¹ Finally, we lack a resource on which I suspect the Supreme Court often relies: amicus briefs. These briefs are the judicial equivalent of a legislative hearing record and are submitted in connection with many appeals heard by the Supreme Court.

Because our panels often cannot ascertain the practical consequences of alternative grounds for decision, they may be tempted to guess or to impose personal preferences or assumptions based on prior personal experience that may or may not be accurate. Consequently, results or rationales between opinions, depending on panel membership, can vary greatly. Such dissonance is especially likely to occur on issues of maximum vagueness, such as obviousness and application of the doctrine of equivalents.

Moreover, we usually lack the elaborate development of a long line of precedent, such as that on which the Supreme Court can usually rely. Because the Court always sits en banc, every past decision carries the full force of combined intellect behind it. There are thousands of potentially applicable decisions rendered by the Supreme Court itself. Accordingly, it has a firm and broad foundation of fully reasoned and detailed opinions on which to build a sound decision in a pending appeal. By contrast, the total body of Federal Circuit en banc precedent is about fifty cases, and the court rarely rehears cases en banc. While we have bound ourselves to follow the decisions of both predecessor courts,⁴² which usually sat en banc, their jurisprudence is less helpful than might be assumed. The Court of Claims adjudicated few patent infringement cases, and the CCPA, despite its name, adjudicated none. The CCPA adjudicated only patentability, not infringement, validity, or enforceability. The Federal Circuit, therefore, receives little guidance from the Supreme Court and must rely on a smaller body of en banc decisions than which is available to our sister circuits. That the court experiences such inter-panel dissonance is thus little wonder.

41. See Colton & Haas, *supra* note 11, at 912.

42. See *South Corp. v. United States*, 690 F.2d 1368, 1370 n.2, 215 U.S.P.Q. (BNA) 657, 658 n.2 (Fed. Cir. 1982) (en banc) (stating that holdings of Court of Claims and Court of Customs and Patent Appeals announced before September 30, 1982 are adopted as binding precedent by Federal Circuit).

Greater dissonance, however, may occur between some of our decisions and technological, economic, or industrial reality. That reality, which is a means for measuring the practical effects of a given ruling, is usually missing from our records and, therefore, from our minds. Again, comparison to Supreme Court decisional practices proves instructive. The opinions rendered by the Court frequently quote from journal articles and monographs, while ours seldom do. I think the absence of such cites in our opinions is partly a result of the fact that published analyses of patent issues are seldom based on empirical studies. Of the innumerable articles on such topics that I have read, I cannot recall one that was truly and fully empirical. Yet on other legal topics, empirical studies abound and are frequently cited and quoted by the Supreme Court. *Brown v. Board of Education*,⁴³ for example, relies on sociological studies.⁴⁴ Furthermore, when a journal article, empirical or not, is apposite, we seldom cite it. Perhaps scholarly inquiry is deterred by the absence of recognition from us.

Another aspect of invisibility is that patent rights are more often manifested in licenses rather than in lawsuits. A public record does not exist for the tens of thousands of private licenses in operation, or the new ones taken each year. We thus cannot easily gain a sense of how our rulings and rules affect licensing decisions. Yet such business-legal decisions may be the best barometer of the practical impact of our judicial decisions.

Lacking empirical studies, licensing data, amici briefs, Supreme Court guidance, and extensive precedent on some issues from predecessor courts, we all too often rely on dicta from prior panel decisions that, upon examination, may have very little foundation. With computer-assisted legal research behind their composition, most briefs regurgitate this dicta in alarming quantities. In the absence of vigilant judges, it can become precedent. The ultimate consequence may be a kind of analytic sterility, a pattern of circular reasoning in which groundless dicta in a prior decision becomes the grounds for decision in a pending appeal. The practical consequences can all too easily be ignored, overlooked, or forgotten.

43. 347 U.S. 483 (1954).

44. *Brown v. Board of Educ.*, 347 U.S. 483, 494 n.11 (1954) (citing psychological sources as basis to reject previous psychological findings).

IV. ANALYTIC STERILITY ALSO THREATENS PREDICTABILITY IN SUBJECT AREAS OTHER THAN PATENTS

Government contract law is an example of another subject area threatened with a lack of predictability. The basic rule is that in the face of ambiguity in contract language that we later deem "patent," the contractor who has failed to inquire about what the Government really wants done will suffer the Government's preferred interpretation.⁴⁵ By contrast, if two panel members later call the ambiguity "latent," the Government suffers the contractor's preferred interpretation so long as it is reasonable.⁴⁶ In short, the choice of label is the choice of the victor. As a starting point for analysis in these cases, this doctrine seems sound enough; but as an automatic "case decider," I think it is difficult to defend. It appears from our contract caseload that a great many government contracts contain ambiguities, and that the patent/latent dichotomy frequently decides contract cases. Like the equivalents test of "same way,"⁴⁷ the "latency test" may be highly subjective—more in the eye of the beholder than grounded in objective legal analysis based on precedent. Consequently, until our court affixes a final label on the ambiguity, the contract dispute cannot be settled. Thus, every such case threatens to go through the full course of litigation. Does a rule that so deters settlement make sense? Is a rule that is so subjective in its application good law?

Consider personnel cases. Removals from the federal civil service are reversible if the penalty was "grossly disproportionate" to the misconduct giving rise to it,⁴⁸ but how is one to know? As I read our case law, the term "grossly disproportionate" is undefined and hence highly subjective. Again, it appears that this ambiguity encourages appeals, first to the Merit Systems Protection Board and then to the Federal Circuit, by any fired employee no matter how egregious the misconduct or how reasonable the penalty because the penalty will certainly seem disproportionate to the former employee. Consider too terminations for incompetence. They are reversible unless the criteria of acceptable performance were: (1) written out for the

45. See *Fortec Constructors v. United States*, 760 F.2d 1288, 1291 (Fed. Cir. 1985) (propounding ambiguity treatment standard).

46. *Sturm v. United States*, 421 F.2d 723, 727 (Ct. Cl. 1970) (discussing standard applied to contractual disputes).

47. See *Dolly, Inc. v. Spaulding & Evenflo Co.*, 16 F.3d 394, 400, 29 U.S.P.Q.2d (BNA) 1767, 1773 (Fed. Cir. 1994) (stating that accused device may infringe claim under doctrine of equivalents if it performs substantially same function, in "same way").

48. *Baker v. Department of Health & Human Servs.*, 912 F.2d 1448, 1456 (Fed. Cir. 1990).

employee in detail, and (2) as objective as possible.⁴⁹ Unfortunately, I can recall no cases that define those terms further. Thus, litigants have little guidance as to how much detail or objectivity is required, or even how one decides “how much.” The danger then is that three circuit judges scrutinizing the same factual record may measure it by three different, subjective yardsticks.

In vaccine cases, we usually review the judgment of the Court of Federal Claims after the judge has upheld the decision, the findings of fact, and the legal conclusions of the Special Master.⁵⁰ Our standards of review ask whether the findings were arbitrary and capricious, whether the legal conclusions were in error, or whether the award was unreasonable.⁵¹ Typically, both petitioner and the Government had presented medical experts whose diagnostic conclusions conflicted. If that means the Master’s findings by definition cannot be arbitrary, our review is in vain. If it means we must minutely examine the conflicting medical testimony, our review is impractical and our competence questionable. Unfortunately, our court decisions have failed to settle this conflict, with different decisions pointing in different directions.⁵² If this conflict means that each panel may choose the review standard it prefers, such a resolution is not good practice. If, as one decision may suggest,⁵³ we are to decide whether the Court of Federal Claims abused its discretion when it upheld the decision of the Special Master, then we have convoluted our review by compounding deference. On the other hand, if a decision simply repeats the review by the Court of Federal Claims, it is wasteful. Given such uncertainty of review and presumably of outcome, it is no wonder that so many vaccine petitioners litigate at all three levels.

49. See *Baker v. Defense Logistics Agency*, 782 F.2d 1579, 1583 (Fed. Cir. 1986).

50. 42 U.S.C. § 300aa-12 (1988).

51. *Munn v. Secretary of the Dep’t of Health & Human Servs.*, 970 F.2d 863, 870 (Fed. Cir. 1992).

52. Compare *Bradley v. Secretary of the Dep’t of Health & Human Servs.*, 991 F.2d 1570, 1574 n.3 (Fed. Cir. 1993) (upholding Special Master’s finding on basis that it was not arbitrary and capricious) with *Hodges v. Secretary of the Dep’t of Health & Human Servs.*, 9 F.3d 958, 960 (Fed. Cir. 1993) (allowing petitioner to submit medical testimony that conflicted with Special Master’s finding).

53. *Hodges*, 9 F.3d at 960 (“We may not disturb the judgment of the Court of Federal Claims unless we find that judgment to be arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.”).

V. DISSONANCE ALSO ARISES FROM THE PATENT AND TRADEMARK OFFICE'S UNRESPONSIVENESS TO FEDERAL CIRCUIT DECISIONS

Although our en banc precedent is slight for infringement issues, there is massive precedent for patentability issues. The CCPA nearly always sat en banc and almost always reviewed decisions of the Board of Patent Appeals and Interferences, upholding rejections by examiners, most commonly for obviousness. In its very first decision, the Federal Circuit adopted as binding precedent all decisions of the CCPA—thousands of cases spanning many decades.⁵⁴ Later, in *Newell Cos. v. Kenney Manufacturing Co.*,⁵⁵ we were said to have adopted twin rules: (1) that a binding precedent could never be overruled by a panel, only by the court en banc; and (2) that of two conflicting decisions, only the first is precedent.⁵⁶ As commonly interpreted, the combination of these two rules means that a CCPA decision always trumps a Federal Circuit panel decision if they conflict.

It is my impression that all levels of the PTO—the examiner corps, the board, and the Solicitor—have taken considerable advantage of this interpretation. Thus, the Solicitor commonly argues before us that a Federal Circuit decision the PTO disfavors may be ignored because it is said to conflict with a CCPA decision.⁵⁷ Because a perception of conflict involves legal judgment, not everyone would agree that a conflict exists. The Solicitor effectively takes the position that if he or she can argue that a CCPA decision conflicts with a disfavored panel decision, the latter may be disregarded. Where the conflict is clear and the decisions irreconcilable, the Solicitor is correct; but where neither is so, the propriety of this practice is, to say the very least, open to question. Clearly, this practice creates dissonance with daily consequences for applicants.

For several reasons, the availability of appeal to our court is not a satisfactory safeguard. First, for various reasons particular to them, some companies have a firm policy against appealing board decisions. Some even decline to appeal examiner rejections to the Board of Patent Appeals and Interferences within the PTO. Others may find

54. *South Corp. v. United States*, 690 F.2d 1368, 1370 n.2, 215 U.S.P.Q. (BNA) 657, 658 n.2 (Fed. Cir. 1982) (en banc).

55. 864 F.2d 757, 9 U.S.P.Q.2d (BNA) 1417 (Fed. Cir. 1988), cert. denied, 493 U.S. 814 (1989).

56. *Newell Cos. v. Kenney Mfg.*, 864 F.2d 757, 765, 9 U.S.P.Q.2d (BNA) 1417, 1423 (Fed. Cir. 1988), cert. denied, 493 U.S. 814 (1989).

57. See *In re Donaldson Co.*, 16 F.3d 1189 (Fed. Cir. 1994) (en banc).

the added expense and delay of appealing to our court unacceptable. Even for those who always appeal, the question remains as to why they should have to. If the claimed invention is patentable, the applicant is *entitled* to a patent (because the statute says so)—not eventually, but as soon as patentability can be determined. Moreover, the burden of proof is on the PTO to show unpatentability, not on the applicant to establish patentability, and it remains on the PTO even if the Solicitor has made a *prima facie* case.⁵⁸ The only burden that shifts to the applicant is the burden of production.⁵⁹ Is it not ironic that a statutory provision that mandates issuance of a patent unless the invention is shown to be obvious can always be applied so as to require intervention by the Federal Circuit in a second-stage review of an examiner's rejection? Where a Federal Circuit precedent supports issuance, I would have thought the application should simply be allowed by the examiner.

Two further observations are appropriate even in such a brief discussion. First, the fact that the CCPA judges may be viewed as “specialist judges” does not justify disregarding subsequent Federal Circuit decisions, unless they cannot be reconciled with the CCPA case. Federal Circuit appointees are “generalist judges,” like those of all other circuit courts. Second, like other circuits, the Federal Circuit operates in panels rather than as a full court (except for cases taken en banc pursuant to the Federal Rules of Appellate Procedure). There should be no confusion respecting the authoritativeness of a panel decision: it *is* the decision of the court even though rendered by only a minority of the court's judges. Unless the court convenes en banc to rehear a case, the panel decision controls, represents the final decision of our court, and constitutes a binding precedent.

VI. UNDUE RELUCTANCE TO DIRECT DISTRICT JUDGES FOSTERS DISSONANCE

Categorical hesitance by the Federal Circuit to establish strict guidelines for district judges is appropriate; undue reluctance is not. Our reluctance to require trial judges to instruct the jury on the proper interpretation of claims has effectively discouraged them from so doing. According to our case law, however, claim interpretation is

58. See *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d (BNA) 1955, 1956, (Fed. Cir. 1993) (stating examiner must affirmatively prove unpatentability) (citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d (BNA) 1443, 1444 (Fed. Cir. 1992)).

59. *Oetiker*, 977 F.2d at 1445, 24 U.S.P.Q.2d at 1444.

fundamentally a question of law.⁶⁰ It is thus to be interpreted by the judge, not by the jury.

In *Jamesbury Corp. v. Litton Industrial Products*,⁶¹ the jury was not properly instructed, and we remanded the case with instruction to the court that it "should instruct the jury on what the claim means."⁶² We also said in *Read Corp. v. Portec, Inc.*⁶³ that "where the [c]ourt's interpretation [of the patent claims] is not set forth in its instructions to the jury, the [c]ourt must perform its role of deciding this issue of law in ruling on the JNOV motion."⁶⁴ As far as I know, however, we have never said, much less held, that it is reversible error to refuse to instruct the jury on the meaning of claims. Thus, our basic holding in *Structural Rubber Co. v. Park Rubber Co.*⁶⁵ that "the issue of claim interpretation [is] a matter for the [c]ourt to decide and to make known to the jury by its jury instructions" is hollow.⁶⁶ Perhaps the very absence of enforcement explains why trial counsel seldom request such instructions.

Similarly, our reluctance to require bifurcation of the issue of willfulness may have made validity and infringement opinion letters of counsel incomplete and unhelpful, if not misleading. District judges routinely enforce discovery of such opinion letters, even in the prelude to a liability trial. While accused infringers may withhold them upon assertion of the attorney-client privilege, the court may normally instruct the jury that a negative inference as to their content is permissible.⁶⁷ Such letters, however, are usually irrelevant to the issues of validity and infringement, the two most common liability issues. They are relevant to possible enhancement of damages for willfulness and in those cases they should be admitted only after liability has been determined, thus justifying some form of bifurcation.

Whether damages are to be decided by the same jury immediately after liability or after appeal on liability by a new jury makes no

60. *Unique Concepts, Inc. v. Brown*, 939 F.2d 1558, 1564, 19 U.S.P.Q.2d (BNA) 1500, 1506 (Fed. Cir. 1991) (stating claim construction issue of law that Federal Circuit reviews *de novo*).

61. 756 F.2d 1556, 225 U.S.P.Q. (BNA) 253 (Fed. Cir. 1985).

62. *Jamesbury Corp. v. Litton Indus. Prods.*, 756 F.2d 1556, 1565, 225 U.S.P.Q. (BNA) 253, 262 (Fed. Cir. 1985).

63. 970 F.2d 816, 23 U.S.P.Q.2d (BNA) 1426 (Fed. Cir. 1992).

64. *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 822-23, 23 U.S.P.Q.2d (BNA) 1426, 1430 (Fed. Cir. 1992).

65. 749 F.2d 707, 223 U.S.P.Q. (BNA) 1264 (Fed. Cir. 1984).

66. *Structural Rubber Co. v. Park Rubber Co.*, 749 F.2d 707, 721, 223 U.S.P.Q. (BNA) 1264, 1277 (Fed. Cir. 1984).

67. *See Fromson v. Western Litho Plate & Supply Co.*, 853 F.2d 1568, 1572-73, 7 U.S.P.Q.2d (BNA) 1606, 1611 (Fed. Cir. 1988) (holding that when patent infringer fails to produce exculpatory opinion of counsel at trial, negative inferences are within province of fact finder).

difference. Although opinion letters are usually relevant only to willfulness, we hear that district judges regularly admit them into evidence while infringement is still at issue. As a result, according to some informal discussions, counsel now write them in a stilted way. Our reluctance has thus unintentionally promoted an undesirable interference in the provision of honest advice by lawyer to client. Even if the client receives supplementary oral advice and is thereby not actually denied counsel's full and honest opinion, this subterfuge is unsatisfactory. In complex cases involving multiple corporate actors, oral advice may constitute ineffective or inaccessible advice. Additionally, material omissions from the opinion letter actually may make the advice misleading. Should our court encourage deliberate drafting of misleading documents that we know often become evidence?

If this is the true state of affairs, it could easily be remedied. Instead of merely hinting that bifurcation is appropriate in such circumstances, we should require it. Otherwise, the accused infringer is left with an unnecessary and perhaps unfair dilemma. If the attorney withholds the letter to avoid making a finding of infringement more likely, and if the court then finds infringement, the negative inference makes a finding of willfulness more likely. Conversely, if to avoid the finding of willfulness counsel produces the letter and it is admitted, it may indeed encourage the jury to irrationally find infringement when it otherwise might not.

So our reluctance to require bifurcation in some form has unwittingly spawned twin evils: stilted opinion letters and a dilemma for defendants regarding letters written earlier. Both evils can be avoided, but only if our court has the confidence to mandate practices in trial courts on matters unique to patent trials.

VII. UNINTENDED DISSONANCE MAY ALSO ARISE FROM LEGISLATION AND RESOLVING IT MAY REQUIRE BETTER COMMUNICATION WITH CONGRESS

When Congress enacted the Contract Disputes Act in 1978,⁶⁸ it probably had no idea of the domino consequences that would result from its failure to require claim certification by an authorized signatory. Because of the wording of the Act and the implementing regulation, a decade of decisions by the Court of Claims and the

68. Pub. L. No. 95-563, 92 Stat. 2383 (1978) (codified at 41 U.S.C. §§ 601-613 (1988)).

Federal Circuit⁶⁹ held that defective certification meant that no claim in accordance with the Act had been filed and thus that the initial arbiter, the contracting officer, lacked jurisdiction.⁷⁰ As a result, there was no "final decision" required by the Act as a prerequisite of appeal.⁷¹ Consequently, we have held that the contract boards and the Court of Federal Claims also lacked jurisdiction,⁷² and because they lacked jurisdiction, so did we. Moreover, because absence of jurisdiction may be raised at any time by a party or sua sponte by a tribunal,⁷³ many cases are aborted in mid-litigation and have to be refiled with the contracting officer. In the meantime, interest on any recovery may be lost, and if the statute of limitations has run, the entire claim may be lost.⁷⁴ All of these adverse consequences presumably were unintended by Congress when it enacted the Contract Disputes Act in 1978.

The perceived problem grew steadily for eleven years and surged in importance in 1989 with our court's decision in *Ball, Ball & Brossamer, Inc. v. United States*.⁷⁵ It reached crisis status beginning in 1991 when our court, following *Ball*, decided *United States v. Grumman Aerospace Corp.*⁷⁶ In 1992, as a result of decisions by the then-United States Claims Court, as well as industry lobbying efforts, Congress amended the Act prospectively to make certification defects non-jurisdictional but curable in mid-litigation.⁷⁷ In hindsight, I see no reason why similar communications with Congress could not have cured the

69. See, e.g., *United States v. Grumman Aerospace Corp.*, 927 F.2d 575, 579 (Fed. Cir.) (citing *Thoen v. United States*, 765 F.2d 1110, 1116 (Fed. Cir. 1985)), cert. denied, 112 S. Ct. 330 (1991); *W.M. Schlosser Co. v. United States*, 705 F.2d 1336, 1338 (Fed. Cir. 1983); *Milmark Servs. v. United States*, 231 Ct. Cl. 954, 956 (1982); *W.H. Moseley Co. v. United States*, 677 F.2d 850, 852 (Ct. Cl.), cert. denied, 459 U.S. 836 (1982); *Paul E. Lehman, Inc. v. United States*, 673 F.2d 352, 355 (Ct. Cl. 1982) (holding that certification requirement is jurisdictional prerequisite that must be satisfied by contractor before it may appeal contracting officer's claim denial).

70. See *Grumman*, 927 F.2d at 579 (stating that pursuant to 41 U.S.C. § 605 (1988), proper certification by contractor of claims over \$50,000 is prerequisite to contracting officer having jurisdiction to render final decision on claims).

71. See *id.* at 578-80 (stating that 41 U.S.C. § 609(a) makes final decision of contracting officer prerequisite to appeal to Court of Federal Claims).

72. *Id.* at 580.

73. See *Bender v. Williamsport Area Sch. Dist.*, 475 U.S. 534, 541 (1986) (holding that every federal appellate court has "special obligation" to determine validity of jurisdiction).

74. 28 U.S.C. § 2501 (1988) ("Every claim of which the United States Claims Court has jurisdiction shall be barred unless the petition thereon is filed within six years after such claim accrues."); *Catawba Indian Tribe v. United States*, 982 F.2d 1564, 1569-70 (Fed. Cir.) (providing example of claim barred by statute of limitation), cert. denied, 113 S. Ct. 2995 (1993).

75. 878 F.2d 1426 (Fed. Cir. 1989).

76. 927 F.2d 575 (Fed. Cir.), cert. denied, 112 S. Ct. 330 (1991).

77. Federal Courts Administration Act (FCAA) of 1992, Pub. L. No. 102-572, § 101, 106 Stat. 4506, 4518 (codified at 41 U.S.C. § 605(c)(6) (Supp. IV 1992)); see also *Newport News Shipbuilding & Dry Dock Co. v. Garrett*, 6 F.3d 1547, 1552-53 (Fed. Cir. 1993) (describing role of FCAA).

problem many years earlier. Our court has traditionally shunned such communication with Congress, however, for fear of appearing to interfere with legislative prerogatives. I think we should reexamine our position of total silence. Of course, our court should express no opinion with regard to policy choices Congress faces, but we could properly advise the legislature on the effect of a given legislative change on existing jurisprudence.

VIII. POSSIBLE FURTHER IMPROVEMENTS IN THE WORK OF THE COURT OF APPEALS FOR THE FEDERAL CIRCUIT

I will first consider what outsiders can do to help the court and then what the court can do to help itself.

A. *Appointments by the President*

Selecting judges is not part of our court's mission. Nevertheless, one factor that I think should be considered may not occur to those who are responsible for helping select potential appointees. Therefore, I will be bold enough to suggest that the President consider filling our long existing vacancy with another patent litigator, ideally one experienced in trying infringement cases to juries. At present, our bench includes judges with varied professional backgrounds, which provides the court with great intellectual strength. One area of professional expertise that the court lacks, however, is that of a patent litigator. While four of eleven active judges had extensive prior experience with intellectual property matters—nearly exactly the proportion of our total caseload that involves intellectual property issues⁷⁸—not one had substantial patent infringement jury experience. Accordingly, the most important gap in our collective experience concerns district court juries in infringement cases. If not a patent jury litigator, then perhaps the President might consider appointing a district court judge who has presided over many patent jury trials.

A fitting choice to fill the next vacancy would be an experienced government contracts litigator. After all, cases that originate in both the Court of Federal Claims and over a dozen departmental boards of contract appeals form a significant proportion of our caseload—approaching twenty percent.⁷⁹ The field of government contracts is a legal specialty with rules as arcane as those in patent

78. See Clerk's Office of the Court of Appeals for the Federal Circuit, Year-to-Date Activity and Status of Pending Cases (Feb. 1994) (unpublished statistical compilation).

79. *Id.*

law, and with damage awards potentially as large as in patent cases. Presently, our active membership includes only one judge who possesses significant experience with government contract litigation. Several senior judges who have extensive experience adjudicating these cases have greatly strengthened our decisionmaking process and enlightened our internal debate in such cases. Unfortunately, these judges will not be with us forever. These judges were originally appointed to the Court of Claims, which was more specialized than was the Federal Circuit, and they have a strong base of expertise, built up over the course of their years on the bench. Ultimately, that strength should be replenished. While it is certainly not our role to tell a President who should be appointed, I see no problem in informing him of advising gaps, both present and future, in our collective experience.

B. More Amicus Briefing by Bar Associations

I believe that more amicus briefs submitted by the various specialized bar groups would provide the greatest possible assistance to the court. I expect that briefs in more cases, especially those before panels, would improve the quality and realism of panel decisions in certain important cases that raise fundamental issues regardless of the subject matter involved. Sometimes different associations in the same area will have different views. The court would benefit from such diversity of opinion.

At present, amicus participation is largely limited to en banc cases. Yet many far-reaching panel decisions are declined for en banc rehearing. To some extent, our heavy workload is a disincentive to accepting suggestions or acting *sua sponte*. Also, some members of our court believe that en banc treatment is not justified merely because nonpanel members would have voted differently or viewed the decision and the precedent it represents as unwise. Certainly, the bar cannot assume that all major decisions will be made by the full court sitting en banc.

I have been told that the time needed to get association approval impedes amicus participation, particularly in cases at the panel level. But district court decisions that raise major issues are often covered in the legal if not the lay press, and computerized services make quick access to such decisions possible and inexpensive. Furthermore, I expect our court would be interested in reviewing the feasibility of any proposed amendment to facilitate timely review by potential amici. It may even be constructive for bar associations to file petitions that endorse a pending suggestion for en banc rehearing.

C. More Consultation with Congressional Committees

While neither the court nor individual judges should be advocating particular positions calculated to influence congressional policy choices on substantive or jurisdictional legislation, I think an exception can be made for explaining the impact of alternative legislative proposals on the court and its jurisprudence. Advocating is one thing, informing is another. Especially with Congress addressing legislation to implement treaties that would harmonize patent law worldwide, 1994 seems an auspicious year for increasing and formalizing the dialogue between court and committee.

D. More Research by Scholars, Especially Empirical Studies

I would like to see more issue-specific conferences presented by law schools, especially those with a particular interest in the work of our court. Recent conferences on patents at the George Washington National Law Center serve as a good model. Empirical research, not only by law school faculty but also by think tank scholars, could also greatly assist our court. Institutions such as the Intellectual Property Owners, Brookings Institute, and RAND Corporation could make important contributions. Such studies could then be cited in amicus and party briefs to ensure that the court's decisions reflect proven cause and effect relationships rather than assumed ones.

E. What Our Court Itself Can Do: Become More Consultative and Orderly

Until the last six months, my principal proposal for improving our service to the bars, the industries, and the agencies affected by our decisions would have been for more cases to be decided en banc. In late 1993, however, this suggestion became moot as the court's active judges voted to consider en banc no fewer than ten appeals. That is many more than in earlier years. From 1988, when I was appointed, through 1992, I doubt we took ten cases en banc. I am hopeful that whatever the extra burden on the court or the bar, the level of dissonance will thereby be diminished. Certainly, en banc decisions in these cases may modify our precedent in problematic subject areas, such as the doctrine of equivalents and claim construction, discussed above. Hopefully, the en banc decisions will increase predictability.

Two more modest suggestions, however, have not become moot. First, I wonder if the several means of informal communication with our various bars—panels, conferences, speeches, journal articles, and Inn of Court meetings—might not be profitably supplemented by

actual "consultations," meetings that focus not on individual cases but generically on selected common and troublesome issues. In past years, the Federal Circuit Bar Association's mid-winter meeting included small discussion groups that mixed together judges, practitioners, and others. I found these candid exchanges most enlightening. Another model might be the semi-annual consultation organized with major patent litigators by the district judges in Wilmington. This roundtable after-dinner discussion with agenda but no press or audience seems well suited to respectful and helpful exchanges. The prominence of the practitioners who attend—coming from New York, Chicago, Washington, and elsewhere—suggests that they find the format useful. The fact that the judges continue to convene these sessions suggests that they do as well. Our court should consider convening such groups. Although we have an excellent Advisory Committee, its work has traditionally concerned procedure, not substantive law, so there is a gap to fill.

Second, the court might institute procedures to consolidate or suspend appeals that raise the same issue of first impression. At present, such appeals are automatically and randomly assigned to various panels as soon as briefing is completed. Consequently, inconsistent decisions can and do issue, needlessly raising the level of dissonance and increasing pressure for en banc rehearing. Some sort of advance screening, perhaps by a rotating panel of judges, could either consolidate such appeals or suspend later ones until the first appeal decides the new issue. Such a panel could also better allocate argument time. Currently, we sometimes hear argument in cases in which argument is not helpful. On the other side of the coin, in certain complex patent or other cases, twenty minutes may not be enough time for argument. I for one would like to avoid argument in simple cases where no new legal issues, as opposed to purely factual ones, are raised and to increase argument time in major cases.

CONCLUSION

Improving predictability and avoiding dissonance will require the court to obtain a deeper understanding of the actual operation of the companies and agencies governed by our decisions, as well as the practical impact of our rulings. If the appellate process, invented before the start of the present century, is to serve well in the next century, more, better, and broader information and argument must be presented to courts. To a great extent, despite computerization, prevailing rules of judicial notice prevent the court itself from properly searching out and using such information: it must come

from both party and amicus briefs. In turn, the court must adjust its internal practices to avoid inconsistencies and reduce uncertainties. We should also welcome, praise, and use the contributions of scholars and amici.

Ironically, in a profession based on effective communication, what is needed, in my view, is more and better communication all around. Above all, the court needs a broader spectrum of input if it is to better align future decisions with the realities of the institutions affected by its decisions. It is interesting, too, that no matter how great our statutory and constitutional powers, we are quite dependent on the bar. We need its help and we want it—the more, the better.

As the following articles illustrate, exceptionally able lawyers contribute to the work of our court and follow its decisions. Consequently, enlarging our dialogue holds great promise.

