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Law Center

IDEA: The Journal of Law and Technology

1997

37 *IDEA* 545

RESTORING THE BALANCE OF OUR PATENT SYSTEM

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I. Introduction

The power of Congress to pass laws to "promote the Progress of Science and useful Arts by securing for limited Times to . . . Inventors the exclusive Right to their . . . Discoveries" n1 is limited. Congress may not "enlarge the monopoly without regard to the innovation advancement or social benefit gained thereby . . . or remove existent knowledge from the public domain, or restrict free access to materials already available." n2 The statutory grant to patent holders of the power to use the legal process to exclude any person from making, using, selling or importing the product or process included within the scope of the patent and recover damages for infringement. n3 Tis a quid pro quo. n4

The theme of this article is that the neutral balance between patent holders and the public domain created by the constitutional and statutory system has been shifted by the United States Court of Appeals for the Federal Circuit to one that unduly favors the patent holder, n5 and needs to be brought back into balance.

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II. The Scope of the Problem of Invalid Patents and Inequitable Conduct By Applicants for Patents

The Patent Statute authorizes the issuance of patents to those who have made new, useful and nonobvious inventions, describe them in full, clear, concise and exact terms, and comply with the requirements for patent applications and their prosecution. n6 Approximately 100,000 patents for inventions are issued each year by the Patent Office. n7 At the rate that patents have been issued from 1980 onward, n8 it is apparent that well over one million unexpired United State's patents are in existence. n9

It is inevitable that some invalid patents will be issued but the nature of our patent system increases the likelihood of error. Patent applications are considered in secret, and examiners have little time to devote to their consideration. Further, the Patent Office lacks testing facilities. n10 There is continuing pressure by applicants to obtain patents and group pressure by those interested in obtaining patents to make it easier to obtain them. Re-examination in the Patent Office may be

[*547] sought by a challenger, the patent holder or on the Patent Office's own motion, but it is usually ineffective.

Only occasionally does the public become aware of the notorious difference between the between the Patent Office's laxity in issuing patents and the judicial application of the standards of Patentability. n11 Such an event occurred in 1993, when the future of the multimedia industry was said to be threatened by the issuance of the Compton patent, U.S. No. 5,241,671, for a multimedia search system the industry asserted was well known in the prior art. n12 Fortunately, the Patent Office took the unusual step of re-examining the Compton patent. n13 Numerous items of prior art were found and the patent was withdrawn. The applicant is currently contesting the withdrawal. Obviously, the removal of that particular threat does not preclude others.

Whether an invalid patent is issued depends not only on the examiner's ability, time and resources, but upon the information supplied by the patent applicant. n14 The Patent Office "must rely on applicants for many of the facts upon which its decisions are based." n15

Our first patent statutes recognized a defense to patent infringement if the description and specification of the patent did not contain the whole truth relative to the discovery or contained more than was necessary to produce the described effect. The acts also provided that any person could sue to repeal a patent if it had been obtained "surreptitiously . . . or upon false suggestion." n16 The present patent

[*548] statute provides a statutory defense of unenforceability of a patent. n17 A patent obtained by fraud or inequitable conduct is unenforceable. n18

Concepts of fraud and inequitable conduct are based upon misrepresentations. A misrepresentation is an assertion not in accordance with the facts, including concealments. n19 Misrepresentations are fraudulent if intended or likely to induce consent, and the maker knows or does not believe them to be in accord with the facts, does not have the confidence asserted or implied in their truth, or knows there is no basis stated or implied for them. n20

The type of conduct considered to be inequitable has been explained in a series of Supreme Court cases holding that the applicant and the relevant attorneys owe an unqualified duty of candor and good faith in proceedings to obtain a patent. n21

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III. The Need for Judicial Safeguards

Approximately 50 percent more patents are issued each year than were issued in 1966 when the Supreme Court referred to the notorious differences between the standards applied by the PTO and the Courts. n22 It is unlikely that the proportions of invalid to valid patents and of breaches of the duty of candor and good faith by patent applicants and those assisting them have declined. n23 It is, therefore, likely that both the number of invalid patents and the incidents of inequitable conduct are greater today than in 1966.

Judicial remedies have always been the major safeguard against invalid patents and overextension of valid patent rights. Judicial remedies have also been the major sanction against the inequitable conduct of the patent applicant and the applicant's attorneys in the Patent Office. Indeed, since 1992, the Patent Office has abandoned its own enforcement of the duty of candor and good faith. Although judicial remedies are only available if an infringement action is brought, or if a person sufficiently threatened with an infringement action brings a declaratory judgment action, judicial decisions in particular patent cases have an effect beyond the immediate parties. They influence the Patent Office, trial and appellate judges and the settlement of patent disputes.

IV. The Effect of the Court of Appeals for the Federal Circuit

The appellate system in patent cases has a major effect on the maintenance of balance in the patent system. Prior to 1982, appeals from United States District Courts in patent cases went to the regional Circuit Courts of Appeal, subject to further discretionary review by the Supreme Court. There had been a perceived need for increased supervision of conflicts among the regional circuits in various areas of federal law, including but not limited to patent law. This led the 1975 Hruska Commission, chaired by Senator Hruska, to recommend the creation of a National Court of Appeals. n24 The Hruska Commission had considered and

[*550] recommended against the creation of topically specialized appellate courts because of the propensities of such courts to develop tunnel vision; impose judges' personal views of policy; reduce incentive for thorough and persuasive opinions; dilute or eliminate regional influence; reduce the number of opinions by generalist judges; possibly dilute the quality of appointments; and be captured by special interest groups.
n25

The Hruska Commission also reported that the major problem reported in the responses it received from patent attorneys was "circuit conflicts due to differences in the application of the law." n26 The conflicts were both "intra- and inter-circuit conflicts which arise by virtue of the differences in applying the law to the facts in particular cases before the court." n27 There was much forum shopping, and the Fifth, Sixth and Seventh Circuits were alleged to be more hospitable to patent holders than the other circuits. n28

Congress did not adopt the recommendation for a National Court of Appeals. During the administration of President Carter, the Department of Justice first proposed the creation of a topically specialized court of appeals to hear patent, tax and environmental matters, and later, withdrew the tax and environmental part of the proposal. n29 In his Message to Congress of February 27, 1979, President Carter proposed that patent appeals be confined to the proposed new Federal Circuit Court of Appeals. n30 After hearings were held in 1979 and 1980 before the Judiciary Subcommittee on Courts, Civil Liberties and the Administration of Justice, n31 Congress enacted the Federal Courts Improvement Act of 1982. n32 A major purpose of the Act was to improve administration of the patent law by centralizing patent appeals in a new United States Court of Appeals for the Federal Circuit (Federal Circuit), which would be created by merging the Court of Claims and the Court of Customs and

[*551] Patent Appeals. n33 All appellate jurisdiction over patents was assigned to the Federal Circuit, subject only to discretionary Supreme Court review. n34

The general legal profession and the patent bar were sharply divided over the wisdom of the proposal. n35 Proponents urged that the new court would provide uniformity, a more effective prediction of patent litigation and eliminate forum shopping between different circuits. n36 Opponents noted that gains in technical expertise might be offset by a lack of general expertise, that forum shopping also occurred at the district court level, and the variety of opinions from different circuits produced reviews by the Supreme Court and growth in the law. n37

Some warnings were prophetic. One distinguished opponent, George Whitney, President-Elect of APLA asked, "As far as uniformity is concerned, do we want a system under which we have an appellate review, where the court is biased or tends to be somewhat antipatent? Do we want a system where the court will tend to be propatent?" n38

Answering his own question, from the viewpoint of the public interest, owners of patents, licensees and defenders against patents, Mr. Whitney stated, "We do not want a system that is too strongly one way or the other." n39

Congressman Railsback raised the possibility that under the new law it might be easy to get patents and too easy to protect them. n40

Doubts were overcome. It was predicted that "[t]he new Court of Appeals for the Federal Circuit will provide nation-wide uniformity in patent law, will make the rules applied in patent litigation more predictable and will eliminate the expensive, time-consuming and unseemly

[*552] forum shopping that characterizes litigation in the field." n41 The Senate Report concluded that the new court would "increase doctrinal stability in the field of patent law," "produce desirable uniformity in this area of the law," "reduce the forum-shopping that is common to patent litigation," and estimated that "as the new court brings uniformity to this field of law, the number of appeals resulting from attempts to obtain different rulings on disputed legal points can be expected to decrease." n42

V. Neither Uniformity Nor Balance Has Been Achieved

The first fourteen years of the Federal Circuit demonstrate how good intentions have gone awry. In many key areas of patent law the Federal Circuit has upset rather than increased the doctrinal stability and predictable quality of the patent law and generated as much, if not more, intra-circuit conflict than the previous inter-circuit conflict. Inter-circuit forum shopping to find courts sympathetic to the litigants may have declined but the problem of different decisions on the same facts depending on which court hears the matter continues to persist in a different form. Today, too often the result will differ depending upon which panel of the Federal Circuit hears the appeal. n43 Moreover, the expansion of jury trials in patent cases has added to the unpredictability of patent litigation, an effect which appears to have been unforeseen by the proponents of the Federal Circuit.

Transcending the desirability of uniformity, the Federal Circuit has in many areas fundamentally shifted the balance of the patent system to favor the patent holder. The shift recognized by the commentator Robert L. Harmon in *Patents and the Federal Circuit* is not in genuine dispute. n44 Doctrinal instability, unpredictability, intra-circuit conflict and

[*553] a shift of the balance of the patent system toward the patent holder are readily demonstrable from the opinions of Federal Circuit judges who have protested against changes made and attempted. One of the most persistent and eloquent of those protesters was former Chief Judge Helen Nies, who died in August 1996 following a tragic accident.

On the subject of trials of issues of patent validity, Judge Nies, in her dissent in *In re Lockwood*, n45 stated:

As jury cases are now tried . . . the evidence respecting validity of a patent is thrown into the black box of the jury room, and the verdict is returned either valid or invalid . . . I believe that a litigant has a right to a trial court's decision with findings of fact and conclusions of law on the issue of validity. The judge has an essential role to play in a constitutional jury trial. n46

In the Federal Circuit opinion of *Hilton Davis Chemical Co. v. Warner-Jenkinson Co., Inc.*, n47 Judge Nies, joined by Chief Judge Archer, stated that the instructions to the jury on claim construction and obviousness upheld by the Federal Circuit were, "an abdication of the court's responsibility" n48 and that the "jury was literally put to sea without navigational aid. It was repeatedly told it was the judge of the obviousness of the invention" n49 Judge Nies continued, "The instructions on obviousness could only have been gibberish to a lay jury." n50

On the issue of whether judge or jury should determine the scope of patent claims beyond the literal words of the claims under the doctrine of equivalents, Judge Nies, joined by Chief Judge Archer in *Hilton Davis*, described the Federal Circuit rule that leaves the question to the jury "as unfair as broadened reissues of a patent without intervening rights." n51

Speaking of what she regarded as an extension by the Federal Circuit of damages recoverable for patent infringement, Judge Nies' in her partial dissent in *Rite-Hite Corp. v. Kelley Company Inc.*, n52 joined by Chief Judge Archer, Senior Judge Smith and Judge Mayer, stated,

[*554] "Challengers who have meritorious defenses to a charge of patent infringement should be encouraged to litigate them without fear of ruinous damage awards." n53 She continued, "This court was created to bring uniformity to the law; but where uniform precedent exists, it was given no mandate to ignore established law. It was not given a blank legal slate on which to write greatly enlarged property rights for patentees." n54 Judge Nies added in a footnote, "This case therefore illustrates the mischief and misery that can accompany the over enforcement of patent rights." n55

On the same subject in partial dissent in *King Instrument Corp. v. Perego*, n56 Judge Nies stated her view that: "A patent now hangs like the sword of Damocles over competition with unpatented goods and serves as a powerful means for extortion. In contrast, Congress has provided a balanced rational system of penalties and rewards." n57 Judge Nies continued, "Clarification from higher authority is needed on the scope of protection afforded by a patent, and the meaning of patent infringement damages." n58

On denial of a petition for rehearing in *King Instrument*, Judge Nies stated that the *Rite-Hite* case "presents, in my view, the most profound departure from basic patent law concepts that any court has ever pronounced . . . [and] provides the jumping off place for further extensions of damages beyond injury to patent rights." n59

In Judge Nies' view, the constitutional power did not permit "this perversion of patent infringement damages." n60 Other judges joined in Judge Nies' opinions. They have also spoken out themselves. For example, in *Hilton Davis*, Judge Plager, dissenting and speaking for himself, Chief Judge Archer and Judge Rich, stated that when a jury verdict is given on equivalents "we will remain as blinded as we are now in our ability to pierce the doctrinal veil." n61 He stated that the majority had given "a virtually uncontrolled and unreviewable license to juries to find

[*555] infringement if they so choose." n62 He pointed out that the issue "is not only the claims of the parties against each other, but the interest of the public in protecting reliance by competitors on the public record, and in ensuring that patent rights are given their due and no more." n63

To be sure, the rhetoric has also flowed in the opposite direction. For example, in his opinion concurring in the judgment in *Markman*, Judge Mayer asserted that the Seventh Amendment and Supreme Court precedent required a jury determination of the interpretation of patent claims; Judge Mayer asserted that the opinion of the majority "jettisons more than two hundred years of jurisprudence and eviscerates the role of the jury," n64 and continued, "[t]he quest to free patent litigation from the unpredictability of jury verdicts, and generalist judges, results from insular dogmatism inspired by unwarrantable elitism; it is unconstitutional." n65

Judge Newman dissented on similar grounds. n66 However, as the Supreme Court unanimously upheld the majority in *Markman v. Westview Instruments, Inc.*, n67 the criticism by Judges Mayer and Newman must have been rejected. In her concurring opinion in *Hilton-Davis* on the doctrine of equivalents, Judge Newman referred to an increasing scholarly interest in the role of patents in technological innovation, the place of the doctrine of equivalents in modern industrial progress and the public welfare. n68 She asserted that extending the incentive to invent in the Constitutional grant of patenting power to Congress had become a principle of international force and referred to efforts of the United States to "enhance its national strength and international trade with the aid of intellectual property." n69 Against that background, she stated, "Because of the diminished risk-weighted incentive to the originator, it has generally been concluded that total welfare, but not the welfare of the consumers, would be increased by making it more difficult to produce

[*556] close substitutes for existing products." n70 Judge Newman continued, "To the extent that the doctrine of equivalents enlarges the value of the patent to the innovator it also increases the net social value, as well as serving as a risk-reducing factor in commercial investment." n71

Judge Newman recognized that the doctrine of equivalents would not contribute investment confidence to the inherently risky environment of new technology if its application were to be so unpredictable that it was unreliable; she concluded that a competitor operating within the penumbra of the claims "may be deemed to have taken a calculated commercial risk that includes possible litigation." n72

Contrary to Judge Mayer's opinion in *Markman*, however, the unpredictability resulting from a jury interpretation is not a constitutional requirement, and the decisions of the Federal Circuit do not reflect a quest to free the patent law from generalist judges. Indeed, one might take the opposite view. Judge Newman's appeal to national strength in international trade as a reason for jury determination of equivalents also appears to be mistaken. First, approximately one half of the United State's patents for inventions are being issued to foreign residents. Second, even if all United State's patents were held by Americans, our national interest with respect to our patent policy cannot be equated with the question of whether juries should determine equivalents or by shifts in the balance of the patent system in favor of the patent holder. Our patent policy should be ascertained from the Constitution, the patent statute and judicial precedents and not from selected writings of economists or appeals to such generalities as international trade.

Certainly patent rights should be respected, but as has been made clear, not all issued patents are valid. Invalid patents lack any semblance of constitutional, statutory or policy justification. Contrary to the basic policy of the patent law they obviously impede technical innovation and competition, as well as increase prices. The threats they pose are aggravated by the in terrorem effect of speculative damage claims which coerce settlements and deter challenges that expose the invalidity of patents. No reasonable argument can be made to strengthen the rights of the holders of invalid patents at the expense of the public interest in the free use of the public domain of knowledge. Arguments based on our national interest do not justify favoring domestic or foreign holders of

[*557] invalid patents or extending the claims of valid patents beyond their proper scope.

VI. Specific Examples of the Weakening of Judicial Safeguards and the Shift in the Balance of the Patent System

In 1961, not a single patent case was tried by a jury. ⁿ⁷³ But by 1994, juries were demanded in 70 percent of patent trials. ⁿ⁷⁴ Jury participation in the process of interpreting patents and determining equivalents to patent claims has undoubtedly been a significant factor in the recent large increase in the proportion of patent cases tried to juries. Other causes that explain the increase are the expansion of the jury's role in other aspects of patent litigation and the shift toward favoring the patent holder in liability and damage determinations in patent litigation.

Ignoring a general trend in civil cases toward a burden of proof by preponderance of the evidence when there is no stricter statutory standard, ⁿ⁷⁵ the Federal Circuit requires clear and convincing evidence to show patent invalidity, even when the challenger produces material prior art which was not before the Patent Examiner. ⁿ⁷⁶ Juries have been permitted to give general verdicts on the ultimate issue of obviousness, a question of law. ⁿ⁷⁷ By increasing the importance of commercial success (a

[*558] jury question) on the issue of obviousness, the Federal Circuit has made it more difficult to show that a patent is invalid for obviousness. n78

Expansion of jury involvement in patent litigation is not the only area in which the patent holder has been favored. By imposing a requirement of intent to deceive when making a material misrepresentation to the Patent Office, the defense of inequitable conduct has been made more difficult to sustain. The process of that transformation is instructive. In accord with prior precedent, the Federal Circuit first held that gross negligence or recklessness was sufficient for inequitable conduct without an intent to deceive. n79 Additionally, it asserted that a "threshold intent to deceive" could be shown by gross negligence, n80 and that evidence of a lack of intent to deceive precluded summary judgment. n81 Nevertheless, as late as 1987, the court squarely held that gross negligence was sufficient to show inequitable conduct. n82 Soon after, however, another panel held that inequitable conduct by a failure to disclose required an intent to mislead. n83 That holding was quickly followed by a judicial broadside that unsupported charges of inequitable conduct were making a negative contribution to the administration of justice coupled with an

[*559] assertion that the Federal Circuit's precedent required proof of an intent to mislead. n84

A limited en banc hearing to resolve the conflicting rulings was granted in *Kingsdown Medical Consultants, Ltd. v. Hollister Inc.* n85 In *Kingsdown*, however, the court avoided the basic question of whether gross negligence was an element of inequitable conduct independent of intent to deceive. Instead, it stated that gross negligence "does not mandate" n86 and "does not of itself" n87 establish an intent to deceive. The result is that subsequent cases have regarded it as settled that an intent to deceive is required, with a passing nod to gross negligence. n88

There is also a movement to make the factor of materiality a subjective, rather than an objective element of inequitable conduct. For example, a recent case held that "[i]t is not inequitable conduct to omit providing information to the patent examiner that the applicant in good faith believes is not material to patentability." n89 That holding is contrary to *J.P. Stevens*, n90 which held that a reasonable attorney should have known of the materiality of a British patent. The failure to disclose was "a reckless disregard of the duty to disclose." n91

The Federal Circuit's dislike of increasing allegations of inequitable conduct has provided no reason to raise the requirements of proof. Subjective standards of determining inequitable conduct inevitably lessen the sanctions against inevitable conduct by making it more difficult to prove. The result is very likely to increase breaches of the duty of candor and good faith owed to the Patent Office and increase the number of invalid patents. The increase in allegations of inequitable conduct

[*560] which so disturbed the court may have occurred against the background of an increase, a static condition, or even a decline in the number of instances of inequitable conduct actually occurring. If the court thought that the allegations were exaggerated or irresponsible, however, there were other means of controlling the situation such as summary judgment and sanctions for frivolous assertions of inequitable conduct.

It is interesting to contrast the Federal Circuit's holdings on willful infringement, which is a predicate for claiming that compensatory damages should be increased up to three times. A patent holder can prove willful infringement by showing knowledge of the patent and breach of the judicially imposed duty to obtain advice of counsel that the patent is invalid, unenforceable or not infringed. n92 One might expect that inequitable conduct would be easier to prove than "willful" conduct, but the opposite is true.

The Federal Circuit has also favored the patent holder with respect to patentability requirements of conception of an invention and usefulness. As to conception, prior cases had held that: (1) conception of an invention can occur before there is a demonstration that the invention works; n93 and (2) in the experimental sciences, conception of an invention requires at least an acceptance by persons of ordinary skill in the art that the invention will work. n94 The Federal Circuit, however, has affirmed the refusal to hear evidence that a person of ordinary skill in the art would not have accepted proof of therapeutic effects on mice as demonstrating therapeutic effects on human beings in a particular case. n95 Also, the court

[*561] has virtually interpreted the requirement of usefulness out of the patent statute.
n96

The Federal Circuit has greatly increased the scope of damages recoverable by patent holders for patent infringement. The changes have resulted in a paradoxical jurisprudence. In 1953, Giles S. Rich, one of the principal draftsmen of the Patent Act of 1952, then Lecturer in Patent Law at Columbia Law School and now the most Senior Judge on the Federal Circuit, recognized that it was essential to think of a patent as

a monopoly because its only value as an incentive depends on securing to its owner monopoly power over the invention. That is the only thing that gives it the possibility of profit. The economic power of monopoly is the mainspring of the patent system, a system whose ultimate purpose is public good. Weaken or destroy the monopoly and you weaken or destroy the system. n97

The possibility of profit of a patented invention depends on the economic power of the patent monopoly. First, it implicitly recognizes that one can have a legal monopoly without either economic monopoly or economic power. Second, there is a distinction between legal monopoly and economic power.

For over one hundred and fifty years, the Supreme Court has used the term monopoly to describe patents. n98 A patent undeniably is a governmentally created legal monopoly. n99 Whether that legal monopoly

[*562] is also an economic monopoly or confers market power is a question of fact.

When a patent holder sues for compensatory damages in the form of lost profits for patent infringement, the patentee necessarily asserts, and should be required to prove, the fact that the patent provided a competitive advantage over other competing products in the market place. Without such proof, there is no basis for a claim of lost sales and lost profits resulting from patent infringement. Without such proof, a reasonable royalty would be low. Despite this, the Federal Circuit has admonished patent lawyers not to describe patents as monopolies. n100

Paradoxically, the Federal Circuit's dislike of the use of the word monopoly to describe patents does not make it cautious in permitting damage awards to rest on assumptions of economic monopoly or economic power without proof that they exist. In determining an adequate substitute for the purposes of limiting claims of lost profits, the Federal Circuit has imposed a formula that a competing device must have all the beneficial characteristics of the patented device. n101 In essence, it has permitted compensatory damage awards for patent infringement that are not based on a competitive market absent the infringement.

The Federal Circuit has allowed lost profits damages for alleged lost sales of competing un infringed products on the basis that such damages were foreseeable, n102 when the infringed patent constituted only a small and not necessary part of the product, and for lost sales of unpatented spare parts, on the theory of economic analysis. n103 It has also

[*563] inflated compensatory royalty damage awards by irrelevant reasoning concerning the absence of a right of compulsory license or the willfulness of an infringement. n104

The patent policy question whether to permit lost profits claims for lost sales of goods that were unpatented, or, if patented, the patents were not infringed, is not answered by the concepts of foreseeability or economic analysis. These concepts apply only after defining the scope of the patent monopoly, its right to exclude, and the interests Congress intended to protect when it authorized patent infringement damages. A patent holder's monopoly and right to exclude do not extend to competing unpatented products. Allowing a patent holder to recover for lost sales of competing, unpatented products expands the patent monopoly in tandem with the business of the patent holder in unpatented competing products.

The patent holder's right to refuse to license and refrain from manufacturing and selling a patented product does not justify such expansions. The patent statute's toleration of the withholding of a patented product from the market by the unilateral decision of the patent holder does not mean that the patent statute was intended to encourage such withholding by awarding lost profits damages with respect to competing unpatented products. A withholding patent holder remains free to enjoin infringement and collect a reasonable royalty. The royalty may be increased up to three times if the trial court finds that infringement is sufficiently willful. n105 There is no policy reason to permit a patent holder to obtain additional lost profits on sales of unpatented products.

The Federal Circuit has reversed a trial court for drawing reasonable inferences in favor of the infringer on the theory that the infringer must not only show that the inferences it seeks to draw are

[*564] reasonable, but also that the inferences the patent holder seeks to draw are unreasonable. n106 The trier of fact decides which inference to draw.

The result of Federal Circuit jurisprudence has been to make patent litigation a lottery as shown by two recent trials. In 1993, in *Litton Sys. v. Honeywell Inc.*, n107 jury verdicts determined Litton's compensatory damages for patent infringement to be \$ 1.2 billion and also determined that Litton's damages for inducement of breach of contract and interference with business relations were in the same amount. Apparently, the verdicts were not cumulative. n108 Litton asked the trial court to treble the verdict because of the degree of willfulness. Instead, the trial court, after post trial motions, determined that the reissue patent in the suit was invalid for obviousness. n109 The trial court also determined that the reissue patent was unenforceable because it had been obtained by inequitable conduct, n110 and that state law claims were without merit in view of the intervening rights acquired by Honeywell as a result of Litton's having withdrawn its original claims when it filed its reissue patent application. n111 Finally, the trial court held that Litton's damage proof was defective and, in the alternative, ordered a new trial on damages. n112 On appeal, however, the trial court was reversed on all liability issues except those of intervening rights although the order granting a new trial on damages was affirmed. n113

In 1994, in *Alpex v. Nintendo*, n114 before the lawsuit was commenced, Nintendo had rejected Alpex's industry wide offer to license its patent at a flat \$ 400,000 royalty per license. At trial, the jury's verdict

[*565] interpreted the patent in favor of Alpex, n115 determined infringement and awarded royalty damages, n116 which, together with interest and an accounting for a later period, may amount to over \$ 400 million. n117 The judgment is one thousand times the industry wide offer. The trial judge, in denying post verdict motions to set aside the verdict, indicated that a reasonable range of damages extended from the \$ 400,000 through Alpex's contention of \$ 800,000,000, a difference of \$ 799,600,000. The jury split the difference. The concept that \$ 400,000 and \$ 800,000,000 in damages can both be reasonable estimates of damages demonstrates the absence of meaningful standards. On appeal, the judgment was reversed. Trials such as those in Litton and Alpex are the consequence of the weakening of judicial safeguards and a shift toward the patentee in obtaining patents and in patent litigation.

VII. Restoring the Balance

For the first ten years of the existence of the Federal Circuit, the Supreme Court adopted a largely hands-off policy in the exercise of its power to review patent cases by writ of certiorari. Lately, the court has begun to review more patent cases. In *Cardinal Chemical Co. v. Morton Int'l, Inc.*, n118 the Supreme Court reversed the Federal Circuit practice which had required dismissal of claims of patent validity if the patent were held not to have been infringed. n119 The Supreme Court held that except in an unusual case, a determination that a patent had not been infringed should not result in the dismissal of a claim of patent invalidity. n120

The Supreme Court also granted a petition to review the Federal Circuit's policy of automatic vacation of judgments in patent cases after post judgment settlements. n121 Although a procedural problem prevented resolution of that issue in *Izumi Seimitsu Kogyo v. U.S. Phillips Corp.*, n122

[*566] shortly thereafter the Court held generally that such vacation should not occur except in extraordinary circumstances. n123

Having granted a petition for certiorari to review the question of the right to a jury trial of patent validity after a determination of non-infringement, the Court remanded the judgment without opinion after a jury was waived, n124 but shortly thereafter granted petitions for certiorari to review two en banc decisions of the Federal Circuit. In *Markman v. Westview Instruments*, the Court affirmed the holding that judges, not juries, interpret patents. n125 *Hilton Davis Chemical Co. v. Warner-Jenkinson Co.*, n126 involving the doctrine of equivalents, was argued in the 1996 Term.

The literal meaning of the claims of a patent and any extended scope of the patent beyond those literal terms under the doctrine of equivalents are threshold questions in most patent disputes and most patent litigation. Such questions must be answered in considering the validity of the patent for license purposes and in litigation over validity, infringement and damages issues. In its opinion in *Hilton Davis*, the Supreme Court reversed and remanded the decision of the Federal Circuit, n127 deciding that: 1) the doctrine of judicial equivalents had survived the Patent Act of 1952; n128 2) equivalents were required for each individual element of the claim not to the invention as a whole; n129 3) prosecution history estoppel against application of an equivalent had to be applied in relation to the reasons for the amendments being sought; n130 4) the intent of the infringer is irrelevant to application of the doctrine, although the presence or absence of experimentation would often be relevant to interchangeability of substitutes; n131 5) equivalents are not limited to those existing when the patent was issued or to those referred to in the specifications; n132 and 6) it was not necessary to decide whether a

[*567] judge or jury should determine the issue of what were equivalents. n133 The fifth and sixth points above are troubling.

As to the time at which equivalents are determined, *Gould v. Rees* n134 and *Gill v. Wells* n135 are clear, though old authority, that the equivalents must have been known at the time the patent issued. In reliance on *Sanitary Refrg'r. Co. v. Winters*, n136 the Federal Circuit in *Hilton Davis* held that the doctrine of equivalents included equivalents not in existence at the time the patent issued. n137 The Court of Claims had ruled similarly, n138 relying on *Temco Corp. v. Apco Corp.* n139

However, *Sanitary* and *Temco* merely held that it is no defense to infringement of an earlier patent that the infringing product was granted a later patent. That holding would not seem to have implicitly decided that a substitution of a new element, not known to be a substitute at the time when the old patent was applied for or issued, can be an equivalent of the limitation in the old patent. An improvement may be an addition or a substitution to the claims of the original patent. Without permission, the owner of an improvement patent which uses the prior patent cannot use the prior patent; nor can the original patent holder use the improvement patent. Both patents may be valid, and each may be infringed. In determining equivalents, the question is whether a substitution of something not in existence when the patent was issued is to be allowed to extend the scope of the original patent. Usually only the original patent is involved.

It is no small extension of patent rights to permit new post patent equivalents to expand the scope of the patent over a twenty year period. Careful consideration needs to be given to the question of the extent to which, if at all, post patent equivalents are to be permitted. If the doctrine of equivalents is to be interpreted to permit equivalents existing as of the time of infringement rather than as of the time of the issuance of the patent or the filing of the original patent application, it would appear to be out of step with the rule for determining obviousness from prior patents, which does not permit hindsight at the time of

[*568] infringement. In an infringement action if a patent holder is entitled to expand the scope of the patent beyond its literal claims to later equivalents, the same expansion would seem justified for the public use of prior art patents.

In discussing the issue of judge or jury determination of equivalents, the Supreme Court in *Hilton Davis* stated, in dicta, that the argued inconsistency of requiring judges to interpret patents while permitting juries to expand claims by equivalents went "more to the alleged inconsistency between the doctrine of equivalents and the claiming requirement than to the role of the jury in applying the doctrine as properly understood." n140 It was noted here that "[t]here was ample support in our prior cases for . . . holding" n141 that a jury should decide the issue, and that "[n]othing in our recent *Markman* decision necessitates a different result than that reached by the Federal Circuit." n142 Indeed, *Markman* cites with considerable favor when discussing the role of judge and jury, the seminal *Winans* decision. "Whether, if the issue were squarely presented to us, we should reach a different conclusion than did the Federal Circuit is not a question we need to decide today." n143

Winans declared that the basis of the doctrine of equivalents was that the patentee was deemed to have claimed equivalents. n144 In *Markman*, the Supreme Court used the statutory requirements of claims to distinguish English precedent for purposes of the Seventh Amendment, and held that the requisite certainty and uniformity for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject will ultimately be dedicated to the public can only be provided by judicial construction of patent claims. n145 If a judge is required to interpret what an applicant has claimed, it is submitted that, a fortiori, a judge ought to interpret what an applicant is deemed to have claimed.

The Supreme Court in *Hilton Davis* also counseled that the use of a special verdict and/or interrogatories on each claim element could be very useful in facilitating review, uniformity and possibly verdict

[*569] judgments as a matter of law. n146 One hopes that the Federal Circuit will require such procedures in this and in other areas discussed in this article.

Finally, the Court left it to the Federal Circuit to refine the formulation the test for equivalence in "that court's sound judgment in this area of its special expertise." n147 Two weeks later, the court granted a writ of certiorari in and remanded the Litton n148 case in light of its opinion in Hilton Davis.

In *Markman v. Westview Instruments Inc.*, n149 the Supreme Court stressed the importance of uniformity in the treatment of a given patent as an independent reason for having judges rather than juries interpret patents quoted from prior cases in observing that

the limits of the patent must be known for the protection of the patentee, the encouragement of the inventive genius of others and the assurance that the subject of the patent will be dedicated ultimately to the public. Otherwise, a "zone of uncertainty which enterprise and experimentation may enter only at the risk of infringement claims would discourage invention only a little less than unequivocal foreclosure of the field". . . . and [t]he public [would] be deprived of rights supposed to belong to it, without being clearly told what it is that limits those rights. n150

The Court added that it was for "such desirable uniformity that Congress created the Federal Circuit as an exclusive appellate court for patent cases." n151

If uniformity alone were what the Court meant, it would not have reversed the Federal Circuit's decisions requiring dismissal of patent invalidity claims after rulings of non-infringement and vacation of judgments after settlement. n152 The goal of Congress was not mere uniformity, but carefully reasoned opinions from one appellate court in accordance with the constitutional and statutory balance of the rights of the public and the patentee. The Federal Circuit has, in many areas, not even produced uniformity among its panels. Where it has produced uniformity, it has departed from Supreme Court precedent by shifting the

[*570] balance toward the patent holder. Restoration of the balance is desirable and necessary. The Supreme Court's recent activity in the patent field has restored some of that balance. It remains for the Federal Circuit itself to complete that job, or it would seem, to face fearless correction from the Supreme Court.

n1 U.S. Const. art. I, [j] 8, cl. 8.

n2 *Graham v. John Deere Co.*, 383 U.S. 1, 5-6, 148 U.S.P.Q. (BNA) 459, 462 (1996).

n3 See 35 U.S.C.A. 271, 281-293, 351 (1996).

n4 "[The] quid pro quo is disclosure of a process or device in sufficient detail to enable one skilled in the art to practice the invention once the period of monopoly has expired; and the same precision of disclosure is likewise essential to warn the industry concerned of the precise scope of the monopoly asserted." *Universal Oil v. Globe Co.*, 322 U.S. 471, 484, 61 U.S.P.Q. (BNA) 382, 388 (1944).

n5 See Robert L. Harmon, *Patents and the Federal Circuit* (2d ed. Supp. 1993), which stated that the enforcement climate "very strongly favors the patentee" and a large component of this was "the work of the Circuit and its impact upon the U.S. patent system." In his 3rd edition, Harmon stated that the pendulum was swinging toward a more neutral position, Robert L. Harmon, *Patents and the Federal Circuit* 794 (3d ed. 1994), but still noted that there was cause for concern that patentees were being "overcompensated" and the Circuit was "favorably disposed toward patent enforcement." *Id.* at 478.

n6 See 35 U.S.C. 101, 102, 103 and 112 (1984).

n7 98,300 patents were issued in 1993. U.S. Dep't of Commerce, Bureau of the Census, *Statistical Abstract of the United States 1995*, at tbl. 871 (115th ed. 1995).

n8 See *id.*

n9 A note in the *Scientific American* of April 1996 states that more than 17,000 software patents will have been issued between 1994 and 1996, that the Patent Office does not have the funds to provide Examiners with the time and resources to investigate the novelty and obviousness of software patents, and forecasts a growing number of lawsuits involving software patents. See *Scientific American*, April 1996, at 3.

n10 During the hearings before the House of Representatives on the bills which culminated in the statute creating the new Federal Circuit Court of Appeals with exclusive jurisdiction over patent appeals, Congressman Railsback noted that there was virtual unanimity among the distinguished members of the patent bar with whom he had consulted that the Patent Office was "underequipped, understaffed, and undermanned." *Industrial Innovation and Patent and Copyright Law Amendments: Hearings on H.R. 6033, H.R. 6934, H.R. 3806, and H.R. 2414 Before the Subcomm. on Courts, Civil Liberties, and the Administration of Justice of the House Comm. on the Judiciary, 96th Cong., 2d Sess. 397 (1980) [hereinafter Hearings]* (statement of Rep. Railsback). In the same hearings, Patent and Trademark Office Commissioner Diamond stated that the search file integrity of the Patent Office was far below the level that guarantees a

thorough search in every case. *Id.* at 571. (statement of Sidney A. Diamond, Comm'r of Patents and Trademarks).

n11 In *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. (BNA) 459 (1966), in holding two patents invalid, the Supreme Court referred to the "notorious difference between the standards [for patentability] applied by the Patent Office and by the courts." *Id.* at 18, 148 U.S.P.Q. (BNA) at 467.

n12 See Peter H. Lewis, The New Patent That Is Infuriating The Multimedia Industry, N.Y. Times, Nov. 28, 1993, sec. 3, at 1.

n13 Reexamination requested Dec. 14, 1993 by Commissioner of Patents and Trademarks, Reexamination No. 90/003,270 (O.G. Jan. 11, 1994).

n14 In *Rosenberg v. Groov-Pin Corp.*, 81 F.2d 46, 28 U.S.P.Q. (BNA) 327 (2d Cir. 1936), Judge Learned Hand stated: "Examiners have neither the time nor the assistance to exhaust the prior art; 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. It 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." *Id.* at 47, 28 U.S.P.Q. (BNA) at 328.

n15 *Norton v. Curtiss*, 433 F.2d 779, 794, 167 U.S.P.Q. (BNA) 532, 544 (C.C.P.A. 1970).

n16 1 Stat. 109, 5 (1790) and 1 Stat. 318, 323 6, 10 (1793).

n17 35 U.S.C. 282 (1995).

n18 See *American Hoist & Derrick Co. v. Sowa & Sons, Inc.*, 725 F.2d 1350, 220 U.S.P.Q. (BNA) 763 (Fed. Cir.), cert. denied, 469 U.S. 821, 224 U.S.P.Q. (BNA) 520 (1984).

n19 Concealments are nondisclosures by persons who know that disclosures are necessary to prevent a previous assertion from being a misrepresentation or would correct a mistake of the other party as to a basic assumption. Concealments also amount to a failure to act in good faith and with reasonable standards of fair dealing or where the other person is entitled to know the fact because of a relation of trust and confidence between them. Restatement (Second) Of Contracts 159-61 (1979).

n20 See Restatement (Second) Of Contracts 162 (1979) and Restatement (Second) Of Torts 525-26 (1976). In contract law a contract is voidable if induced either by a fraudulent or a material misrepresentation of fact. Restatement (Second) Of Contracts 164(1) (1979). In tort law an action for damages arises not only for fraudulent misrepresentations that cause damage but also (1) for a negligent material misrepresentation made by a person in the ordinary course of business, profession or employment who "supplies false information for the guidance of others in their business transactions" and "fails to exercise reasonable care or competence in obtaining or communicating the information," Restatement (Second) Of Torts 552(1) (1976); and (2) without any requirement of fraud or negligence if, in a sale, rental or exchange transaction, one misrepresents a material fact in order to induce another to act or refrain from acting in reliance on it. Restatement (Second) Of Torts 552(C) (1976).

n21 See, e.g., *Keystone Driller Co. v. General Excavator Co.*, 290 U.S. 240, 244-47, 19 U.S.P.Q. (BNA) 228, 230-31 (1933); *Hazel-Atlas Glass Co. v. Hartford-Empire Co.*, 322 U.S. 238, 244-45, 61 U.S.P.Q. (BNA) 241, 244-45 (1944); *Precision Inst. Mfg. Co. v. Automotive Maint. Mach. Co.*, 324 U.S. 806, 815-19, 65 U.S.P.Q. (BNA) 133, 138-40 (1945).

n22 See *Graham v. John Deere Co.*, 383 U.S. 1, 18, 148 U.S.P.Q. (BNA) 459, 467 (1966).

n23 In 1973, President Nixon's Message to Congress called attention to the "increasing allegations of fraud and inequitable conduct in the procurement of patents." President Nixon's Message to Congress, November 27, 1973 (quoted in Patent Law Revision, S. Rep. No. 642, 94th Cong., 1st Sess. 62 (1976)).

n24 This proposed court would have been composed of seven judges sitting en banc. Its decisions would have bound federal and state courts in matters of federal law unless modified or overruled by the Supreme Court. See Comm'n on Revision of the Federal Court Appellate System, Structure and Internal Procedures: Recommendations for Change, reprinted in 67 *F.R.D.* 195, 199 (1975).

n25 See generally *id.*

n26 *Id.* at 370.

n27 *Id.*

n28 *Id.*

n29 Hearings, *supra* note 10, at 764 (statement of George Whitney, Chairman, ABA Comm. on Patent Litigation).

n30 125 Cong. Rec. 11911.

n31 See Hearings, *supra* note 10.

n32 Federal Courts Improvement Act, Pub. L. No. 97-164, 96 Stat. 25 (codified as amended in scattered sections of 28 U.S.C.).

n33 *Id.*

n34 28 U.S.C. 1295, 1338 (1993).

n35 The American Bar Association (ABA) opposed the proposal, but the Patent Section of the ABA approved it. The American Patent Law Association (APLA) approved the proposal by a 3-2 majority, but the Rules Committee of the APLA disapproved it. Hearings, *supra* note 10, at 94, 453. One industry spokesman counseled waiting: "we just don't believe it's ripe for resolution." Hearings, *supra* note 10, at 542 (Statement of Paul L. Gomory, Director, Assoc. For the Advancement of Invention and Innovation).

n36 Hearings, *supra* note 10, at 94, 390 (Statement of Donald R. Dunner, President, APLA).

n37 Hearings, *supra* note 10, at 182, 224-25 (Statement of John Stedman, Professor, Univ. of Wisconsin School of Law).

n38 Hearings, *supra* note 10, at 771, 781 (statement of George Whitney, President Elect of APLA).

n39 *Id.*

n40 Hearings, *supra* note 10, at 397 (statement of Rep. Railsback).

n41 H. R. Rep. No. 97-312, 97th Cong., - Sess. 20 (year).

n42 S. Rep. No. 275, 97th Cong., 1st Sess. (1981), reprinted in 1982 U.S.C.C.A.N. 11, 15.

n43 See Robert L. Harmon, *Patents and the Federal Circuit* (3d ed. 1994), appendix.

n44 In 1964, a law review article calculated that of the cases challenging the validity of patents that reached the regional circuit courts of appeal, the approximate proportion of those in which the patents were held invalid was 50 percent between 1930 and 1935; 60 percent between 1930 and 1935; 70 percent between 1935 and 1940; 80 percent between 1940 and 1945; 73 percent between 1945 and 1950; 72 percent between 1950 and 1955; 70 percent between 1955 and 1960, and 54 percent between 1960 and 1963. Laurence I. Wood, *Patents, Antitrust and Prima Facie Attitudes*, 50 *Va. L. Rev.* 571, 576 *n.13* (1964). The tabulation in the appendix at the end of the commentator Harmon's book states that his study of results indicates that the accused infringer who loses in the trial court now has a 1 in 10 chance of reversal, while a patent holder who loses below has a 1 in 4 chance of reversal. Robert L. Harmon, *Patents and the Federal Circuit* 174 (3d ed. 1994).

n45 50 *F.3d* 966, 33 *U.S.P.Q.2d* (BNA) 1907 (*Fed. Cir.* 1995), cert. granted, sub nom *American Airlines, Inc. v. Lockwood*, 115 *S. Ct.* 2274 (1995), subsequently dismissed as moot, 116 *S. Ct.* 29 (1995).

n46 *Id.* at 990, 33 *U.S.P.Q.2d* (BNA) at 1916 (Nies, J., dissenting).

n47 62 *F.3d* 1512, 35 *U.S.P.Q.2d* (BNA) 1641 (*Fed. Cir.* 1995) (en banc), rev'd., 117 *S. Ct.* 1040, 41 *U.S.P.Q.2d* (BNA) 1865 (1997).

n48 *Id.* at 1556, 35 *U.S.P.Q.2d* (BNA) at 1677 (Nies, J., dissenting).

n49 *Id.* at 1557, 35 *U.S.P.Q.2d* (BNA) at 1678.

n50 *Id.*

n51 *Id.* at 1560, 35 *U.S.P.Q.2d* (BNA) at 1681.

n52 56 *F.3d* 1538, 35 *U.S.P.Q.2d* (BNA) 1065 (*Fed. Cir.*) (en banc), cert. denied, 116 *S. Ct.* 184 (1995).

n53 *Id.* at 1575, 35 *U.S.P.Q.2d* (BNA) at 1093-94 (Nies., J., dissenting).

n54 *Id.* at 1578, 35 *U.S.P.Q.2d* (BNA) at 1096.

n55 *Id.* at 1577 *n.23*, 35 *U.S.P.Q.2d* (BNA) at 1096 *n.23*.

n56 65 *F.3d* 941, 36 *U.S.P.Q.2d* (BNA) 1129 (*Fed. Cir.* 1995), reh'g en banc denied, 72 *F.3d* 855 (*Fed. Cir.* 1995), cert. denied, 116 *S. Ct.* 1675 (1996).

n57 *Id.* at 959, 36 *U.S.P.Q.2d* (BNA) at 1143 (Nies., J., dissenting).

n58 *Id.* at 961, 36 *U.S.P.Q.2d* (BNA) at 1145.

n59 *King Instrument Corp. v. Perego*, 72 F.3d 855, 857 (Nies, J., dissenting from denial of reh'g en banc).

n60 *Id.*

n61 62 F.3d 1512, 1537, 35 U.S.P.Q.2d (BNA) 1641, 1661 (*Fed. Cir.* 1995) (en banc) (Plager, J., dissenting), rev'd., 117 S. Ct. 1040, 41 U.S.P.Q.2d (BNA) 1865 (1997).

n62 *Id.* at 1538, 35 U.S.P.Q.2d (BNA) at 1662.

n63 *Id.* at 1544-45, 35 U.S.P.Q.2d (BNA) at 1667.

n64 *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 989, 34 U.S.P.Q.2d (BNA) 1321, 1337 (*Fed. Cir.* 1995) (en banc) (Mayer, J., concurring), aff'd 116 S. Ct. 1384, 38 U.S.P.Q.2d (BNA) 1461 (1996).

n65 *Id.* at 989, 34 U.S.P.Q.2d (BNA) at 1338.

n66 See *id.* at 1010-11, 34 U.S.P.Q.2d (BNA) at 1355-56 (Newman, J., dissenting).

n67 *Markman v. Westview Instruments, Inc.*, 116 S. Ct. 1384, 38 U.S.P.Q.2d (BNA) 1461 (1996).

n68 *Hilton Davis*, 62 F.3d at 1529-30, 35 U.S.P.Q.2d (BNA) at 1654-56 (Newman, J., concurring).

n69 *Id.* at 1531, 35 U.S.P.Q.2d (BNA) at 1656.

n70 *Id.* at 1532, 35 U.S.P.Q.2d (BNA) at 1657 (citing Stanley M. Besen and Leo J. Raskind, An Introduction to the Law and Economics of Intellectual Property, 5 J. Econ. Persp. 3, 5 n.2 (1991)).

n71 *Id.* at 1533, 35 U.S.P.Q.2d (BNA) at 1658.

n72 *Id.* at 1534, 35 U.S.P.Q.2d (BNA) at 1659.

n73 Advisory Comm'n on Patent Law Reform, Report to the Secretary of Commerce (Aug. 1992).

n74 The Director of the Administrative Office of the United States Courts Annual Report, at Table C-4 (1994) (on file with the Administrative Office of the United States Courts).

n75 See *Herman & MacLean v. Huddleston*, 459 U.S. 375, 389-90 (1983); *Grogan v. Garner*, 498 U.S. 279, 286 (1991).

n76 See *Railroad Dynamics, Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1517, 220 U.S.P.Q. (BNA) 929, 939 (*Fed. Cir.* 1984); *Hughes Tool Co. v. Dresser Indus. Inc.*, 816 F.2d 1549, 1555, 2 U.S.P.Q.2d (BNA) 1396, 1401 (*Fed. Cir.*), cert. denied, 484 U.S. 914 (1987); *Buildex, Inc. v. Kason Indus., Inc.*, 849 F.2d 1461, 1463, 7 U.S.P.Q.2d (BNA) 1325, 1326-27 (*Fed. Cir.* 1988).

n77 See *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 U.S.P.Q. (BNA) 193 (*Fed. Cir.* 1983); Cf. *Structural Rubber Prods. Co. v. Park Rubber Co.*, 749 F.2d 707, 718, 223 U.S.P.Q. (BNA) 1264, 1272 (1984); *In re Lockwood*, 50 F.3d 966, 33 U.S.P.Q.2d (BNA) 1406 (*Fed. Cir.*), cert. granted sub nom. *American Airlines, Inc. v. Lockwood*, 115 S. Ct. 2274, and subsequently dismissed as moot, 116 S. Ct. 29 (1995).

n78 Compare *Graham v. John Deere Co.*, 383 U.S. 1, 17-18, 148 U.S.P.Q. (BNA) 459, 467 (1966) with *Alco Standard Corp. v. Tennessee Valley Auth.*, 808 F.2d 1490, 1500, 1 U.S.P.Q.2d (BNA) 1337, 1345 (Fed. Cir. 1986), cert. dismissed, 483 U.S. 1052 (1987); *Gillette Co. v. S.C. Johnson & Son, Inc.*, 919 F.2d 720, 725-26, 16 U.S.P.Q.2d (BNA) 1923, 1928 (Fed. Cir. 1990). The commentator Harmon states, "We are able now safely to strike the may' in the last sentence [of the Graham rule]." Robert L. Harmon, *Patents and the Federal Circuit* 118 (3d ed. 1994). One should question not only the lack of authority in the Federal Circuit to change the Supreme Court's "may" to "must," but also the reasons for the purported change. The label of "objective evidence" given to commercial success by the Federal Circuit erroneously implies that other evidence, including more direct evidence from prior art, is not objective evidence. It also overlooks the fact that commercial success is indirect, and often ambiguous and misleading evidence of invention. Commercial success merely reflects the actions of consumers in buying products; it does not answer the question of what their acts mean; or of what the commercial success is evidence of.

n79 *Driscoll v. Cebalo*, 731 F.2d 878, 885, 221 U.S.P.Q. (BNA) 745, 751 (Fed. Cir. 1984).

n80 *J.P. Stevens & Co. v. Lex Tex Ltd.*, 747 F.2d 1553, 1560, 223 U.S.P.Q. (BNA) 1089, 1092 (Fed. Cir. 1984), cert. denied, 474 U.S. 822 (1985).

n81 *Kangaroos U.S.A., Inc. v. Caldor, Inc.*, 778 F.2d 1571, 1577, 228 U.S.P.Q. (BNA) 32, 36 (Fed. Cir. 1985).

n82 *Gardco Mfg., Inc. v. Herbst Lighting Co.*, 820 F.2d 1209, 1215, 2 U.S.P.Q.2d (BNA) 2015, 2020 (Fed. Cir. 1987).

n83 *FMC Corp. v. Manitowoc Co.*, 835 F.2d 1411, 1415, 5 U.S.P.Q. (BNA) 1112, 1115 (Fed. Cir. 1987).

n84 See *Burlington Indus. v. Dayco Corp.*, 849 F.2d 1418, 7 U.S.P.Q.2d (BNA) 1158 (Fed. Cir. 1988).

n85 *Kingsdown Medical Consultants, Ltd. v. Hollister Inc.*, 863 F.2d 867, 876, 9 U.S.P.Q.2d (BNA) 1384, 1392 (Fed. Cir. 1988), cert. denied, 490 U.S. 1067 (1989).

n86 Id. (citation omitted).

n87 Id. (citation omitted).

n88 See, e.g., *Hewlett-Packard Co. v. Bausch & Lomb, Inc.*, 882 F.2d 1556, 1562, 11 U.S.P.Q.2d (BNA) 1750, 1755 (Fed. Cir. 1989), cert. denied, 493 U.S. 1076 (1990); and *Hoffman-La Roche Inc. v. Lemmon Co.*, 906 F.2d 684, 688, 15 U.S.P.Q.2d (BNA) 1363, 1367 (Fed. Cir. 1990).

n89 *Allied Colloids, Inc. v. American Cyanamid Co.*, 64 F.3d 1570, 1578, 35 U.S.P.Q.2d (BNA) 1840, 1846 (Fed. Cir. 1995).

n90 *J.P. Stevens & Co. v. Lex Tex Ltd.*, 747 F.2d 1553, 1565-66, 223 U.S.P.Q. (BNA) 1089, 1096 (Fed. Cir. 1984), cert. denied, 474 U.S. 822 (1985).

n91 *Id. at 1566, 223 U.S.P.Q.2d (BNA) at 1097. Accord, Argus Chem. Corp. v. Fibre Glass-Evercoat Co., 759 F.2d 10, 15, 225 U.S.P.Q. (BNA) 1100, 1103 (Fed. Cir.), cert. denied, 474 U.S. 903 (1985).*

n92 *Kloster Speedsteel AB v. Crucible Inc., 793 F.2d 1565, 1580, 230 U.S.P.Q. (BNA) 81, 91 (Fed. Cir. 1986).*

n93 *Applegate v. Scherer, 332 F.2d 571, 141 U.S.P.Q. (BNA) 796 (C.C.P.A. 1964).*

n94 *Smith v. Bousquet, 111 F.2d 157 (C.C.P.A. 1940); Alpert v. Slatin, 305 F.2d 891, 134 U.S.P.Q. (BNA) 296 (C.C.P.A. 1962); see also Biel v. Chessin, 347 F.2d 898, 903, 146 U.S.P.Q. (BNA) 293, 296 (C.C.P.A. 1965).*

n95 *Burroughs Wellcome Co. v Barr Labs., Inc., 40 F.3d 1223, 32 U.S.P.Q.2d (BNA) 1915 (Fed. Cir. 1994), cert. denied, 116 S. Ct. 771 (1995).* In this case, although the compound AZT was well known, Burroughs obtained a patent on its use to treat the HIV virus in human beings on the basis that it had tested AZT on mice, and had prepared a draft application for filing in the United Kingdom. *Id. at 1226, 32 U.S.P.Q.2d (BNA) at 1918.* Barr, an alleged infringer with a license from the National Health Institute (NIH) argued that Burrough's conception was not complete until NIH (at Burrough's request) performed unique tests on unique human T cells developed by NIH. *Id. at 1227, 32 U.S.P.Q.2d (BNA) at 1919.* Barr offered to prove that persons of ordinary skill in the art would not have accepted the murine tests as satisfactory evidence that what was effective in mice would be effective in humans. *Id. at 1230-31, 32 U.S.P.Q.2d (BNA) at 1922.* The trial court refused to consider that evidence. *Id.* The Federal Circuit affirmed the judgment. *Id. at 1232, 32 U.S.P.Q.2d (BNA) at 1923.* Barr's evidence, however, fell into category (2) above and should have been admitted.

n96 *Compare Brenner v. Manson, 383 U.S. 519, 534-35, 48 U.S.P.Q. (BNA) 689, 695-96 (1966) with Cross v. Iizuka, 753 F.2d 1040, 1051, 224 U.S.P.Q. (BNA) 739, 748 (Fed. Cir. 1985) and the new Patent Office Guidelines, 60 Fed. Reg. 3625 (1995).*

n97 *Giles S. Rich, Infringement Under Section 271 of the Patent Act of 1952, 35 J. Pat. Off. Soc'y 476, 479 (1953).*

n98 *See, e.g., Bloomer v. McQuewan, 55 U.S. 539, 548 (1852); Continental Paper Bag Co. v. Eastern Paper Bag Co., 210 U.S. 405, 423-24 (1908); Graham v. John Deere Co., 383 U.S. 1, 6, 148 U.S.P.Q. (BNA) 459, 462 (1966); Bonito Boats v. Thunder Craft Boats, Inc., 489 U.S. 141, 146, 9 U.S.P.Q.2d (BNA) 1847, 1850 (1989); and Cardinal Chem. Co. v. Morton Int'l, Inc. 508 U.S. 83, 101, 26 U.S.P.Q.2d (BNA) 1721, 1729 (1993).* The usage of the term monopoly goes back over 400 years. *See J. Neale, Elizabeth I and Her Parliaments 1589-1601 391.*

n99 The word monopoly accurately reflects the transfer to the patent holder of the right to invoke the power of the courts and other governmental agencies to restrain competition with the patent holder by making, using or selling the products or processes covered by the claims of the patent. Referring to the patent as a monopoly reflects the public interest in the constitutional limitation on the power to authorize the grant of patents and the limited power granted by Congress. Patents are limited exceptions to the freedom of knowledge for the use of all humanity. They are exceptions for a limited term

granted in exchange for the clear disclosure of new, useful and nonobvious inventions in accordance with Article 1, clause 8, section 8 of the Constitution.

n100 See *Carl Schenck, A.G. v. Nortron Corp.*, 713 F.2d 782, 784, 218 U.S.P.Q. (BNA) 698, 699 (Fed. Cir. 1983); *Union Carbide Corp. v. American Can Co.*, 724 F.2d 1567, 1574 n.4, 220 U.S.P.Q. (BNA) 584, 592 n.4 (Fed. Cir. 1984); *Jamesbury Corp. v. Litton Indus. Prods., Inc.*, 756 F.2d 1556, 1559, 225 U.S.P.Q. (BNA) 253, 255 (Fed. Cir. 1985), cert. denied, 488 U.S. 828 (1988); *In re Kaplan*, 789 F.2d 1574, 1577 n.3, 229 U.S.P.Q. (BNA) 678, 684 n.3 (Fed. Cir. 1986).

n101 See *TWM Mfg. Co. v. Dura Corp.*, 789 F.2d 895, 229 U.S.P.Q. (BNA) 535 (Fed. Cir.), cert. denied, 479 U.S. 852 (1986); *Radio Steel & Mfg. Co. v. MTD Prods., Inc.*, 788 F.2d 1554, 1556, 229 U.S.P.Q. (BNA) 431, 432 (Fed. Cir. 1986). This theory is contrary to basic principles of competition. See *United States v. E.I. du Pont de Nemours & Co.*, 351 U.S. 377, 380-81, 398-402 (1956). The Federal Circuit's statement is a formula for patentability rather than a standard for determining realistic competition.

n102 *Rite-Hite v. Kelley Co.*, 56 F.3d 1538, 1572, 35 U.S.P.Q.2d (BNA) 1065, 1091 (Fed. Cir.) (en banc), cert. denied, 116 U.S. 184 (1995).

n103 *King Instruments Corp. v. Perego*, 65 F.3d 941, 36 U.S.P.Q.2d (BNA) 1129 (Fed. Cir. 1995) cert. denied, 116 S.Ct. 1675 (1996). See Karen M. McDaniel and Gregory M. Ansems, Damages in The Post-Rite-Hite Era: Convoyed Sales Illustrate the Dichotomy in Current Damages Law, 78 J. Pat. & Trademark Off. Soc'y. 461, 476 (1996).

n104 See *Stickle v. Heublein Inc.*, 716 F.2d 1550, 1563, 219 U.S.P.Q. (BNA) 377, 386 (Fed. Cir. 1983); *Fromson v. Western Litho Plate and Supply Co.*, 853 F.2d 1568, 1573, 7 U.S.P.Q.2d (BNA) 1606, 1611. But see *Mahurkar v. C.R. Bard, Inc.*, 79 F.3d 1572, 38 U.S.P.Q.2d (BNA) 1288 (Fed. Cir. 1996), reh'g denied 1996 U.S. App. LEXIS 11270 (en banc) (May 3, 1996). In *Mahurkar*, the Federal Court held that in determining an award of compensatory damages there is no right to a "kicker" because of heavy litigation or other expenses. *Id. at 1581*, 38 U.S.P.Q.2d (BNA) at 1294. When imported into the determination of compensatory damages, factors such as the absence of compulsory licenses or the willfulness of an infringement can easily result in multiplication of compensatory damages without regard to the statutory requirement of willful infringement. Damages can also be affected by the exercise of judicial discretion in concluding that the facts warrant increasing the compensatory damages.

n105 35 U.S.C. 284 (1996).

n106 See *Kaufman Co. v. Lantech, Inc.*, 926 F.2d 1136, 1141, 17 U.S.P.Q.2d (BNA) 1828, 1831 (Fed. Cir. 1991). See also *Rite-Hite v. Kelley Co.*, 56 F.2d 1538, 1545, 35 U.S.P.Q.2d (BNA) 1065, 1069 (Fed. Cir.) (en banc), cert. denied, 116 S. Ct. 184 (1995).

n107 Nos. CV 90-93 MRP, CV 90-4823 MRP, 1995 WL 366468, at *1 (C.D. Cal Jan. 6, 1995), aff'd in part, rev'd in part, 87 F.3d 1559, 39 U.S.P.Q.2d (BNA) 1321 (Fed. Cir. 1996), cert. granted, judgment vacated and remanded, 117 S. Ct. 1240 (1997).

n108 The verdicts interpreted the patent in favor of the patentee and, determined the reissue patent in litigation was not invalid for obviousness. They determined that it had been willfully infringed by two separate Honeywell products. *Id. at *39*.

n109 *Id.* at *23.

n110 *Id.* at *15.

n111 *Id.* at *46-47.

n112 *Id.* at *23.

n113 87 *F.3d* 1559, 39 *U.S.P.Q.2d* (BNA) 1321 (*Fed. Cir.* 1996), cert. granted, judgment vacated and remanded, 117 *S. Ct.* 1240 (1997).

n114 *Alpex Computer Corp. v. Nintendo Co.*, 34 *U.S.P.Q.2d* (BNA) 1167 (*S.D.N.Y.* 1994).

n115 *Id.* at 1169.

n116 *Id.* at 1198.

n117 *Id.*

n118 *Cardinal Chem. Co. v. Morton Int'l, Inc.*, 508 *U.S.* 83, 26 *U.S.P.Q.2d* (BNA) 1721 (1993).

n119 *Id.* at 102, 26 *U.S.P.Q.2d* (BNA) at 1730.

n120 *Id.*

n121 *Id.*

n122 *Izumi Seimitsu Kogyo Kabushiki Kaisha v. U.S. Philips Corp.*, 114 *S. Ct.* 425, 28 *U.S.P.Q.2d* (BNA) 1930 (1993) (dismissing petition because improvidently granted regarding procedural problems).

n123 *U.S. Bancorp Mortgage Co. v. Bonner Mall Partnership*, 513 *U.S.* 18 (1994).

n124 *American Airlines Inc. v. Lockwood*, 115 *S. Ct.* 2274 (1994).

n125 *Markman v. Westview Instruments*, 116 *S. Ct.* 1384, 1395, 38 *U.S.P.Q.2d* (BNA) 1461, 1470 (1996).

n126 *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 117 *S. Ct.* 1040, 41 *U.S.P.Q.2d* (BNA) 1865 (1997).

n127 *Id.* at 1054, 41 *U.S.P.Q.2d* (BNA) at 1876.

n128 *Id.* at 1047-48, 41 *U.S.P.Q.2d* (BNA) at 1871.

n129 *Id.* at 1049, 41 *U.S.P.Q.2d* (BNA) at 1871.

n130 *Id.* at 1051, 41 *U.S.P.Q.2d* (BNA) at 1873.

n131 *Id.* at 1052, 41 *U.S.P.Q.2d* (BNA) at 1874.

n132 *Id.* at 1053, 41 *U.S.P.Q.2d* (BNA) at 1875.

n133 *Id.* at 1053, 41 *U.S.P.Q.2d* (BNA) at 1874-75.

n134 *Gould v. Rees*, 82 *U.S.* 187 (1872).

n135 *Gill v. Wells*, 89 *U.S.* 1 (1874).

n136 *Sanitary Refrg'r Co. v. Winters*, 280 *U.S.* 30, 40-43 (1929).

n137 *Hilton Davis Chemical Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 1528, 35 U.S.P.Q.2d (BNA) 1641, 1653 (Fed. Cir. 1995) (en banc), rev'd 117 S. Ct. 1040, 41 U.S.P.Q.2d (BNA) 1865 (1997).

n138 See, e.g., *Bendix Corp. v. United States*, 606 F.2d 1373 (Ct. Cl. 1979).

n139 *Temco Elec. Motor Corp. v. Apco Mfg. Corp.*, 275 U.S. 319, 327 (1928).

n140 *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 117 S. Ct. 1040, 1053, 41 U.S.P.Q.2d (BNA) 1865, 1875 (1997).

n141 Id.

n142 Id.

n143 Id.

n144 *Winans v. Denmead*, 56 U.S. (15 How.) 330, 343 (1853).

n145 *Markman v. Westview Instruments, Inc.*, 116 S. Ct. 1384, 1396, 38 U.S.P.Q.2d (BNA) 1461, 1470 (1996).

n146 *Hilton Davis*, 117 S. Ct. at 1053 n.8, 41 U.S.P.Q.2d (BNA) at 1876 n.8.

n147 *Markman v. Westview Instruments, Inc.*, 116 S. Ct. 1351, 1396, 38 U.S.P.Q.2d (BNA) 1461, 1470 (1996).

n148 *Honeywell, Inc. v. Litton Systems, Inc.*, 65 U.S.L.W. 3629 (Mar. 3, 1997).

n149 *Markman v. Westview Instruments Inc.*, 116 S. Ct. 1384, 38 U.S.P.Q.2d (BNA) 1461 (1996).

n150 Id. at 1396, 38 U.S.P.Q.2d (BNA) at 1470 (quoting *General Elec. Co. v. Wabash Appl. Co.*, 304 U.S. 364, 369 (1938), *United Carbon Co. v. Binney & Smith Co.*, 317 U.S. 228, 236 (1942) and *Merrill v. Yeomans*, 94 U.S. 568, 563 (1877)).

n151 Id. at 1395, 38 U.S.P.Q.2d (bna) AT 1471.

n152 See *Cardinal Chem. Corp. v. Morton Int's., Inc.*, 508 U.S. 83, 26 U.S.P.Q.2d (BNA) 1721 (1993); AND u.s. bancorp *Mortgage Co. v. Bonner Mall Partnership*, 513 U.S. 18 (1994).