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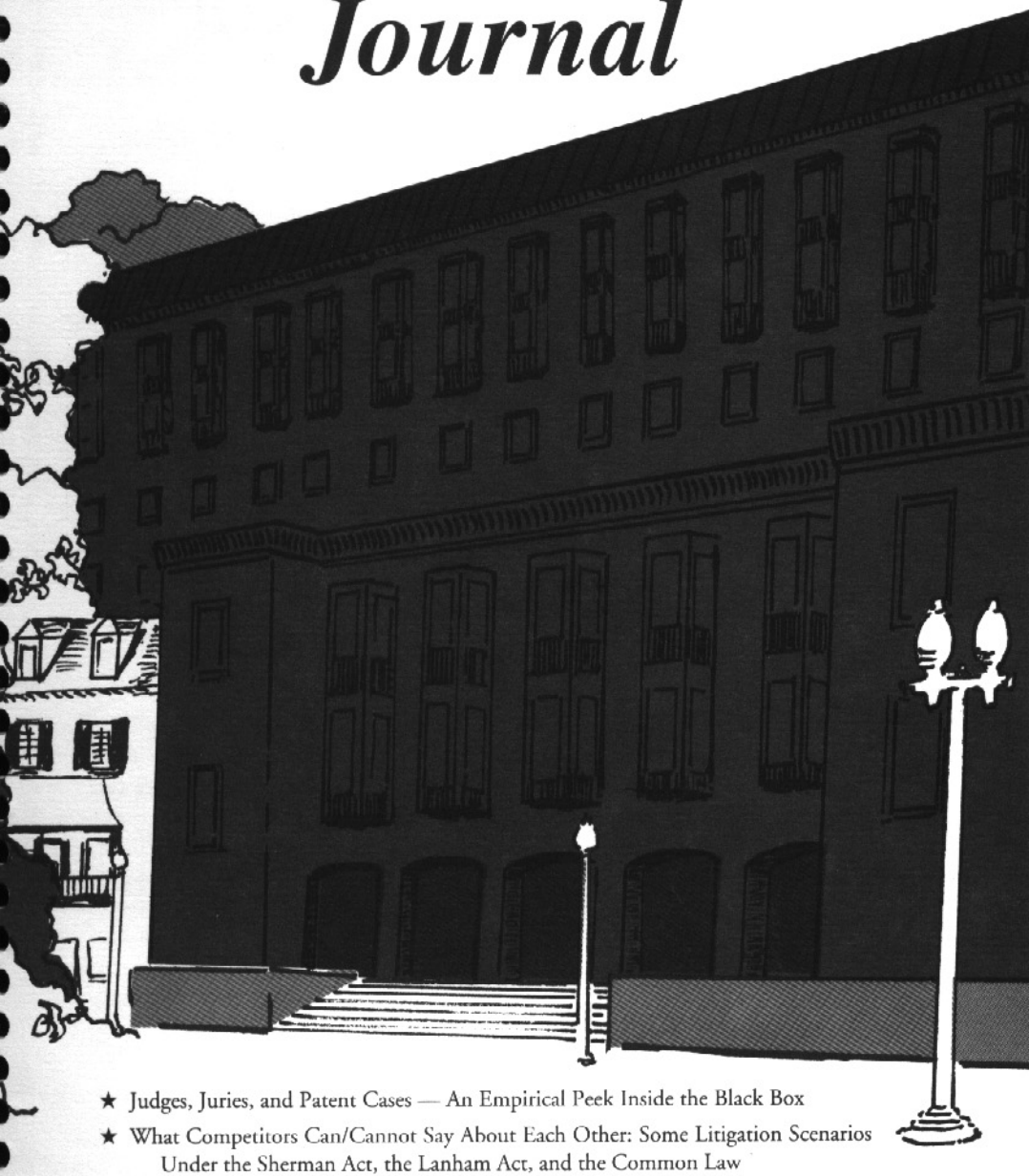

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Standards of Appellate Review in the Federal Circuit: Substance and Semantics

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Introduction

"Standards of review" denote the strictness or intensity with which an appellate court evaluates the action of a trial tribunal including, for the United States Court of Appeals for the Federal circuit, a district court judge, a jury, or an agency. At first blush, a discussion of standards of review might appear superficial, or worse, of little consequence. Some might believe that a standard of review is merely a semantic label affixed to a particular issue by an appellate court, and that such labels are virtually irrelevant to the likelihood of success on the merits of an appeal.[1] It is tempting to say that standards of review are meaningless rationalizations applied to justify a decision once made. Others might believe that standards of review are obvious: the parties can simply look up the appropriate standards applicable to the issues involved in their particular appeal.[2]

Experienced appellate advocates realize, however, that those who frame their appellate practice using such beliefs undermine their chances of obtaining a favorable judgment on appeal. Appellate judges who provide tips almost invariably advise advocates

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[1] *See e.g.,* Armour & Co. v. Wilson & Co., 274 F.2d 143, 124 U.S.P.Q. 115 (7th Cir. 1960).

> We have come to speak of questions of "facts," "primary facts," "subsidiary facts," "evidentiary facts," "ultimate facts," "physical facts," "documentary facts," "oral evidence," "inferences," "reasonable inferences," "findings of fact," "conclusions," "conclusions of law," "questions of fact," "questions of law," "mixed questions of law and fact," "correct criteria of law," and so on *ad infinitum*. The simple answer is that we are all too frequently dealing in semantics, and our choice of words does not always reflect the magic we would prefer to ascribe to them.

[2] In fact, Appendix A provides a collection of the standards of review for a number of issues as applied by the United States Court of Appeals for the Federal Circuit.

to address standards of review.[3] Why? Because standards of review involve complex and subtle questions of both law and tactics, which often impact the appeal more than the facts and the substantive law issues upon which advocates spend so much time and effort. A thoughtful consideration and practical understanding of these questions will improve and focus the advocate's written and oral presentations and, therefore, will increase the chances of obtaining a favorable judgment on appeal.[4] In an appeal, the appellee's strongest point may well be a restrictive standard of review.[5]

More practically, appellate advocates must carefully assess standard of review issues because local rules in many appellate courts, including the Federal Circuit, require parties to state in their briefs the standard of review applicable to the issues presented.[6] Federal Circuit Rule 28(a) lists the requisite contents of briefs and Federal Circuit Rule 28 (a) (10) specifies that briefs must contain a statement of the standard of review. Even more important, upon choosing to ignore the standard of review labels, the advocate would simply be forced to find some other way to identify, clarify, and address the realities of appellate behavior.[7]

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[3] *See, e.g.*, Judge Harry Pregerson, *The Seven Sins of Appellate Brief Writing and Other Transgressions*, 34 UCLA L. Rev. 431, 437 (1986) (explaining that ignoring standards of review is the fifth sin); Arthur L. Alarcon, *Points on Appeal* 10 LITIG. 5, 66 (1984); Alvin B. Rubin, *The Admiralty Case on Appeal in the Fifth Circuit*, 43 LA. L. REV. 869, 872 (1987) ("Start the brief by stating briefly the applicable standard of review."). Not surprisingly, other, non-judicial commentators agree. *See, eg.*, Barry Sullivan, *Standards of Review*, in APPELLATE ADVOCACY, 59, 59 (Peter J. Carre et al. eds., 1981).

[4] The Seventh Circuit has said: "The critical issue in this case is one not discussed by the parties: our standard of review." Fox v. Comm'r, 718 F.2d 251, 253 (7th Cir. 1983); *see also* 1 STEVEN A. CHILDRESS & MARTHA S. DAVIS, FEDERAL STANDARDS OF REVIEW § 1.02, at 1-19 (2d ed. 1992) [hereinafter CHILDRESS & DAVIS] ("The smart attorney … likely will discuss the standard and its application to the issues at hand.") (citing John C. Godbold, *Twenty Pages and Twenty Minutes Effective Advocacy on Appeal* 30 Sw. L.J. 801, 811 (1976) ("Early in his presentation counsel should state to the court the standard of review which he considers applicable.")).

[5] "In our consideration of this issue, there is a reality check: would it matter to the outcome in a given case which formulation of the standard a court articulates in arriving at its decision? The answer no doubt must be that, even though in some cases it might not matter, in others it would, otherwise the lengthy debates about the meaning of these formulations and the circumstances in which they apply would be unnecessary." *In re* Brana, 51 F.3d 1560, 1569, 34 U.S.P.Q.2d 1436, 1443-44 (Fed. Cir. 1995) (declining to decide whether to consider the Board of Patent Appeals and Interference's (BPAI) error under clearly erroneous or arbitrary and capricious standard because it erred under either standard).

[6] Circuits require that a statement of the standards of review be included as part of the briefs, by referencing requirements of the Federal Rules of Appellate Procedure (FED. R. APP. P. 28(a)(9)(B) ("[T]he argument ... must contain ... for each issue, a concise statement of the applicable standard of review. . . .")). The Sixth Circuit provides a form, "Checklist for Briefs" at http://pacer.cab.uscourts.gov/formslforms.htm, which provides that the applicable standard of review must be discussed in the brief. Several courts require by local rule, a statement on the standard of review as part of the brief. *See, e.g.,* 3D CIR. R. 28.1(b); 9TH CIR. R. 28-2.5, 11TH CIR. R 28- 1 (i)(iii). In addition, some states mandate that each argument in a brief include the appropriate standard of review. *See, e.g.,* ALASKA R. App. P. 212(c)(1)(h); ARIZ. R. App. P. 13(a)(6); HAW. R. App. P. 28(b)(5); N.H. Sup. CT. R. 7 *Notice of Appeal Form;* OR. R App. P. 5.45(5); PA. R. App. P. 2111(a)(2); UTAH R. App. P. 24(a)(5).

[7] For a good general discussion on the procedures for filing an appeal with the Federal Circuit, with reference to Federal Circuit rules, see Jennifer A Tegfeldt, *A Few Practical Considerations in Appeals Before the Federal Circuit*, 3 FED. CIR. B.J. 237 (1993). *See also* Harrie R. Samaras & Mark Abate, *Practical Tips for Using the Federal Circuit's Rules of Practice When Filing Patent Appeals from the PTO*, 4 FED. CIR. B.J. 389 (1994).

I. The Effect of Standards of Review

Why should the appellate advocate try to understand and correctly apply the various standards of review? Simply put, because an understanding and correct application of the standards will help an advocate to win an appeal.[8] Faced with a difficult standard, the advocate might consider not appealing or, at least, not appealing just yet.[9] If an appeal will be taken, the advocate will want to frame the appeal to use the standards of review to his or her advantage. The appellant wants to move the standard of review toward a plenary review; the appellee wants a standard more deferential to the trial tribunal.

Almost all advocates realize that there are several standards of review. Many may not realize, however, that as a practical matter, there are varying levels of review within each of the standards.[10] For example, the strictest standard of review is *de novo* review for legal error. Under this standard, the trial tribunal's decision receives little or no deference. There are at least three levels of review within that standard: (1) the trial tribunal's opinion will receive the most deference, because appellate courts know that trial tribunal errors occur less often, when the trial tribunal has simply applied settled law to the facts;[11] (2) the review will be strict, but there will be some deference to the trial tribunal in interpreting the law;[12] and (3) the appellate court will not defer at all in the relatively rare case when the trial tribunal must establish a new legal principle (i.e., in a case of first impression).[13]

Different kinds of appellate tasks give rise to a more or less strict review according to the relative capacities of the trial tribunal and appellate court, the need for uniformity among cases, the perceived importance of the dispute, and the nature of the legal rules involved.[14] All of these

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[8] The Federal Circuit has stated that "[t]here is a significant difference between the standards of substantial evidence' and of 'clearly erroneous'" and that "in close cases this difference can be controlling." Tandon Corp. v. United States Int'l Trade Comm'n, 831 F.2d 1017, 1019, 4 U.S.P.Q.2d 1283, 1284-85 (Fed. Cir. 1987).

[9] *See e.g.,* MICHAEL E. TIGAR, FEDERAL APPEALS: JURISDICTION & PRACTICE § 5.03, AT 211 (1993) (stating that review standard is among the most important factors influencing decision whether to appeal); ROBERT J. MARTINEAU, FUNDAMENTALS OF MODERN APPELLATE ADVOCACY § 7.21, at 132 (1985) (nothing the decision to appeal, and development of arguments on appeal, are substantially affected by review standards); George A. Somerville, *Standards of Appellate Review*, 15 LITIG. 23, 23 (1989) (stating that decision as to when to appeal should be influenced by the shifting standard of review; for example, the decision to appeal before judgment or an injunction). *See infra* Section V for a discussion of the effect of the stage of trial on the appellate standard of review.

[10] *See, e.g.,* CHILDRESS & DAVIS, *supra* note 4, § 4.01, at 4-13 n.44; Somerville, *supra* note 9, at 24-25.

[11] See *infra* Section II.A.1.

[12] See *infra* Section II.A.2

[13] See *infra* Section II.A.3

[14] Of these factors, perhaps the most "fundamental notion behind a standard of review is that of defining the relationship and power shared among judicial bodies." CHILDRESS & DAVIS, *supra* note 4, § 1.01, at 1-3 (citing James D. Phillips, *The Appellate Review Function: Scope of Review,* 47 LAW & CONTEMP. PROBS. 1, 1 (1984)); Edward H. Cooper, *Civil Rule 52(a): Rationing & Rationalizing the Resources of Appellate Review,* 63 NOTRE DAME L. REV. 645, 649 (1988) (concluding that standards of review serve a vital institutional role in allocating the responsibility and the power of decision between trial tribunals and the courts of appeals).

factors change over time; the standard of review applied in 1995 may differ from that applied in 1985.[15] Consequently, the standards are flexible, malleable, and adaptable. The absence of bright-line rules gives the appellate advocate much room to maneuver, and to win or lose, depending upon the advocate's acumen.

Appellate advocates can use such subtle distinctions to their advantage. For example, when the appellant is characterizing what the trial tribunal did in its ruling, he or she should argue that the court established an entirely new and erroneous legal principle, rather than that the court applied an incorrect rule of law. The appellate court will not defer to the trial tribunal at all under the first characterization, but might defer somewhat to the trial tribunal's decision under the second characterization, although both characterizations fall under the *de novo* standard of review.

Apple Computer's recent appellate strategy reaped the benefit of a wise use of standards of review. In *Apple Computer, Inc. v. Articulate Systems, Inc.,*[16] Apple challenged the legal analysis and underlying claim interpretation of the court that led it to conclude that the asserted claims of the patent are invalid as anticipated. Claim construction is an issue of law, which the appellate court reviews *de novo*.[17] Apple succeeded in having the appellate court reverse the district court's fact-finding of anticipation.[18]

Similarly, although a trial court's infringement ruling is reversible only for clear error, that ruling may turn on claim construction. Often, when the abuse of discretion standard applies, "there may be an underlying issue of fact, making review less deferential than would at first appear. If there is an underlying issue of law, review can become non-deferential."[19] Many other examples of the tactical strategy inherent in standards of review might be imagined.

Clearly, the appellate advocate must know the various standards of review, appreciate the varying levels within each individual standard, and understand why review is structured as it is. Then, and only then, can the advocate craft written and oral presentations to the appellate court to secure the most advantageous standard. In the brief and at oral argument, the appellate advocate has the opportunity to characterize the trial tribunal's actions and to suggest how intensely the appellate court should scrutinize those actions. The semantics of such characterizations and suggestions often spell the difference between success and failure on appeal. Of course, as all advocates know, the most effective strategy on appeal is to have won

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[15] Early in its existence, for example, the Federal Circuit viewed the question of whether inequitable conduct occurred as one of law. *See In re* Jerabek, 789 F.2d 886, 890, 229 U.S.P.Q. 530, 533 (Fed. Cir. 1986). As such, at least as of 1986, the question was reviewed under a de novo standard of review. Although it expressly recognized such precedent, the court later adopted the view that the question is equitable in nature and, therefore, "is committed to the discretion of the trial court and is reviewed by this court under an abuse of discretion standard." Kingsdown Med. Consultants v. Hollister Inc., 863 F.2d 867, 876, 9 U.S.P.Q.2d 1384, 1392 (Fed. Cir. 1988) (en banc). *Compare* Markman v. Westview Instruments, Inc., 52 F.3d 967, 976-77, 34 U.S.P.Q.2d 1321, 1327 (Fed. Cir. 1995) (en banc) (defining the issue of claim construction as one of law, despite "a significant line of cases ... developed in our precedent ... which have statements that claim construction may be a factual or mixed issue"), *affd*, 517 U.S. 370 (1996).

[16] 234 F.3d 14, 57 U.S.P.Q.2d 1057 (Fed. Cir. 2000).

[17] Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456, 46 U.S.P.Q.2d 1169, 1174 (Fed. Cir. 1998) (en banc).

[18] *Apple,* 234 F.3d at *24-25,* 57 U.S.P.Q.2d at 1061.

[19] Paul R. Michel, *Appellate Advocacy: One Judge's View,* 1 FED. CIR. B.J. 1, 4-5 (1991).

below.

II. Definition of the Standards of Review

Phrases such as *"de novo,"* "clearly erroneous," "substantial evidence," and "abuse of discretion" have no intrinsic meaning. It might be better to think of the phrases as defining a mood, rather than a precise formula, because they cannot be precisely defined.[20] Nevertheless, many courts have attempted definitions.[21] Definition is elusive, not only because language is indefinite,[22] but because a true definition must include all of the shadings along the spectrum of

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[20] Anderson v. City of Bessemer City, 470 U.S. 564, 573 (1985) ("[T]he meaning of the phrase 'clearly erroneous' is not immediately apparent...."); United States v. Aluminum Co. of Am., 148 F.2d 416, 433, 65 U.S.P.Q. 6, 22 (2d Cir. 1945) (Judge Learned Hand recognized that "[i]t is idle to try to define the meaning of the phrase 'clearly erroneous.'").

[21] "Although the meaning of the phrase 'clearly erroneous' is not immediately apparent, certain general principles governing the exercise of the appellate court's power to overturn findings of a district court may be derived from our cases. The foremost of these principles… is that '[a] finding is "clearly erroneous" when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed.'" *Anderson*, 470 U.S. at 573 (alteration in original). *See, e.g.*, Inwood Labs, Inc. v. Ives Labs., Inc., 456 U.S. 844 (1982) (stating that if the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it under the clearly erroneous standard); Manning v. United States, 146 F.3d 808 (10th Cir. 1998) (stating that a finding of fact is clearly erroneous if it is without factual support in the record or if the appellate court, after reviewing all the evidence, is left with a definite and firm conviction that a mistake has been made); Motorola, Inc. v. Interdigital Tech. Corp., 121 F.3d 1461 (Fed. Cir. 1997) (stating that court of appeals tests district court's denial of motion for new trial under abuse of discretion standard and this question turns on whether error occurred in conduct of trial that was so grievous as to have rendered trial unfair); Carr v. Allison Gas Turbine Div., Gen. Motors Corp., 32 F.3d 1007, 1008 (7th Cir. 1994) (The clear-error standard "requires us appellate judges to distinguish between the situation in which we *think* that if we had been the trier of fact we would have decided the case differently and the situation in which we are *firmly convinced* that we would have done so."); Northeast Utilities Serv. Co. v. Fed. Energy Regulatory Comm'n, 993 F.2d 937, 944 (1st Cir. 1993) ("'[P]ure' legal errors require no deference to agency expertise and are reviewed *de novo*."); Elec. Consumers Res. Council v. Fed. Energy Regulatory Comm'n, 747 F.2d 1511, 1513 (D.C. Cir. 1984) (stating that court defers to the agency's expertise, particularly where the statute prescribes few specific standards for the agency to follow, so long as its decision is supported by substantial evidence in the record and reached by "reasoned decision-making," including an examination of the relevant data and a reasoned explanation supported by a stated connection between the facts found and the choice made); Consumers Union of U.S., Inc. v. Consumer Prod. Safety Comm'n, 491 F.2d 810, 812 (2d Cir. 1974) ("Here, under the `arbitrary, capricious' standard, our scope of review is even narrower than it was in Scenic Hudson Preservation Conference v. FPC (Scenic Hudson II), 453 F.2d 463 (2d Cir. 1971), *cert. denied*, 407 U.S. 926 (1972), where the statutory standard was 'substantial evidence'. Under either standard, at a minimum, an agency must exercise its jurisdiction where it properly lies. It must not ignore evidence placed before it by interested parties.").

[22] Towne v. Eisner, 245 U.S. 418, 425 (1918) ("A word is not a crystal, transparent and unchanged, it is the skin of a living thought and may vary greatly in color and content according to the circumstances and the time in which it is used." (citation omitted)); Powell v. United States Cartridge Co., 339 U.S. 497, 529 (1950) (Frankfurter, J., dissenting) ("In law as elsewhere words of many-hued meaning derive their scope from the use to which they are put.").

working appellate review standards.[23] Many different standards of review properly pass under a single standard of review phrase.

Nevertheless, like most of its appellate sister circuits, the Federal Circuit has defined four standards of review as signposts or markers along this spectrum, which it applies to review of district court decisions. When legal error is at issue the standard of review is *de novo* review. Under this standard, the Federal Circuit gives the trial tribunal little, if any, deference; the opinion appealed receives little or no presumption of correctness.[24]

Somewhat more deferential to the trial tribunal is the clearly erroneous standard of review. The United States Supreme Court defined this standard, which applies to review of district court fact findings: "A finding is 'clearly erroneous' when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed."[25] An even more deferential standard of review is reserved for jury fact-findings, which are reviewed for substantial evidence. Substantial evidence "means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."[26]

The most lenient standard of review is abuse of discretion. Abuse of discretion may be found when: (1) the tribunal's decision is clearly unreasonable, arbitrary, or fanciful; (2) the decision was based on an erroneous conclusion of law; (3) the tribunal's findings are clearly erroneous; or (4) the record contains no evidence upon which the tribunal rationally could have based its decision.[27]

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[23] Professor Monaghan defined fact and law labels, which trigger different standards of review (see *infra* Section III), as having "a nodal quality; they are points of rest and relative stability on a continuum of experience." Henry P. Monaghan, *Constitutional Fact Review*, 85 COLUM. L. REV. 229,233 (1985). The defined standards of appellate review would appear best viewed in a similar light.

[24] *See, e.g.,* Superior Fireplace Co. v. Majestic Prods. Co., 00-1233, 00-1281, 00-1282, 2001 U.S. App. LEXIS 236334 at *25 (Fed. Cir. Nov. 1, 2001) ("Statutory interpretation is a matter of law and we thus review the district court's interpretation of 35 U.S.C. § 255 without deference."); Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448,1456, 46 U.S.P.Q 2d 1169, 1174 (Fed. Cir. 1998) (en banc) (stating that claim construction is an issue of law reviewed without deference); Tex. Instruments Inc. v. Cypress Semiconductor Corp., 90 F.3d 1558, 1563,39 U.S.P.Q.2d 1492, 1496 (Fed. Cir. 1996) (grant of JMOL reviewed without deference to the district court).

[25] United States v. United States Gypsum Co., 333 U.S. 364, 395 (1948); *see also* SSIH Equip. S.A. v. U.S. Int'l Trade Comm'n, 718 F.2d 365, 381, 218 U.S.P.Q. 678,692 (Fed. Cir. 1983) (Nies, J., additional views) (describing the clearly erroneous standard as "the next level in the hierarchy" after the *de novo* standard). The reviewing court may not substitute its view for that of the district court. *Anderson,* 470 U.S. at 573-74.

> If the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently. Where there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous.

Id. (citations omitted).

[26] Universal Camera Corp. v. NLRB, 340 U.S. 474, 477 (1951) (quoting Consol. Edison Co. v. Labor Bd., 305 U.S. 197,229 (1938)). The standard of review does not director permit the appellate court to decide which of two decisions is *more reasonable*. As long as substantial evidence supports the decision under review, the appellate court must affirm. *Cf.* Fischer & Porter Co. v. United States Int'l Trade Comm'n, 831 F.2d 1574, 1577,4 U.S.P.Q.2d 1700, 1701-02 (Fed. Cir. 1987) (noting that the court may not substitute its judgment for an agency's final determination under the Administrative Procedure Act).

[27] Abrutyn v. Giovanniello, 15 F.3d 1048,1050-51, 29 U.S.P.Q.2d 1615, 1617 (Fed. Cir. 1994); W. Elec. Co. v. Piezo Tech., Inc., 860 F.2d 428, 430-31, 8 U.S.P.Q.2d 1853, 1855 (Fed. Cir. 1988); Heat & Control, Inc. v. Hester Indus., Inc., 785 F.2d 1017, 1022, 228 U.S.P.Q. 926, 930 (Fed. Cir.1986). The Supreme Court, in *Citizens to Preserve Overton Park, Inc*. v. Volpe, stated that an abuse of discretion occurs when a court's decision represents a "clear error of judgment. " 401 U.S. 402, 416 (1971); *see also* Mendenhall v. Cedarapids, Inc., 5 F.3d 1557, 1569,

Thus, the four standards of review, arrayed in order of increasing deference to the district court (or, in other words, from the stricter to the more forgiving), include: *de novo* review (is the decision right?), clearly erroneous review (is the decision wrong?), review for substantial evidence (is the decision unreasonable?), and review for abuse of discretion (is the decision irrational?).[28] The following table graphically summarizes the standards of review in relation to both the type of issue under review and the degree of deference accorded the trial tribunal by the appellate court under each standard. The following table graphically summarizes the standards of review in relation to both the type of issue under review and the degree of deference accorded the trial tribunal by the appellate court under each standard.

Standard of Review			
(1) *De novo*	(2) Clearly Erroneous	(3) Substantial Evidence	(4) Abuse of Discretion

Discretion Issue to be Reviewed:			
(1) Law	(2) Judge Fact	(3) Jury Fact	(4) Trial Supervision

Deference to Trial Tribunal:			
(1) Least →	(2)	(3)	(4) Greatest

The Federal Circuit hears appeals from a wide variety of sources.[29] This article focuses on the standards of review applicable to district court decisions in the area of intellectual property law. Standards of review for administrative action include these standards, and add a few additional standards, such as arbitrary or capricious, which is unique to the agency context. Such additional standards are considered briefly in Section VI below.

Before considering each standard of review in detail and in turn, it should be pointed out that the Federal Circuit acknowledges that no trial is free of error. A party is entitled only to a fair trial, not a perfect one.[30] The erroneous submission of evidence to a jury requires retrial, for example, only if the error affects "the substantial rights of the parties."[31] Stated another way, courts of appeal must disregard harmless errors, which do not affect the parties' substantive rights. The Federal Circuit applies often the rule of harmless error.[32]

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28 U.S.P.Q.2d 1081, 1091 (Fed. Cir. 1993); Kingsdown Med. Consultants, Ltd. v. Hollister Inc., 863 F.2d 867, 876, 9 U.S.P.Q.2d 1384, 1392 (Fed. Cir. 1988) (en banc); PPG Indus., Inc. v. Celanese Polymer Specialties Co., 840 F.2d 1565, 1567, 6 U.S.P.Q.2d 1010, 1013 (Fed. Cir. 1988).

[28] *See SSIH Equip*., 718 F.2d at 381, 218 U.S.P.Q. at 691-92. Unfortunately and paradoxically, the most deferential standards of review tend to sound the most pejorative and strict when the appellate court finds that they have been violated.

[29] *See* 28 U.S.C. § 1295 (1994).

[30] See Newell Cos., Inc. v. Kenney Mfg. Co., 864 F.2d 757, 765, 9 U.S.P.Q.2d 1417,1424 (Fed. Cir. 1988) ("Procedural errors that do not unfairly affect the outcome are to be ignored. Trials must be fair, not perfect."); Devices for Med., Inc. v. Boehl, 822 F.2d 1062, 1066, 3 U.S.P.Q.2d 1288, 1292 (Fed. Cir. 1987).

[31] 28 U.S.C. § 2111 (1994); FED. R. Civ. P. 61 ("No error . . . is ground for granting a new trial or for setting aside a verdict . . . unless refusal to take such action appears to the court inconsistent with substantial justice.").

[32] See, e.g., ATD Corp. v. Lydall, Inc., 159 F.3d 534, 549, 48 U.S.P.Q.2d 1321, 1332 (Fed. Cir. 1998) ("In general terms, the test of whether a substantial right of a party has been affected is whether the error in question affected the outcome of the case.") (quoting 1 JACK B. WEINSTEIN & MARGARET A. BERGER, FEDERAL

For example, in *Environ Products, Inc. v. Furon Co.*[33], the Federal Circuit applied the doctrine of harmless error to affirm a district court's decision on inventorship in the context of an invalidity defense to a charge of patent infringement despite the fact that the district court's jury instruction was in error. The jury instruction incorrectly required the jury to decide priority of inventorship between co-pending interfering patents under the clear and convincing standard of proof, rather than the correct preponderance of the evidence standard. The Federal Circuit reasoned that "the error as to the weight of proof could not have changed the result," so that the erroneous instruction was harmless.[34]

EVIDENCE § 103.41 [2] (1998)) (finding that the district court's error in allowing as evidence the patent infringement defendant's tardy use of its own patent was "harmless"); Oddzon Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396, 1406-07, 43 U.S.P.Q2d 1641, 1648 (Fed. Cir. 1997) (Although the district court's exclusion of evidence was an abuse of discretion, the Federal Circuit stated: "We find this error harmless, however, because it does not change the result of [the] appeal."); 0.1. Corp. v. Tekmar Co., 115 F.3d 1576, 1580, 42 U.S.P.Q.2d 1777, 1780 (Fed. Cir. 1997) ("We conclude that the district court erred in applying section 112, 16, to the word passage in apparatus claim 17, but that this error was harmless."); Serrano v. Telular Corp., 111 F.3d 1578, 1595, 842 U.S.P.Q.2d 1538, 1544 (Fed. Cit. 1997) (holding that district court's error in concluding that the accused device directly infringed the patent claim was harmless because the Federal Circuit concluded that the device contributorily infringed that claim). In Munoz v. Strahm Farms, Inc., 69 F.3d 501, 136 U.S.P.Q.2d 1499 (Fed. Cit. 1995), the court held that:

> In order for Munoz to obtain a new trial, he must show that the district court abused its discretion in admitting the challenged evidence and that such rulings prejudiced his substantial rights and were thus not harmless error. Even assuming that the district court erred in admitting the challenged evidence, such error would have been harmless. The correction of an error must yield a different result in order for that error to have been harmful and thus prejudice a substantial right of a party.

Id. at 503-04, 136 U.S.P.Q 2d at 1501-02 (citation omitted). *Butsee* Ultradent Prods., Inc. v. Life-Like Cosmetics, Inc., 127 F.3d 1065, 1069, 44 U.S.P.Q.2d 1336, 1339 (Fed. Cir. 1997) (stating that the district court's error in interpreting the patent claim was prejudicial, and not harmless, both to the court's grant of summary judgment of non-anticipation and to the jury's verdict on obviousness).

[33] 33 215 F.3d 1261, 55 U.S.P.Q.2d 1038 (Fed. Cir. 2000).

[34] 34 Id at 1266,55 U.S.P.Q2d at 1043; *see also* Embrex, Inc. v. Serv. Eng'g Corp., 216 F.3d 1343, 1351, 55 U.S.P.Q.2d 1161, 1166 (Fed. Cir. 2000). In *Embrex*, the Federal Circuit affirmed the district court's patent infringement willfulness finding, despite fact that "error occurred and that the error was plain" when the district court instructed the jury that willfulness could be proved by a preponderance of the evidence although clear and convincing evidence is required. *Embrex*, 216 F.3d at 1351, 55 U.S.P.Q.2d at 1166. The Federal Circuit concluded "that the jury would have reached the same conclusion under either the preponderance or the clear and convincing standard." *Id. See also* Va. Panel Corp. v. MAC Panel Co., 133 F.3d 860, 865, 45 U.S.P.Q.2d 1225, 1228-29 (Fed. Cir. 1997) (stating that the district court's failure to interpret the disputed claim term, sending the issue to the jury instead, even after Markman, was harmless error); Para-Ordnance Mfg., Inc. v. SGS Importers Int'l, Inc., 73 F.3d 1085, 1090, 37 U.S.P.Q.2d 1237, 1241-42 (Fed. Cit. 1995) ("[T]he district court's failure to set forth an explicit explanation as to how a person of ordinary skill in the pertinent art would have combined the prior art described by the court to arrive at the claimed invention does not require reversal."); Cable Elec. Prods., Inc. v. Genmark, Inc., 770 F.2d 1015, 1021, 226 U.S.P.Q. 881, 884 (Fed. Cir. 1985); Lemelson v. United States, 752 F.2d 1538, 1549, 224 U.S.P.Q. 526, 532 (Fed. Cir. 1985); Gardner v. TEC Sys., Inc., 725 F.2d 1338, 1345, 220 U.S.P.Q. 777, 782 (Fed. Cir. 1984) (en banc); Medtronic, Inc. v. Cardiac Pacemakers, Inc., 721 F.2d 1563, 1566, 220 U.S.P.Q. 97, 99 (Fed. Cit. 1983) (errors in decisional approach considered harmless).

A. De Novo Review

The strictest standard of review is *de novo* review for legal error.[35] This is the standard that the appellant most desires. The Federal Circuit has acknowledged that the *de novo* standard is "the long-recognized appellate review standard for issues of law in the trial proceeding, regardless of whether the case was tried to a judge or a jury.[36] In its *de novo* review of an issue of law, such as claim construction after *Markman,* the Federal Circuit will reach its own conclusion on the issue "without deference to that of the district court."[37]

In theory, the appellate court decides the issue in a *de novo* review, "[a] new; afresh; a second time,"[38] as if the trial tribunal had not before rendered a decision on the issue. In practice, however, the trial tribunal's decision will at least have a subtle effect; the persuasive force of a well-written trial tribunal opinion, which reasons forcefully and examines deftly the law and precedent, may help the appellant even if the trial tribunal created a new legal principle.[39] Conversely, a poorly written opinion should not instill confidence in the appellee despite a favorable standard of review.[40]

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[35] The Federal Circuit has alternatively labeled the strictest standard of review plenary, full, and independent review. *See, e.g., In* re Asahi/America, Inc., 68 F.3d 442, 445, 37 U.S. P.Q.2d 1204, 1206 (Fed. Cir. 1995) ("[Q]uestions of law are subject to full and independent review (sometimes referred to as *`de novo' or* `plenary' review)."); Comair Rotron, Inc. v. Nippon Densan Corp., 49 F.3d 1535, 1536, 33 U.S.P.Q.2d 1929, 1930 (Fed. Cit. 1995) ("We conduct plenary review of the grant of summary judgment."); Glaverbel Sociere Anonyme v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1559, 33 U.S.P.Q.2d 1496, 1502 (Fed. Cir. 1995) ("We give plenary review to whether the issue was appropriately disposed of by summary judgment."); Newell Cos., Inc. v. Kenney Mfg. Co., 864 F.2d 757, 762-65, 9 U.S.P.Q.2d 1417, 1421-24 (Fed. Cit. 1988) (stating that any issue of law is subject to independent plenary review and determination). To ease semantics, these authors have attempted to use consistently the single label of *de novo* review. Perhaps the standard might better be labeled review *without deference* or review to reach *an independent conclusion on the record.*

[36] Markman v. Westview Instruments, Inc., 52 F.3d 967, 984 n.13, 34 U. S.P.Q.2d 1321, 1333 n.13 (Fed. Cir. 1995) (en banc), *affil,* 517 U.S. 370 (1996). Because nonobviousness is generally regarded as a legal question, the Federal Circuit extended the rule of judicial decision on legal issues into the jury context, finding that the district court may decide the issue as law without submitting it to the jury. Newel/Cos., 864 F.2d at 762, 9 U.S.P.Q.2d at 1421.

[37] Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1216, 36 U.S.P.Q 2d 1225, 1228 (Fed. Cir. 1995); *see also* Union Pac. Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 690, 57 U.S.P.Q.2d 1293, 1296 (Fed. Cir. 2001) ("Enablement is a question of law reviewed by this court independently and without deference.").

[38] BLACK'S LAW DICTIONARY 435 (6th ed. 1990).

[39] *See, e.g.,* Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1462-63, 46 U.S.P.Q.2d 1169, 1180 (Fed. Cir. 1998) (en banc).

> Though we review that record *de novo,* meaning without applying a formal deferential standard of review, common sense dictates that the trial judge's view [on an issue of law such as claim interpretation] will carry weight. That weight may vary depending on the care, as shown in the record, with which that view was developed, and the information on which it is based.

Id. at 1462, 46 U.S.P.Q.2d at 1180 (Plager, J. concurring). "In fact, reviewing courts often acknowledge that as to particular legal issues lower tribunals have special competence and their judgments on those legal issues should be accorded significant weight." *Id.* at 1463 (Bryson, J., concurring).

[40] The Supreme Court has emphasized that law determinations are not made *de novo* in the sense of "an original appraisal of all the evidence." Bose Corp. v. Consumers Union of United States, Inc., 466 U.S. 485, 514 n.31 (1984); *see also* Somerville, *supra* note 9, at 24 ("[A] well-written trial court opinion is every appellant's worst enemy and every appellee's best friend. It creates its own presumption of correctness by the force of its reasoning and the quality of its examination of law and precedent."); Mark Banner, *Appeal: Winning on Infringement, at the Federal Circuit,* 2 Modern Trends in Intellectual Property at 40, UNIV. ILL. COLLEGE LAW (Fall 1998) ("While

Thus, although the court reviews a dismissal for lack of an actual controversy as a question of law subject to plenary appellate review, the Federal Circuit vows to keep in mind that the district court's "view of the legal effect of the fact pattern before it is not to be lightly disregarded."[41] The court applies independent review to the legal issue of claim construction.[42] The Federal Circuit has qualified such independent review, however, with the notation that "we do not start from scratch; rather we begin with and carefully consider the trial court's work."[43] The court has characterized what *de novo* review really means as follows:

> This court often describes the standard of review in this context as *de novo.* However, the use of the term *de novo* to describe our appellate function is a misnomer. As our sister circuit noted: "To consider a matter *de novo is* to determine it anew, as if it had not been heard before and no decision had been rendered." By use of the term *de novo,* this court means that it does not defer to the "lower court ruling or agency decision in question."[44]

Therefore, *de novo* review really means that the appellate court has t] power, ability, and competency to reach a different conclusion on the record than as determined below. This role is more accurately defined as one of r particular deference or as an independent conclusion on the record. addition, the intensity of the *de novo* review will depend on how the appellant advocate characterizes what the trial tribunal did and, hence, what t] appellate court is asked to review: did the trial court apply settled law to t] facts, did it interpret an existing rule of law such as a statutory provision, did it create a new legal principle? Finally, the appellate court will not defer to any decision that a trial tribunal fails to explain.

1. Application of Settled Law to Facts

At least some commentators view law application as a third category between the end-points of rulings of law and findings of fact, requiring an intermediate standard of review.[45] Certainly, some types of law application have the characteristics of both law-making and fact-finding, although law application does not always involve such a combination. There is support in the Federal Circuit for a more deferential type of *de novo* review for law application.

Specifically, the Federal Circuit has said that a trial tribunal "is presumed to have applied the law correctly, absent a clear showing to the contrary."[46] At least one active Federal Circuit judge has implied that legal conclusions made upon application of the law by trial tribunals deserve more deference than legal interpretations: "As you know, for issues categorized by precedent as issues *of law,* our review is termed *'de novo.'* However, many such issues concern

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a *de novo* standard of review is the least deferential standard of review available, there nevertheless is some deference given to a lower court's decision. . . . The key point here is that the concept of *no deference is* a myth. The idea of *low deference* is in acct both with human nature and with actual practice.").

[41] Fina Research, S.A. v. Baroid Ltd., 141 F.3d 1479, 1481, 46 U.S.P.Q.2d 1461, 14 (Fed. Cir. 1998) (quoting Arrowhead Indus. Water, Inc. v. Echolochem, Inc., 846 F.2d 7: 735, 6 U.S.P.Q2d 1685, 1688 (Fed. Cir. 1988)).

[42] Markman v. Westview Instruments, 52 F.3d 967, 975, 34 U.S.P.Q.2d 1321, 13 (Fed. Cir. 1995), *aff'd,* 517 U.S. 370 (1996).

[43] Key Pharms. v. Hercon Labs. Corp., 161 F.3d 709, 713, 48 U.S.P.Q2d 1911, 19 (Fed. Cir. 1998).

[44] Litton Sys., Inc. v. Honeywell, Inc., 87 F.3d 1559, 1566 n.1, 39 U.S.P.Q.2d 13: 1324 n. I (Fed. Cir. 1996) (quoting Yepes-Prado v. INS, 10 F.3d 1363, 1367 n.5 (9th 1993)).

[45] *See, e.g.,* Cooper, *supra* note 14, at 658.

[46] Lee v. Dayton-Hudson Corp., 838 F.2d 1186, 1189, 5 U.S.P.Q.2d 1625, 1627 (Fed. Cir. 1988).

not merely questions of law interpretation, but of 'law application.' The latter, we might more accurately say, get *some* deference."[47]

Taken in isolation, however, such statements by the court and its individual judges probably do not signal any deliberate retreat from the Federal Circuit's broad view of its role in reviewing applications of law to facts. For example, the court has also affirmed its full and independent review of law applications: "All of our precedent holds that, where the only issue is, as here, the application of the statutory standard of obviousness (35 U.S.C. § 103) to an established set of facts, there is only a question of law to be resolved by the trial judge, and that the trial court's conclusion on obviousness is subject to full and independent review by this court."[48]

Even though *de novo* review applies to cases that require the trial tribunal to apply settled law to facts, such decisions seem more likely to be affirmed by unpublished orders.[49] The Federal Circuit Rules explicitly allow summary affirmance without any opinion, published or unpublished, when the standard of review warrants such action.[50]

2. Interpretation

The district courts and administrative agencies reviewed by the Federal Circuit often must interpret statutes and, on occasion, the United States Constitution when applicable to their respective analyses. Most statutory and constitutional jurisprudence before the Federal Circuit lies in this category of interpretation. The degree of deference accorded by the Federal Circuit to the interpretations that it reviews depends on whether the interpretation is offered by a district court or by an agency. Moreover, in the case of at least one agency, the U.S. Patent and Trademark Office (USPTO), the Federal Circuit has been equivocal in defining the deference accorded.[51]

When the only issue before a district court is one of statutory interpretation, the Federal Circuit independently determines the proper interpretation, and need not defer to the district court.[52] Statutory interpretation on appeal from a district court is a question of law reviewed *de novo.* In addition, the meaning or interpretation of precedent is a question of law also reviewed

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[47] Michel, *supra* note 19, at 3-4.

[48] Newell Cos., Inc. v. Kenney Mfg. Co., 864 F.2d 757, 762, 9 U.S.P.Q.2d 1417, 1421 (Fed. Cir. 1988). So, too, the court has indicated that it need not defer to the district court when reviewing claim interpretation, a conclusion of law. Specialty Composites v. Cabot Corp., 845 F.2d 981, 986, 6 U.S.P.Q2d 1601, 1604 (Fed. Cir. 1988).

[49] Somerville, *supra* note 9, at 24.

[50] FED. CIR. R. 36(d). *See* United States Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1556,41 U.S.P.Q.2d 1225, 1226 (Fed. Cir. 1997) (discussing Rule 36 summary affirmance procedure). For a criticism of the Federal Circuit's increasing use of its Rule 36 power to decide cases without opinion, see Brief of Amicus Curiae Federal Circuit Bar Association, CPC Int'l, Inc. v. Archer Daniels Midland Co., 1994 U.S. App. LEXIS 27584 (Fed. Cir. 1994) (Nos. 94-1045, 94-1060); *see also* Anastasoff v. United States, 223 F.3d 898, 899, 56 U.S.P.Q.2d 1621, 1622 (rule of Federal Court of Appeals is unconstitutional to extent that it declares that unpublished opinions of court are not precedent), *opinion vacated in rehg en banc, 235* F.3d 1054 (8th Cit. 2000).

[51] *But see* Dickinson v. Zurco, 527 U.S. 150, 152, 50 U.S.P.Q.2d 1930, 1931-32 (1999); *In* re Gartside, 203 F.3d 1305, 1315, *53* U.S.P.Q.2d 1769, 1775 (Fed. Cir. 2000) (stating that because review of the Board's decision is confined to the factual record, the substantial evidence test is the appropriate review standard).

[52] Bristol-Myers Squibb Co. v. Royce Labs., Inc., 69 F.3d 1130, 1133, 436 U.S.P.Q.2d 1641, 1645 (Fed. Cit. 1995); Gardner v. Brown, 5 F.3d 1456, 1458 (Fed. Cit. 1993); *In re* Carlson, 983 F.2d 1032, 1035, 25 U.S.P.Q.2d 1207, 1209 (Fed. Cir. 1993); Hoechst Aktiengesellschaft v. Quigg, 917 F.2d 522, 526,16 U.S.P.Q.2d 1549,1552 (Fed. Cit. 1990): Chula Vista City Sch. Dist. v. Bennett, 824 F.2d 1573, 1579 (Fed. Cir. 1987).

de novo.[53] So, too, the Federal Circuit reviews *de novo a* trial tribunal's interpretation of the appellate court's own mandate.[54]

Although the Federal Circuit is relatively clear in refusing to accord deference to the district courts upon review of their statutory interpretation decisions, the standard of review accorded USPTO decisions involving interpretation represents an area of debate. This debate centers around the application of the Supreme Court's decision in *Chevron U.S.A. Inc. v. Natural Resources Defense Council, Inc.,*[55] to decisions of law by an agency such as the USPTO. As discussed above, the Federal Circuit normally reviews decisions of law *de novo.* According to the *Chevron* standard of review, however, decisions of law should receive deference.[56] Under this standard, the Federal Circuit would merely ask: (1) has Congress directly spoken on the precise issue decided by the USPTO; (2) if not, is the statute silent or ambiguous on the question (was the USPTO's decision reasonable)?[57]

In *Eastman Kodak, Co. v. Bell & Howell Document Management Products* Co., the Federal Circuit held that the Trademark Trial and Appeals Board's (TTAB) interpretation of the Lanham Act was entitled to deference under *Chevron.*[58] The Federal Circuit upheld the USPTO's decision as reasonable.[59] The Federal Circuit has refused to apply *Chevron,* however, in the context of patent decisions. In *Merck & Co. v. Kessler,*[60] the Federal Circuit specifically refused to accord deference to the Commissioner's interpretation of the patent statute with respect to patent term extensions, stating that "Congress has not vested the Commissioner with any general substantive rulemaking power."[61] Even if the USPTO's interpretation of the patent statute might otherwise receive deference, the appellate court has refused unequivocally any deference when the USPTO's interpretation frustrates the policy of Congress, in the view, of course, of the Federal Circuit.[62]

More generally, beyond the area of interpretation, the Federal Circuit has not tended to accord any deference under *Chevron* to the Board of Patent Appeals and Interferences' (BPAI) decisions of law. Some commentators have criticized the Federal Circuit for not applying

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[53] YBM Magnex, Inc. v. United States Int'l Trade Comm'n, 145 F.3d 1317, 1320, 46 U.S.P.Q.2d 1843, 1845 (Fed. Cir. 1998).

[54] Tronzo v. Biomet, Inc., 236 F.3d 1342, 1346, 57 U.S.P.Q.2d 1387, 1388 (Fed. Cir 2001).

[55] 467 U.S. 837 (1984).

[56] *See id.* at 843-44.

[57] *See id.* at 842-43; Eastman Kodak Co. v. Bell & Howell Document Mgmt. Prods. Co., 994 F.2d 1569, 1571, 26 U.S.P.Q.2d 1912, 1915 (Fed. Cir. 1993).

[58] 994 F.2d 1569, 26 U.S.P.Q.2d 1912 (Fed. Cir. 1993).

[59] *Id.* at 1572, 26 U.S.P.Q.2d at 1916.

[60] 80 F.3d 1543, 38 U.S.P.Q.2d 1347 (Fed. Cir. 1996).

[61] *Id.* at 1550, 38 U.S.P.Q.2d at 1351 (citations omitted) ("Such deference as we owe to the PTO's interpretive 'Final Determination' . . . thus arises . . . solely from, *inter alia,* the thoroughness of its consideration and the validity of its reasoning, i.e., its basic power to persuade if lacking power to control."); *see also In re* Portola Packaging, Inc., 110 F.3d 786, 788, 42 U.S.P.Q.2d 1295, 1297 (Fed. Cir. 1997) (reviewing the USPTO's interpretation of the reexamination statute "without deference to the Commissioner's interpretation"); Animal Legal Def. Fund v. Quigg, 932 F.2d 920, 930-31, 18 U.S.P.Q.2d 1677, 1686 (Fed. Cir. 1991) (holding Commissioner was not conferred with statutory authority to make binding interpretations of the patent statute); Glaxo Operations UK Ltd. v. Quigg, 894 F.2d 392, 398-99, 13 U.S.P.Q.2d 1628, 1632-33 (Fed. Cir. 1990) (interpreting "independently" statutory interpretation *of 35* U.S.C. § 156, and expressly rejecting the USPTO's request for deference to its interpretation).

[62] Hoechst Aktiengesellschaft v. Quigg, 917 F.2d 522, 526, 16 U.S.P.Q.2d 1549, 1552 (Fed. Cir. 1990).

Chevron to patent decisions .[63] It remains to be seen whether the Federal Circuit will cede any of its power over decisions of patent law in the future by granting any degree of deference at all to the USPTO.

3. New Legal Principles

Cases that require a trial tribunal to select or fashion a new legal principle truly receive the minimum of appellate deference. This is because, in these cases, the trial tribunal is performing an appellate function: defining the law regardless of the particular facts of the case. The lines between the levels of *de novo* review blur in practice. For example, when the issue involves determining which of two conflicting legal principles applies, the court's task in selecting between the two principles and interpretation merge.[64] Similarly, interpretation and application often merge. Advocates need not stumble over the precise categorization; they will simply argue for the most appealing level of review that helps their case. The advocate must also remember that, overriding these levels, the *de novo* standard of review is least deferential to the trial tribunal.

4. An Explanation

Of course, it may happen that the trial tribunal fails to explain fully its legal analysis or the reasoning or basis for its decision. The tribunal may entirely fail to consider a legal issue, or may consider a legal issue but offer something less than a full explanation of its analysis. The appropriate response may be for the appellate court to remand the case to give the trial tribunal a further opportunity to explain its decision. Alternatively, the trial tribunal may not have considered an issue because a party did not raise it. In that case, the appropriate response may be for the appellate court to disregard the issue except under certain circumstances.

Surprisingly, the appellate courts and even the United States Supreme Court have addressed with regularity the situation that arises when the court below failed to address a major issue and to explain the reasons for its decision. The typical response of the reviewing court is: "We must know what a decision means before the duty becomes ours to say whether it is right or wrong."[65] In *Graco, Inc. v. Binks Manufacturing Co.*[66], the Federal Circuit noted the prerequisite that, before it could review the district court's finding of patent infringement, the appellate court must know what meaning and scope the district court gave the asserted patent claims.[67] The district court had provided no enlightenment, however, on the first step of the infringement analysis: the legal issue of claim interpretation. The district court's opinion was "absolutely devoid of *any* discussion of claim construction."[68] Therefore, the Federal Circuit stated, "[w]e simply do not know what claim construction the trial judge gave the terms in the claims," and

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[63] *See, e.g.,* Craig Allen Nard, *Deference, Defiance, and the Useful Arts,* 56 OHIO ST. L.J. 1415 (1995) (arguing that decisions of patent law, even USPTO obviousness rejections, should receive deference from the Federal Circuit); S. Jay Plager, *An Interview With Circuit Judge S. Jay Plager,* 5 J. *PROPRIETARY RTS.* 2 (1993).

[64] *See, e.g.,* Fitzpatrick v. Bitzer, 427 U.S. 445, 449-50, 456 (1976).

[65] McKeague v. United States, 788 F.2d 755, 758 (Fed. Cir. 1986) (quoting United States V. Chicago, Milwaukee, St. Paul & Pac. R.R., 294 U.S. 499, 511 (1935)).

[66] 60 F.3d 785, 35 U.S.P.Q.2d 1255 (Fed. Cir. 1995).

[67] Graco, Inc. v. Binks Mfg. Co., 60 F.3d 785, 791, 35 U.S.P.Q2d 1255, 1259 (Fed. Cit. 1995).

[68] *Id.* at 791, 35 U.S.P.Q2d 1259.

concluded that the "entire omission of a claim construction analysis from the opinion ... provide[s] an independent basis for remand."[69]

"An appellate court may consider only the record as it was made before the district court."[70] Thus, the basic rule is that an issue or argument not briefed and argued cannot be entertained for the first time on appeal.[71] The Federal Circuit has applied the rule relatively consistently, explaining:

> We have reviewed the briefs and other pleadings filed in the district court and cannot find therein any assertion of this claim by the appellants . . . [who] were obliged to bring it to the attention of the district court, so that the court could consider it. Since the district court discussed the appellants' contentions in some detail, its failure to even mention this argument strongly suggests that the appellants did not raise it in that court . . . . Having in effect waived that claim in the district court, he cannot resurrect it in this court, and we decline to consider it.[72]

The Federal Circuit has clearly and often expressed the rule: "No matter how independent an appellate court's review of an issue may be, it is still no more than that-a review. With a few notable exceptions, such as some jurisdictional matters, appellate courts do not consider a party's new theories, lodged first on appeal."[73] The rule is essential so that each party may have the opportunity to present evidence relevant to each issue raised, to give the district court the opportunity to decide the issue, and to avoid surprise to any party should the appellate court render a decision based on new issues first raised on appeal.

As with most rules, however, there are exceptions. As one exception, the appellate court may resolve an issue presented for the first time on appeal when "the proper resolution is beyond doubt or where injustice might otherwise result."[74] Thus, an argument not timely made to the district court need not be, but within the discretion of the appellant court may be considered by the appellate court.[75] The Federal Circuit has indicated that it *will* consider an issue not presented to the district court, as an exception to the general rule, if

> (i) the issue involves a pure question of law and refusal to consider it would result in a miscarriage of justice; (ii) the proper resolution is beyond any doubt; (iii) the appellant had no opportunity to raise the issue at the district court level; (iv) the issue presents "significant questions of general impact or of great public concern"; or (v) the interest of substantial justice is at stake.[76]

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[69] *Id., 35* U.S.P.Q.2d at 1259-60; *see also* Digital Equip. Corp. v. Emulex Corp., 805 F.2d 380, 383, 231 U.S.P.Q.2d 779, 781-82 (Fed. Cir. 1986) (holding that the district court's failure to comply with FED. R. Civ. P. 52(a) and issue conclusions of law with a statement of supporting reasons, even when issuing a preliminary injunction, requires that the Federal Circuit vacate the consequent decision).

[70] Ballard Med. Prods. v. Wright, 821 F.2d 642, 643, 5 U.S.P.Q.2d 1223,1223 (Fed. Cir. 1987).

[71] Boone v. Chiles, 35 U.S. 177, 208 (1836).

[72] Bockoven v. Marsh, 727 F.2d 1558, 1566 (Fed. Cir. 1984); *see also* Cornetta v. United States, 831 F.2d 1039, 1043 (Fed. Cir. 1987).

[73] Sage Prods., Inc. v. Devon Indus., Inc., 126 F.3d 1420, 1426, 44 U.S.P.Q.2d 1103, 1108 (Fed. Cir. 1997).

[74] Singleton v. Wulff, 428 U.S. 106, 121 (1976).

[75] *Id.* ("The matter of what questions may be taken up and resolved for the first time on appeal is one left primarily to the courts of appeals, to be exercised on the facts of individual cases. We announce no general rule.").

[76] L.E.A. Dynatech, Inc. v. Allina, 49 F.3d 1527, 1531, 33 U.S.P.Q.2d 1839, 1843 (Fed. Cir. 1995) (citing Dean Witter Reynolds, Inc. v. Fernandez, 741 F.2d 355,360-61 (11th Cir. 1984)).

B. The Clearly Erroneous Standard of Review

Federal Rule of Civil Procedure 52(a) governs appellate review of facts in federal civil cases tried to the bench.[77] On its face, Rule 52(a) also applies to findings made by a judge aided by an advisory jury as if there were no jury; the district court need not accept the jury's suggested findings.[78] An appellate court may not set aside trial court findings unless they are "clearly erroneous," a standard which the United States Supreme Court has defined as follows:

> A finding is "clearly erroneous" when although there is evidence to support it, the reviewing court on the entire evidence is left with the definite and firm conviction that a mistake has been committed.... If the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently.[79]

The clear error rule inescapably means that in many cases, the appellate court must affirm findings of fact, although that same court would also have affirmed contrary findings.[80] Under the clear error standard, the appellate court does not ask whether the findings were correct; it asks whether they were clearly wrong. This is a very lenient standard of review.[81]

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[77] FED. R. Civ. P. 52(a) states:

> In all actions tried upon the facts without a jury or with an advisory jury, the court shall find the facts specially and state separately its conclusions of law thereon, and judgment shall be entered pursuant to Rule 58; and in granting or refusing, interlocutory injunctions the court shall similarly set forth the findings of fact and conclusions of law which constitute the grounds of its action. Requests for findings are not necessary for purposes of review. Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, and due regard shall be given to the opportunity of the trial court to judge of the credibility of the witnesses. The findings of a master, to the extent that the court adopts them, shall be considered as the findings of the court. It will be sufficient if the findings of fact and conclusions of law are stated orally and recorded in open court following the close of the evidence or appear in an opinion or memorandum of decision filed by the court. Findings of fact and conclusions of law are unnecessary on decisions of motions under Rule 12 or 56 or any other motion except as provided in subdivision (c) of this rule.

At least one commentator believes that no provision of the Federal Rules of Civil Procedure has been quoted and cited more often that Rule 52(a). *See* CHARLES ALLEN WRIGHT, LAW OF FEDERAL COURTS § 96, at 689 (5th ed. 1994).

[78] FED. R. Civ. P. 52(a).

[79] Anderson v. City of Bessemer City, 470 U.S. 564, 573-74 (1985) (citations omitted). The enduring "conviction of mistake" formulation has its basis in *United States v. United States Gypsum Co., 333* U.S. 364, 395 (1948), and has been consistently followed in subsequent Supreme Court opinions. Every circuit court has adopted the *Gypsum* formula in defining the clearly erroneous standard *of* review. *See, e.g.,* Kingsdown Med. Consultants v. Hollister Inc., 863 F.2d 867, 876, 9 U.S.P.Q2d 1384, 1392 (Fed. Cit. 1988) (en banc). Of course, fact findings bind the Supreme Court as well as the courts of appeals. *See* United States v. Gen. Dynamics Corp., 415 U.S. 486, 508 (1974).

[80] When the district court chooses one of two permissible views of the evidence, the choice between them cannot be clearly erroneous. Miles Labs., Inc. v. Shandon Inc., 997 F.2d 870, 874,27 U.S.P.Q.2d 1123, 1125 (Fed. Cir. 1993); Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1375, 231 U.S.P.Q. 81, 87 (Fed. Cir. 1986) (quoting *Anderson, 470* U.S. at 574).

[81] For example, the Seventh Circuit informed one appellant that, for the trial court's decision to be overturned as clearly erroneous, the decision "must strike us as more than just maybe or probably wrong; it must . . . strike us as

Consequently, an appellant whose case arises in a settled area of the law, and who has lost at trial because the court found that the facts favored the appellee, has little chance to win on appeal. The appellant must convince the appellate court that the findings lack any rational connection to the record or that the vast weight of the evidence renders a finding certainly wrong. Such circumstances are rare.

Like other standards of review, the clear error standard provides variable levels of review.[82] In fact, the flexibility in application of Rule 52 is one of its attributes.[83] For the appellate court to exercise any type of review, of course, the trial tribunal must have expressed its factual findings. Absent express factual findings by the trial tribunal, the appellate court's review may simply consist of a remand with instructions to make such findings.[84] In addition, the actual degree of scrutiny applied under the clear error standard of review depends upon the nature of the evidence in the record. There may be rare exceptions to deferential appellate review of fact-findings for certain types of facts.

Most cases involve a mixture of oral testimony and documentary evidence. In some circumstances, however, the trial court may decide a case entirely on the basis of documents: stipulations, discovery materials, the transcript of a trial before another tribunal, or other paper evidence. An appellate court may more easily find clear error when it has the same documents for decision as were available to the trial tribunal. This different standard may practically exist despite the express requirement in Rule 52(a) that the same "clear error" standard applies in such cases[85] as in cases involving oral testimony. In contrast, the Supreme Court has recognized that greater deference is due under the clearly erroneous standard to findings of the trial tribunal based upon the credibility of witnesses.[86]

1. Insufficient Findings

The Supreme Court indicated in *Pullman-Standard v. Swint,*[87] that if the district court has completely failed to make Rule 52 factual findings on decisive issues, then:

> [T] he usual rule is that there should be a remand for further proceedings to permit the trial court to make the missing findings. . . . Likewise, where findings are infirm because of an erroneous view of the law, a remand is the proper course unless the record permits only one resolution of the factual issue.[88]

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wrong with the force of a five-week-old, unrefrigerated dead fish." Parts & Elec. Motors, Inc. v. Sterling Elec., Inc., 866 F.2d 228, 233 (7th Cir. 1988).

[82] Judge Frank broke down clear error review of fact findings in excruciating detail in *Orvis v. Higgins,* 180 F.2d 537, 539-40 (2d Cit. 1950), delineating five tiers of review for bench trial factual findings, based on the type of evidence considered. This article focuses on fewer tiers.

[83] *See* Cooper, *supra* note 14, at 645 (rule allows flexible application on appeal).

[84] For example, when the trial court adopts a proposed but unaccepted settlement offer as its judgment, it has failed to perform its obligation to determine the case on the basis of the evidence, a clear violation of Rule 52(a). Cheyenne River Sioux Tribe v. United States, 806 F.2d 1046, 1050, 1052 (Fed. Cir. 1986).

[85] *See* Section II.B.3 on documentary evidence below.

[86] Anderson v. City of Bessemer City, 470 U.S. 564, 573 (1985); Bose Corp. v. Consumers Union of United States, Inc., 466 U.S. 485, 500 (1984).

[87] 456 U.S. 273 (1982).

[88] *Id.* at 291-92.

Findings that are missing or legally faulty, such as those made under an incorrect standard, must be distinguished from those found to be clearly erroneous. In the former situation, the trial judge ordinarily should be given a chance to make findings in the first instance because an erroneous view of the law prevented correct fact-finding; the judge never had a real chance to assess the facts. Because the trial court is the appropriate site for an initial resolution, remand is usual. Findings that are clearly erroneous, however, already have gone through the fact-sifting process and come out wrong on their own terms. In such a case, the appellate court may reject or correct those findings on their own terms and reverse without remand.[89]

Following the guidance of the Supreme Court in *Pullman-Standard,* the Federal Circuit will no defer to findings of fact that are insufficient to allow meaningful review.[90] "[Conclusory findings are] entirely inadequate under Rule 52(a) of the Federal Rules of Civil Procedure. It is even impossible to determine whether the court held infringement to be literal or under the doctrine of equivalents . . . . [T]he conclusory factual findings on infringement . . . provide an independent basis for remand."[91] The court remanded the case "because insufficient findings preclude meaningful review."[92] Applying a similar analysis and reaching the same conclusion in another case, the Federal Circuit stated:

> We have a substantial problem in this particular case, however, in light of the terse four-page judgment of the trial court. This judgment lacks any rationale for the court's decisions on the parties' various post-verdict motions. Specifically, with respect to the court's entry of JMOL in favor of Spectramed on all issues of infringement, the trial court offered no explanation as to how it arrived at this decision. One option in such a case, not to be discarded lightly, is to vacate the judgment of the trial court and remand the matter to that court for a full explication of the reasons for the court's rejection of the jury's findings.[93]

Similarly, the district court's failure to comply with Rule 52 (a) and express findings of fact, even when issuing a preliminary injunction, requires the Federal Circuit to vacate the consequent decision or order.[94]

The Federal Circuit has characterized a complete failure to make findings as a "dereliction of duty."[95] Assuming that the district court makes at least some attempt to meet its duty to provide findings of fact, how detailed must those findings of fact be? The ultimate test of the adequacy of such findings is whether they are sufficiently comprehensive to form a basis for the decision. How many and how specific the findings need to be are questions resolved on a case-by-case basis,[96] and may depend on the issue under review.[97] The mere fact that the district court does not include findings on all the evidence does mean that such evidence was not

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[89] Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1565-66, 1 U.S.P.Q.2d 1593, 1595 (Fed. Cit. 1987).

[90] Rule 52(b) allows a party to make a post-judgment motion for findings not made. Counsel should not simply ignore that rule and rely on the appellate court to seek a remand for the purpose of requiring the lower court to make those same findings. *See* Consol. Aluminum Corp. v. Foseco Int'l Ltd., 910 F.2d 804, 814 n.9,15 U.S.P.Q.2d 1481, 1488 n.9 (Fed. Cir. 1990).

[91] Grayco, Inc. v. Binks Mfg. Co., 60 F.3d 785, 791, 35 U.S.P.Q.2d 1255, 1260 (Fed. Cir. 1995).

[92] *Id.*

[93] Baxter Healthcare Corp. v. Spectramed, Inc., 49 F.3d *1575,* 1582, 34 U.S.P.Q.2d 1120, 1125 (Fed. Cir. 1995).

[94] Digital Equip. Corp. v. Emulex Corp., 805 F.2d 380, 383, 231 U.S.P.Q2d 779,18182 (Fed. Cir. 1986).

[95] Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 873, 228 U.S.P.Q. 90, 97 (Fed. Cir. 1985) (quoting Seattle Box Co. v. Indus. Crating & Packing Inc., 756 F.2d 1574, 1578, 225 U.S.P.Q. 357, 360 (Fed. Cir. 1985)).

[96] *Loctite Corp.,* 781 F.2d at 873, 228 U.S.P.Q. at 98.

[97] The Federal Circuit has indicated that there is a greater need for express findings on certain issues, such as obviousness. *Id.*

considered;[98] a judge may have considered evidence even though the evidence was not mentioned in an opinion.[99] Certainly, a district court is not obligated to list, and reject, factors that might have supported a contrary conclusion.[100] Also, oral findings by a district court may be sufficient to indicate the basis of the trial judge's decision, and provide an adequate foundation for appellate review.[101]

The Federal Circuit does recognize a narrow exception to the requirement that the district court make Rule 52 factual findings: when the appellate court can achieve a full understanding without the aid of separate findings.[102] If the trial court has not misapplied the controlling legal standards in its evaluation of the evidence, its ultimate finding may be reviewed in order to conclude the controversy without unnecessary further expenditure of judicial resources, if possible.[103] When there is sufficient record, the relevant facts are not in dispute, no credibility determinations are needed, and it appears that there can be only one acceptable resolution of the issue, a remand is not required.[104]

2. Possible Exception for "Constitutional" Facts

There are rare exceptions to deferential appellate review of fact-findings. Among these exceptions are the constitutional facts which were discussed in *Bose Corp. v. Consumers Union of United States, Inc.*[105] Resolving a conflict between constitutional provisions, the Supreme Court held that Rule 52(a) does not apply to a finding that a disparaging statement about the sound quality of the plaintiffs loudspeakers was made with "actual malice."[106] The actual reach of such exceptions is unclear, and the value of the exceptions outside litigation involving freedom of speech or freedom of the press is uncertain.

3. Documentary Evidence

Until recently, many federal courts applied a much stricter standard of review of findings based on documentary evidence.[107] The standard sometimes approached *de novo* review. These

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[98] N.V. Akzo v. E.I. DuPont de Nemours, 810 F.2d 1148, 1152, 1 U.S.P.Q.2d 1704, 1708 (Fed. Cit. 1987).

[99] Winner Int'l Corp. v. Wolo Mfg. Corp., 905 F.2d 375, 376,15 U.S.P.Q 2d 1076,1077 (Fed. Cit. 1990).

[100] J P. Stevens Co. v. Lex Tex Ltd., 822 F.2d 1047, 1053, 3 U.S.P.Q.2d 1235, 1239 (Fed. Cir. 1987).

[101] Albert v. Kevex Corp., 729 F.2d 757, 762, 221 U.S.P.Q. 202, 206 (Fed. Cir. 1984).

[102] Loctite Corp. v. Ultraseal Ltd., 781 F.2d 861, 872, 228 U.S.P.Q. 90, 97 (Fed. Cir. 1985).

[103] ACS Hosp. Sys., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1578, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984).

[104] Seattle Box Co. v. Indus. Crating & Packing, Inc., 756 F.2d 1574, 1578, 225 U.S.P.Q. 357, 360 (Fed. Cir. 1985).

[105] 466 U.S. 485, 498-511 (1984). The Supreme Court exhaustively discussed constitutional fact-finding in *Bose*.

[106] *Id* at 514.

[107] *See, e.g.,* Orvis v. Higgins, 180 F.2d 537, 539 (2d Cit. 1950) ("If he decides a fact issue on written evidence alone, we are as able as he to determine credibility, and so we may disregard his finding."); Lydle v. United States, 635 F.2d 763, 765, n.1 (6th Cir. 1981) ("This Court is in as good a position as the district court to review a purely documentary record and to arrive at conclusions of mixed law and fact."); Swanson v. Baker Indus., Inc., 615 F.2d 479,483 (8th Cir. 1980) ("Where the construction of a contract rests upon documentation and factual findings involving no issues of credibility, we review the district court's construction free of Fed. R. Civ. P. 52(a)'s `clearly erroneous' standard."); Securities Exch. Comm'n v. Coffey, 493 F.2d 1304, 1311 (5th Cir. 1974), *cert. denied, 420* U.S. 908 (1975) (stating that the major rationale for deferring to district court findings is that the district court is able to observe the demeanor of witnesses but that issue is lacking with documentary evidence). *Butsee Anderson* v. City

courts reasoned that no credibility concerns were involved with documentary evidence, and believed themselves to be in as good a position as the trial court to judge such evidence.[108] Based on the institutional factors that affect the allocation of responsibility for the finding of facts between trial and appellate courts, why should the appellate court defer to the trial court when it can read and reach a decision based upon documents as easily as can the trial court?[109] The response is that factors other than institutional factors support deference to findings based on a paper record."[110]

In any event, the Court in *Anderson v. City of Bessemer City,*[111] and the amendments to Rule 52(a), adopted a few weeks after that case came down in August of 1985, rejected the stricter standard of review. Rule 52 was amended to add the emphasized clause as follows: "Findings of fact, whether based on oral or documentary evidence, shall not be set aside unless clearly erroneous, *and due regard shall be given to the opportunity of the trial court to judge the credibility of the witnesses.*[112] The Supreme Court unequivocally stated that the clearly erroneous standard applies "even when the district court's findings do not rest on credibility determinations, but are based instead on physical or documentary evidence or inferences from other facts."[113] Moreover, the Court declined to characterize the phrase added by amendment as a mere justification for the clearly erroneous rule. Most appellate courts now follow the language of Rule 52 (a) strictly, and state that they apply the Rule indiscriminately, regardless of the documentary source for findings of fact.[114] The Federal Circuit has indicated its support of that approach, stating that an appellate court is not in the same position as the trial court to judge the true significance of documentary and physical exhibits that are introduced through live witnesses or about which live witnesses testify.[115] Ostensibly, no variation, perhaps even in application, is now permitted for documentary-based findings.

Despite the Supreme Court's statements and the amendments to Rule 52(a), courts of appeal may tend to review decisions based upon documentary evidence with more care than decisions based upon other forms of evidence.[116] At least to a certain extent, some judges may

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of Bessemer City, 470 U.S. 564, 573-74 (1985) (adopting the clearly erroneous standard of review for findings based on documentary evidence).

[108] In *Orvis v. Higgins,* the Second Circuit ruled that, when a trial judge "decides a fact issue on written evidence alone, we are as able as he to determine credibility, and so we may disregard his finding." 180 F.2d 537, 539 (2d Cir. 1950) (Frank, J.) (footnote omitted).

[109] The Federal Circuit has not expressly decided the question of deference in the context of purely documentary evidence. In *Gardner v. TEC Systems, Inc.,* the court refused to decide whether to adopt an exception to the clearly erroneous rule where all of the evidence is documentary. 725 F.2d 1338, 1347, 220 U.S.P.Q. 777, 784 (Fed. Cir. 1984).

[110] Among these reasons are that a strict standard of review would: (1) reduce the number of appeals taken, thereby easing appellate burden and helping the parties; (2) enhance the quality of district court findings by increasing prestige for the trial court and attracting qualified people to the bench; and (3) force the parties to focus their case at the trial court level, because they will not have a significant second chance to win. *See* Cooper, *supra* note 14, at 651-54.

[111] 470 U.S. 564 (1985).

[112] FED. R. Civ. P. 52(a) (emphasis added).

[113] *Anderson, 470* U.S. at 574.

[114] *See, e.g.,* Tyler Refrigeration v. Kysor Indus. Corp., 777 F.2d 687, 690-91, 227 U.S.P.Q. 845, 847-48 (Fed. Cir. 1985).

[115] Preemption Devices, Inc. v. Minnesota Mining & Mfg. Co., 732 F.2d 903, 905, 221 U.S.P.Q. 841, 842 (Fed. Cir. 1984).

[116] For a collection of court of appeals decisions reflecting the view that the clearly erroneous standard of review applies differently to findings based on documentary or otherwise undisputed paper evidence, see 9A

continue to take the source of findings into consideration when applying the Rule, even if they do not say so explicitly.[117] Clear error may be more easily found when the entire case came to trial in undisputed documentary form. It has also been suggested that a more searching review is appropriate when there is a conflict between testimonial and documentary evidence.[118]

4. Credibility Findings

In contrast to determinations made on a paper record, credibility determinations are reviewed under an even more deferential level of clearly erroneous review. In *Anderson,* the Supreme Court stated:

> When findings are based on determinations regarding the credibility of witnesses, Rule 52(a) demands even greater deference to the trial court's findings . . . . When a trial judge's finding is based on his decision to credit the testimony of one of two or more witnesses, each of whom has told a coherent and facially plausible story that is not contradicted by extrinsic evidence, that finding, if not internally inconsistent, can virtually never be clear error.[119]

The Supreme Court expressly recognized the different levels of review under the clearly erroneous standard, applied to documentary versus credibility determinations:

> The requirement that special deference be given to a trial judge's credibility determinations is itself a recognition of the broader proposition that the presumption of correctness that attaches to factual findings is stronger in some cases than in others. The same "clearly erroneous" standard applies to findings based on documentary evidence as to those based entirely on oral testimony . . . but the presumption has lesser force in the former situation than in the latter.120

The Federal Circuit has acknowledged that, "The trial court is in the best position to weigh evidence that involves credibility determinations, and that such determinations should be accorded substantial deference on appellate review."[121] Indeed, the Federal Circuit has gone so far as to say, often, that credibility determinations are largely *unreviewable by* the appellate court.[122] The trier of fact, not the appellate judge, is able to evaluate the demeanor of witnesses.

CHARLES ALLEN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE & PROCEDURE § 2587 (3d ed. 1995).

[117] Indeed, some commentators suggest that flexibility may be a proper application even of the amended Rule 52(a). *See, e.g.,* CHILDRESS & DAVIS, *supra* note 4, § 2.09, at 2-65 (citing additional commentators who share that view).

[118] United States v. United States Gypsum Co., 333 U.S. 364, 395-96 (1948). When the testimony of witnesses is elicited by "extremely leading [questions and] is in conflict with contemporaneous documents we can give it little weight . . . [d]espite the opportunity of the trial court to appraise the credibility of the witnesses, we cannot . . . rule otherwise than that Finding 118 is clearly erroneous." *Id.* at 396.

[119] Anderson v. City of Bessemer City, 470 U.S. 564, 575 (1985); *see also* Bose Corp. v. Consumers Union of United States, Inc., 466 U.S. 485, 512 (1984) (stating that disbelieved testimony of a witness may be properly disregarded); Amadeo v. Zant, 486 U.S. 214, 227 (1988) (noting that it is within the district court's discretion as the fact-finder to credit statements of certain witnesses over the self-interested testimony of a party's attorney).

[120] *Bose,* 466 U.S. at 500 (1984) (citation omitted).

[121] Goodyear Tire & Rubber Co. v. Hercules Tire & Rubber Co., 162 F.2d 1113, 1122, 48 U.S.P.Q.2d 1767, 1772 (Fed. Cir. 1998).

[122] Refac Int'l, Ltd. v. Lotus Dev. Corp., 81 F.3d 1576, 1582,38 U.S.P.Q.2d 1665, 1670 (Fed. Cir. 1996) ("The district court is best suited to make credibility determinations and we accord such determinations deference."); Para-Ordinance Mfg., Inc. v. SGS Imps. Int'l, Inc., 73 F.3d 1085, 1091, 37 U.S.P.Q.2d 1237, 1241 (Fed. Cir. 1995)

Accordingly, Rule 52(a) requires that the appellate court give "due regard . . . to the opportunity of the trial court to judge of the credibility of witnesses."[123] It is difficult, under this standard, to show clear error in a trial tribunal's decision to believe or disbelieve a single witness. It is nearly impossible to show clear error in a choice between two or more witnesses whose testimony is at all plausible.[124]

While it is difficult to hold findings based upon testimony to be clearly erroneous, appellate courts do have the power to overrule even credibility calls of a district judge if clearly erroneous. The deference given to findings based upon testimony is less restrictive than that accorded jury determinations. Although Rule 52(a) itself makes credibility a *due consideration,* credibility is not conclusive and contradictory evidence may make a finding reversible.[125] Thus, for example, a district court cannot rely solely on a credibility determination to find a fact directly opposite to uncontroverted testimony.[126]

Once a finding is found to be clearly erroneous, the appellate court may find the correct facts and reverse, assuming the record is adequate to permit meaningful review[127]. This approach allows the appellate court to decide the case without remand. Even erroneous findings may not justify reversal, however, if the judgment can be supported otherwise. The court may simply apply the rule of harmless error discussed above.

C. Review for Substantial Evidence

The role of the trial court in a patent jury trial is not significantly different from its role in a patent bench trial with respect to legal issues. The Federal Circuit applies the same standard of review, therefore, to legal conclusions on issues such as patent validity. Thus, the Federal Circuit's duty to be satisfied that the law has been correctly applied to the facts is the same regardless of whether a judge or a jury determines those facts.[128]

("This court gives great deference to the district court's decisions regarding credibility of witnesses."); Hambsch v. Dep't of the Treasury, 796 F.2d 430, 436 (Fed. Cir. 1986) (stating that "[t]o the extent that the petitioner's claim is based on a challenge to the presiding official's credibility determinations, we reiterate our previous holdings that these determinations are virtually unreviewable").

[123] 123 FED. R. Civ. P. 52(a).

[124] A1-SiteCorp. v. VSI Int'l, Inc., 174 F.3d 1308, 1317, 50 U.S.P.Q.2d 1161, 1165 (Fed. Cit. 1999) ("As the finder of fact, the jury receives deference for its function of weighing witness demeanor, credibility, and meaning."). Thus, when the evidence consists solely of competing expert opinions, the Federal Circuit has indicated that it has no basis for overturning the district court's credibility determinations. *See* Amstar Corp. v. Envirotech Corp., 823 F.2d 1538, 1545, 3 U.S.P.Q.2d 1412, 1417 (Fed. Cir. 1987).

[125] *See Anderson,* 470 U.S. at 575 ("Documents or objective evidence may contradict the witness' story; or the story itself may be so internally inconsistent or implausible on its face that a reasonable factfinder would not credit it."); United States v. United States Gypsum Co., 333 U.S. 364, 395-96 (1948) (rejecting testimony in conflict with documentary evidence); Cooper, *supra* note 14, at 650-51 (wondering whether the opportunity to evaluate the demeanor of witnesses at trial actually enhances the fact-finding process because the outward signs of lying are usually extraordinarily subtle).

[126] Moore v. Chesapeake & Ohio Ry. Co., 340 U.S. 573, 576-77 (1951); Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1375, 231 U.S.P.Q81, 87 (Fed. Cir. 1986).

[127] *See, e.g., Gypsum,* 333 U.S. at 395. When a district court or board fails to make findings of fact, the Federal Circuit can make such findings when: (1) the facts are undisputed, or (2) the facts are disputed but as a matter of law only one of the factual findings is permissible. Black & Decker, Inc. v. Hoover Serv. Ctr., 886 F.2d 1285, 1290, 12 U.S.P.Q.2d 1250, 1254 (Fed. Cit. 1989); B.D. Click Co. v. United States, 614 F.2d 748, 755 (Ct. Cl. 1980).

[128] "When a legal issue is submitted to a jury without an objection, we treat the jury's verdict on the legal issue as a resolution of all genuinely disputed underlying factual issues in favor of the verdict winner." Lough v. Brunswick Corp., 86 F.3d 1113, 1119, 39 U.S.P.Q.2d 1100, 1103 (Fed. Cir. 1996).

The standard of review applied by the appellate court to factual issues is affected, however, by the different type of trial. Although the clearly erroneous standard of review applies to bench trial findings of fact, Rule 52 does not prescribe the standard of review for jury findings. Findings of fact by the jury are more difficult to set aside. They are reviewed under the substantial evidence test. This discrepancy is not unique to patent law.[129] The foundation for jury trials in civil litigation is, of course, the Seventh Amendment to the Constitution.[130] Appellate challenges to jury findings of fact rarely succeed, because the Seventh Amendment proscribes review of such findings even more than Rule 52 restricts review of trial court findings of fact.

Compare the clearly erroneous standard applied to review fact-findings by the court and the substantial evidence standard applied to review factfindings by a jury. The clearly erroneous test requires less deference to the trial tribunal, and the appellate court need not affirm a finding under that standard if supported by substantial evidence as it would if a jury had found the fact. Findings can be clearly erroneous even if supported by substantial evidence,[131] but findings unsupported by substantial evidence are clearly erroneous. In practice, of course, the two tests often reach the same result (affirming) because both are fairly deferential. Nevertheless, important differences remain. The jury test is more deferential-based on the policy judgment that bench trial findings are less sacrosanct on review than are jury verdicts.

Substantial evidence is such relevant evidence taken from the record as a whole as might be accepted by a reasonable mind as adequate to support the finding under review.[132] That a contrary determination would be sustained if it were the decision under review does not mean that the determination must be overturned. Both decisions may be reasonable based on the entirety of the record, a concept some litigants find difficult to accept. The Federal Circuit may not substitute its judgment for the final determination of the decision maker on the ground that the court believes a contrary determination *is more reasonable* than the determination under review.[133]

As a practical matter, the Federal Circuit "look[s] at which evidence . . . supports the [jury's factfinding] and then review[s] the entire record to determine whether factors such as 'exaggeration, inherent improbability, self-contradiction, omissions in a purportedly complete account, imprecision, and errors' detract from the weight of that particular evidence."[134] The

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[129] *See, e.g.,* United States v. Grimaldo, 214 F.3d 967, 975 (8th Cir.), *cert. denied, 531* U.S. 939 (2000) (stating that the court must view the evidence in a criminal conviction to determine if there is substantial evidence to convince a reasonable jury of a defendant's guilt beyond a reasonable doubt, not evidence which rules out all reasonable hypotheses of innocence); United States v. McMurray, 34 F.3d 1405, 1409 (8th Cir. 1994) (stating that the court will disturb the district court's findings of fact in a criminal law proceeding only if it finds them to be clearly erroneous).

[130] "In Suits at common law, where the value in controversy shall exceed twenty dollars, the right of trial by jury shall be preserved, and no fact tried by a jury, shall be otherwise reexamined in any Court of the United States, than according to the rules of the common law." U.S. CONST. amend. VII.

[131] Cooper, *supra* note 14, at 650 (discussing and explaining the differences in deference to juries and judges: "[j]udge findings are accorded somewhat less deference than jury findings").

[132] Consolidated Edison Co. v. NLRB, 305 U.S. 197, 229 (1938) (defining substantial evidence as "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion"); Tol-O-Matic, Inc. v. Proma Produckt-und Mktg. Gesellschaft, 945 F.2d 1546, 1549, 20 U.S.P.Q.2d 1332, 1335 (Fed. Cir. 1991).

[133] Fischer & Porter Co. v. United States Int'l Trade Comm'n, 831 F.2d 1574, 1577, 4 U.S.P.Q2d 1700, 1701-02 (Fed. Cir. 1987).

[134] Dixon v. Dep't of Transp. Fed. Aviation Admin., 8 F.3d 798, 804 (Fed. Cir. 1993) (quoting Spurlock v. Dep't of justice, 894 F.2d 1328, 1330 (Fed. Cir. 1990)).

Federal Circuit will reverse only if such factors so detract from the weight of the evidence, or the evidence is so sparse, that a reasonable fact finder would not find the fact proved.[135] As might be expected, the jury's assessment of the character and credibility of witnesses is entitled to especially great deference.[136]

The substantial evidence nomenclature is misleading in the sense that it implies a quantitative amount of evidence. The dictionary definition of "substantial" is "of ample or considerable amount, quantity, size, etc."[137] This is not the legal definition. Rather, legally, the standard of review requires evidence minimally sufficient, more than a mere scintilla, such that "a reasonable mind might accept the evidence as adequate to support a conclusion." [138]It may be helpful to read substantial evidence non-numerically, as meaning "evidence of substance."[139]

D. Review for Abuse of Discretion

Abuse of discretion is a phrase that sounds worse than it really is.[140] When an appellate court reviews a decision for abuse of discretion, it will be predisposed to affirm the decision.[141] The appellant faces a difficult task in securing a reversal because the abuse of discretion standard of review reflects an appellate judgment that some decisions are best left to the trial tribunal.[142] On many matters, the trial tribunal has a range of choice in deciding an issue. The appellate court will not disturb its choice as long as the choice is within the predetermined range, and is not influenced by any mistake of law or erroneous findings of fact. Thus, for equitable issues that come before the Federal Circuit, like injunctions, inequitable conduct, multiple damages, and attorney fees, the standard of appellate review is abuse of discretion. "At least where the ruling is essentially a judgment call rather than derivative of a legal or factual decision, it gets great deference."[143]

A ruling on a discretionary matter involving admission of evidence, discovery, or other trial management issues is rarely reversed.[144] The appellate court's deference to the trial tribunal's decisions in these areas recognizes the tribunal's superior knowledge of the issues, the record, the proceedings, and the people. Such deference also recognizes the variety of cases in which such decisions arise, making legal rules difficult or impossible to formulate. Finally,

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[135] ROBERT L. HARMON, PATENTS & THE FEDERAL CIRCUIT § 17.1(6)(ii), at 864 (4th ed. 1998).

[136] Baxter Healthcare Corp. v. Spectramed, Inc., 49 F.3d 1575, 1584, 34 U.S.P.Q.2d 1120, 1127 (Fed. Cir. 1995) ("[T]he persons accused of inequitable conduct actually testified as witnesses, and the jury's assessment of their character and credibility is entitled to great deference.") (quoting Modine Mfg. Co. v. Allen Group, Inc., 917 F.2d 538, 542, 16 U.S.P.Q.2d 1622, 1625 (Fed. Cir. 1990)).

[137] RANDOM HOUSE WEBSTER'S UNABRIDGED DICTIONARY 1897 (2d ed. 1999).

[138] Pierce v. Underwood, 487 U.S. 552, 565 (1988).

[139] CHILDRESS & DAMS, *supra* note 4, § 3.04, at 3-47.

[140] *In re* Josephson, 218 F.2d 174, 182 (1st Cir. 1954).

[141] Before it will find an abuse of discretion, the appellate court may have to determine that the trial tribunal has nearly taken leave of its senses. Datascope Corp. v. SMEC, Inc., 879 F.2d 820, 828, 11 U.S.P.Q.2d 1321, 1326 (Fed. Cir. 1989) (quoting PPG Indust. v. Celanese Polymer Specialties Co., 840 F.2d 1565, 1572, 6 U.P.S.Q 2d 1010, 1016 (Fed. Cir. 1988)); *see* Henry J. Friendly, *Indiscretion About Discretion,* 31 EMORY L.J. 747, 763 (1982).

[142] J P. Stevens Co. v. LexTex Ltd., 822 F.2d 1047, 1051, 3 U.S.P.Q.2d 1235, 1239 (Fed. Cir. 1987) (noting that the lower court has a range of choice, and that its decision will not be disturbed as long as it stays within that range); PPG Indus., Inc. v. Celanese Polymer Specialties Co., 840 F.2d 1565, 1570-72, 6 U.S.P.Q 2d 1010, 1015-16 (Fed. Cir. 1988) (Bissell, J., additional views) (stating that appellate review of discretionary rulings should be limited).

[143] Michel, *supra* note 19, at 4.

[144] *See, e.g., ATD* Corp. v. Lydall, Inc., 159 F3d 534, 544, 48 U.S.P.Q2d 1321, 1328 (Fed. Cir.1998); Abbott Labs. v. Brennan, 952 F.2d 1346,1350, 21 U.S.P.Q 2d 1192,1196 (Fed. Cir. 1992).

deference to decisions on subjects such as discovery represents application of the principle that trials must be fair, but need not be perfect, as an incorrect decision on a discovery matter rarely affects the basic fairness of a trial.

Just as for *de novo* and clearly erroneous review, review for abuse of discretion also has several identifiable levels.[145] Again, the intensity of the review will depend on how the appellate advocate characterizes what the trial tribunal did and, therefore, what the appellate court is asked to review. The three levels of review for abuse of discretion ask whether the trial tribunal conformed with enunciated standards in exercising its discretion, based its decision on a legal error or on an erroneous factual underpinning, or failed to explain the reasons for its decision. In addition, the degree of scrutiny applied by the Federal Circuit may depend, at least for certain issues, on the severity of the final result ordered by the trial tribunal following exercise of its discretion.

1. Conformance with Standards

The trial tribunal does not have unlimited leeway when exercising its discretion. The exercise of discretion must conform to standards announced by the Federal Circuit, and the appellate court will review the decision carefully to assure that the trial tribunal applied those standards. If the trial tribunal considers impermissible factors or fails to consider factors that it should have evaluated, the Federal Circuit may reverse. In this category are cases seeking a preliminary injunction, a declaratory judgment, or an exercise of supplemental jurisdiction.

Consider the trial tribunal's decision to grant or deny a preliminary injunction motion as an example. Whether a preliminary injunction should issue turns on four factors: (1) the movant's reasonable likelihood of success on the merits; (2) the irreparable harm the movant will suffer if preliminary relief is not granted; (3) the balance of hardships tipping in its favor; and (4) the adverse impact on the public interest.[146] The trial tribunal may not ignore any of the factors en route to its determination; otherwise, it may have failed its obligation to consider the requisite factors and risks reversal.[147] Certainly, a trial tribunal must consider all four factors before granting a preliminary injunction in order to determine whether the moving party has carried its burden to establish each of the four factors. Although it is preferable that the trial tribunal always make findings regarding each of the four factors that weigh in the balance concerning whether to deny a preliminary injunction, the tribunal is not required to articulate findings on the third and

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[145] "Abuse of discretion is a flexible term whose application can vary broadly. . . . When judicial discretion is exercised to restrain commercial communications, it is subject to special scrutiny." Mikohn Gaming Corp. v. Acres Gaming, Inc., 165 F.3d 891, 895,49 U.S.P.Q 2d 1308, 1310-11 (Fed. Cir. 1998). Professor Maurice Rosenberg discerns at least four levels of discretion in action. *See* Maurice Rosenberg, *Appellate Review of Trial Court Discretion, in 79* FEDERAL RULES DECISIONS 173, 173-75 (1979). Judge Friendly began his own study of judicial discretion wanting to apply one definition across the board, but soon concluded that "the differences are not only defensible but essential. Some cases call for application of the abuse of discretion standard in a `broad' sense and others in a `narrow' one." Friendly, *supra* note 141, at 763-64.

[146] Thus, the Federal Circuit applies the four-factor test, that is applied in most jurisdictions, to determine whether a preliminary injunction should issue. *See, e.g.,* Smith Int'l, Inc. v. Hughes Tool Co., 718 F.2d *1573,* 1578-79, 219 U.S.P.Q. 686, 690-91 (Fed. Cir. 1983); Roper Corp. v. Litton Sys., Inc., 757 F.2d 1266, 1269, 225 U.S.P.Q. 345, 346 (Fed. Cir. 1985); Payless Shoesource, Inc. v. Reebok Int'l Ltd., 998 F.2d 985, 991, 27 U.S.P.Q.2d 1516, 1521 (Fed. Cir. 1993).

[147] *See, e.g.,* Chrysler Motors Corp. v. Auto Body Panels of Ohio, Inc., 908 F.2d 951, 954, 15 U.S.P.Q.2d 1469,1472 (Fed. Cir. 1990); Illinois Tool Works, Inc. v. Grip-Pak, Inc., 725 F. Supp. 951, 952, 13 U.S.P.Q.2d 1463, 1464 (N.D. 111. 1989).

fourth factors when the tribunal denies a preliminary injunction because a party fails to establish either of the first two critical factors, which the moving party is required to prove.[148]

How carefully must the trial tribunal consider each of the preliminary injunction factors? The grant or denial of a preliminary injunction motion is within the sound discretion of the trial tribunal.[149] Again, however, the scrutiny applied by the Federal Circuit appears to depend upon whether it is reviewing the grant or denial of the motion. The Federal Circuit has stated that it will reverse a trial tribunal's issuance of a preliminary injunction unless the tribunal makes comprehensive findings in support of the injunction.[150] The court seems to treat the denial of a preliminary injunction motion less strictly, however, as shown by the recent case of *Jeneric/Pentron, Inc. v. Dillon Co.*[151] In that case, the Federal Circuit affirmed the district court's denial of a preliminary injunction motion in a patent infringement case, "under the highly deferential standard of review applicable to a preliminary injunction," even though the district court did not even conduct an equivalents analysis.[152]

The results also may slant the degree of scrutiny applied by the Federal Circuit in other issues to which the abuse of discretion standard of review applies. The trial court's decision on a discovery matter is reviewable only to determine whether the court abused its discretion.[153] I The decision whether to impose discovery sanctions also rests within the sound discretion of the trial court, and is reviewed under the abuse of discretion standard. Such discretion is not unfettered, however, especially if the *de facto* result of sanctions imposed is dismissal.[154]

The Federal Circuit strives to provide guidance on how the district court should exercise its discretion on the issues reviewed under the abuse of discretion standard. For the equitable defense of laches, for example, which is committed to the sound discretion of the district court, the Federal Circuit discussed in *A. C. Aukerman Co. v. R.L. Chaides Construction Co.,*[155] the factors that a district court must consider in exercising its discretion.[156] The Federal Circuit summarized those factors for the district courts: "Thus, for laches, the length of delay, the seriousness of prejudice, the reasonableness of excuses, and the defendant's conduct or culpability must be weighed to determine whether the patentee dealt unfairly with the alleged infringer by not promptly bringing suit."[157] Given such guidance, if a district court fails to consider these factors, the Federal Circuit may reverse.

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[148] Reebok Int'l Ltd. v. J. Baker, Inc., 32 F.3d 1552, 1554, 31 U.S.P.Q.2d 1781, 1782 (Fed. Cit. 1994) (affirming denial of preliminary injunction when district court found only that the moving party failed to establish irreparable harm).

[149] *See* 35 U.S.C. § 283 (1994 & Supp. 11*996); see also* Ortho Pharm. Corp. v. Smith, 959 F.2d 936, 945, 22 U.S.P.Q.2d 1119, 1127 (Fed. Cit. 1992); H.H. Robertson Co. v. United Steel Deck, Inc., 820 F.2d 384, 387, 2 U.S.P.Q.2d 1926, 1927 (Fed. Cit. 1987).

[150] *See, e.g.,* Conair Group Inc. v. AutomatikApparate-Maschinenbau, 944 F.2d 862, 866, 20 U.S.P.Q2d 1067, 1070 (Fed. Cir. 1991).

[151] *205* F.3d 1377, 54 U.S.P.Q.2d 1086 (Fed. Cir. 2000).

[152] *Id.* at 1384, 54 U.S.P.Q 2d at 1092.

[153] Adkins v. United States, 816 F.2d 1580, 1581-82 (Fed. Cit. 1987) (citing National Hockey League v. Metro. Hockey Club, Inc., 427 U.S. 639, 642 (1976)).

[154] Ingalls Shipbuilding, Inc. v. United States, 857 F.2d 1448,1451 (Fed. Cir. 1988).

[155] 960 F.2d 1020, 22 U.S.P.Q.2d 1321 (Fed. Cir. 1992) (en banc).

[156] *Id* at 1032, 22 U.S.P.Q.2d at 1327.

[157] *Id.* at 1034, 22 U.S.P.Q.2d at 1329.

2. Legal Error/Erroneous Factual Underpinning

One reason why almost all exercises of discretion may actually get meaningful appellate review is that a discretionary judgment often has legal or factual components.[158] Legal error may be embedded in an apparently discretionary decision, for example, when the trial tribunal fails to recognize that an issue is discretionary and wrongly believes that it is bound by a rule of law. Review of a decision to grant an injunction provides another example of a discretionary judgment that has legal components.[159] Although the standard of review for the issuance and scope of an injunction is abuse of discretion, whether the terms of the injunction fulfill the specificity required by Federal Rule of Civil Procedure 65(d) is a question of law that is reviewed *de novo.*[160]

In *High Tech Medical Instrumentation, Inc. v. New Image Industries, Inc.,*[161] the district court granted a patent holder's motion for a preliminary injunction in a patent infringement suit. The Federal Circuit reversed, concluding "that the district court committed legal errors in its analysis of the issues of likelihood of success and irreparable harm."[162] The appellate court thoroughly and critically reviewed the district court's analysis.

Review of a decision to award attorney fees provides an example of a discretionary) judgment that has factual components. A finding by the district court that a case is exceptional under 35 U.S.C. § 285 (1994) is a factual determination, whereas the decision to award attorney fees based on that finding is discretionary. One factor that may warrant finding a case exceptional is willful infringement.

> It thus appears that the court's conclusion that Binks [the defendant] willfully infringed also served as the basis for the finding that the case was exceptional. The Findings of Fact made by the court do not provide any other basis for its ruling. We have, however, reversed the court's finding of willful infringement. As such, the court's finding that this case was exceptional must also be reversed, since the court provided no other factual findings to support the award. The court's award of attorney's fees and expenses is therefore reversed.[163]

Therefore, review under the abuse of discretion standard may become either *de novo* review or a more intensive review of fact-finding. The goal of the appellant is, of course, to avoid a deferential abuse of discretion standard. The appellant may successfully do so by finding an underlying error and arguing for a more intensive review.

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[158] Glaverbel Societe Anonyme & Fosbel, Inc. v. Northlake Marketing & Supply, Inc., 45 F.3d 1550, 1557, 33 U.S.P.Q 2d 1496, 1500 (Fed. Cit. 1995) ("The determination of the issue of inequitable conduct . . . is within the district court's discretion . . . . Thus the district court's ruling on the issue of inequitable conduct will be affirmed unless it was based on a clearly erroneous finding of fact or a misinterpretation or misapplication of law, or manifested a clear error of judgment." (citations omitted)); A.C. Aukerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020, 1039, 22 U.S.P.Q.2d 1321, 1333 (Fed. Cir. 1992) (en banc) ("An appellate court, however, may set aside a discretionary decision if the decision rests on an erroneous interpretation of the law or on clearly erroneous factual underpinnings. If such error is absent, the determination can be overturned only if the trial court's decision represents an unreasonable judgment in weighing relevant factors." (citations omitted)).

[159] Signtech USA Ltd. v. Vutek Inc., 174 F.3d 1352, 1356, 50 U.S.P.Q.2d 1372, 1374 (Fed. Cit. 1999).

[160] *Id.*

[161] 49 F.3d 1551, 33 U.S.P.Q.2d 2005 (Fed. Cir. 1995).

[162] *Id* at 1558, 33 U.S.P.Q.2d at 2010.

[163] Graco, Inc. v. Binks Mfg. Co., 60 F.3d 785, 795, 35 U.S.P.Q.2d 1255, 1263 (Fed. Cir. 1995).

3. Explanation

The Federal Circuit is willing to scrutinize the trial tribunal's decision for reasons to support its exercise of discretion.[164] Stated negatively, the Federal Circuit will not tolerate an exercise of discretion when the trial tribunal fails to explain its reasons. Findings adequate to permit meaningful review of the trial court's exercise of discretion are essential.[165] The Federal Circuit has an institutional interest in reviewability that demands articulation of the trial tribunal's reasons. Absent reasons on the record, the Federal Circuit has no basis for its review. Insistence on detailed fact-findings, for example, may help to transfer substantial portions of the institutional responsibility for a *correct* decision to the court of appeals—regardless of the abuse of discretion category for the standard of review. The Federal Circuit has said, for example, that denial of relief without any justifying reason is not an exercise of discretion; it is an abuse of discretion.[166]

Thus, the trial tribunal must provide reasons to support its exercise of discretion. How detailed and thorough must those reasons be? The answer to that question is uncertain. The Supreme Court's answer may be that a somewhat less than detailed explanation is acceptable, but there at least needs to be some kind of explanation from the court.

In *Cooter & Gell v. Hartmarx Corp.,*[167] the Supreme Court held that, although a determination of sanctions under Federal Rule of Civil Procedure 11 involves both factual and legal issues, all aspects of the Rule 11 determination are reviewed for an abuse of discretion.[168] That deferential standard is appropriate, the Court held, because "the district court is better situated than the court of appeals to marshal the pertinent facts and apply the fact-dependent legal standard mandated by Rule 11."[169] The Court also noted that sanctions are often sought in cases in which they are manifestly unwarranted, and it would impose an undue burden on district courts to require a detailed explanation for the denial of sanctions in every case. When the requesting party makes a strong showing that Rule 11 violations may have occurred, however, the district court should provide some explanation for disregarding the proffered showing.

The Federal Circuit has answered the question of how detailed and thorough the trial tribunal's reasons must be to support its exercise of discretion with a similar, and perhaps appropriate, lack of precision. The appellate court has required an adequate explanation for an exercise of discretion. For example, in *S. Bravo Systems, Inc. v. Containment Technologies Corp.,*[170] the Federal Circuit held that a district court abused its discretion by denying a party's

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[164] *See, e.g.,* Townsend v. Consulting Corp., 929 F.2d 1358, 1366 (9th Cir. 1990) ("We must know to what we defer; when we are not certain of the district court's reasoning, or when we cannot discern whether the district court considered the relevant factors, we must remand."). Although the Federal Circuit will try to discern from the trial court's opinion the basis for its decision, such discernment cannot be made from "a naked phrase for which no basis is set forth." Fromson v. Western Litho Plate & Supp. Co., 853 F.2d 1568, 1570, 7 U.S.P.Q.2d 1606, 1608 (Fed. Cir. 1988).

[165] *See, e.g.,* S.C. Johnson & Sons, Inc. v. Carter-Wallace, Inc., 781 F.2d 198, 201, 228 U.S.P.Q. 367, 369 (Fed. Cir. 1986).

[166] Kalman v. Berlyn Corp., 914 F.2d 1473, 1480, 16 U.S.P.Q.2d 1093, 1098 (Fed. Cir. 1990) (quoting Ondis v. Barrows, 538 F.2d 904, 909 (1st Cir. 1976)).

[167] 496 U.S. 384 (1990).

[168] *Id.* at 405.

[169] *Id.* at 402.

[170] 96 F.3d 1372, 40 U.S.P.Q.2d 1140 (Fed. Cir. 1996).

Rule 11 motion without adequate explanation.[171] Consequently, the Federal Circuit remanded the case to the district court for further consideration of the motion.[172]

The *S. Bravo Systems, Inc.* holding raises another important point. A victory in securing a reversal from the Federal Circuit on the basis that the trial tribunal failed to explain its exercise of discretion may prove hollow. The usual result will be a remand to the trial tribunal for a statement of its reasons, which is what occurred. In *Transmatic, Inc. v. Gulton Industries, Inc.,*[173] *the* Federal Circuit held that the district court "failed to support its damage award [which is reviewed under the abuse of discretion standard] with sufficiently comprehensive factual findings pursuant to Rule 52(a) of the Federal Rules of Civil Procedure."[174] Accordingly, the appellate court vacated the district court's damage award and remanded for the district court to make further factual findings and, if appropriate, to reconsider the amount of the award.[175]

III. Why Is It Never Black and White?

A. Mixed Questions of Law and Fact

Questions of law receive strict, non-deferential, *de novo* appellate review; questions of fact receive the more deferential clearly erroneous (judge factfinding) or substantial evidence (jury fact-finding) standards of review. Thus, the type of issue under review, law versus fact, helps to determine the standard of review. Implicit in selecting a standard of review is a crucial policy decision: Whether the trial court, that deals with questions of fact, or the appellate court, that deals with questions of law, is better suited to decide a particular issue in a case.

At first blush, the determination of what is fact and what is law appears easy. Generally, facts are those findings that "respond to inquiries about who, when, what, and where."[176] Justice Brennan offered more generally that questions of fact are those for which resolution is "based ultimately on the application of the fact-finding tribunal's experience with the mainsprings of human conduct."[177] On the other hand, "Declarations of law are fact-free general principles that are applicable to all, or at least to many, disputes and not simply to the one *sub judice.*"[178] Thus, "law" is a statement of a general principle or rule, made in advance of a case, awaiting application to particular facts that may arise. Facts are case-specific.

The distinction between law and fact for purposes of identifying the standard of review is often a difficult line to draw.[179] In part, this is because the line "varies according to the nature of the substantive law at issue."[180] More fundamentally, many believe that the distinction blurs

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[171] *Id.* at 1376, 40 U.S.P.Q2d at 1143.

[172] *Id.* at 1373, 40 U.S.P.Q.2d at 1141.

[173] 53 F.3d 1270, 35 U.S.P.Q.2d 1035 (Fed. Cir. 1995).

[174] *Id* at 1275, 35 U.S.P.Q.2d at 1039.

[175] *Id* at 1272, *35* U.S.P.Q.2d at 1037.

[176] Monaghan, *supra* note 23, at 235.

[177] Comm'r v. Duberstein, 363 U.S. 278, 289 (1960).

[178] Martin B. Louis, *Allocating Adjudicative Decision Making Authority Between the Trial and Appellate Levels: A Unified View of the Scope of Review, the Judge/Jury Question, and Procedural Discretion, 64 N.C.* L. REV. 993, 994 (1986) (citations omitted); *see also* Francais H. Bohlen, *Mixed Questions of Law and Fact, 72* U. PA. L. REV. 111, 112 (1924); Clarence Morris, *Law &Fact,* 55 HARV. L. REV. 1303, 1303-04 (1942).

[179] The United States Supreme Court has noted the "vexing nature" of the fact-law dichotomy and has concluded, "We yet know of . . . [no] rule or principle that will unerringly distinguish a factual finding from a legal conclusion." Pullman-Standard v. Swint, 456 U.S. 273, 288 (1982).

[180] Bose Corp. v. Consumers Union of the United States, Inc., 466 U.S. 485, 501 n.17 (1984).

because "[c]haracterization of an issue . . . as fact or law for purposes of identifying a formalized standard of review depends on the perceived need for review, not on the actual status of the issue."[181] "The `magic' of *de novo* appellate determination . . . serves not to reflect a nuanced definition of law and fact, but to affect trial/appellate authority and . . . [when a jury is involved] the role of the jury."[182] Judge Friendly observed that "what a court can determine better than a jury, [is] perhaps about the only satisfactory criterion for distinguishing 'law' from 'fact.'"[183] Such a policy-oriented definition may sound empty, but may offer a more functional meaning than attempts to resolve difficult institutional questions by simple resort to the definitional trump cards law and fact. Semantics may at times be less useful than a case-based inquiry into the appropriateness of leaving a particular question to the trial court rather than resolving it anew or on a more generalized level. The cases support that belief. The Supreme Court has unequivocally stated:

> [T]he fact/law distinction at times has turned on a determination that, as a matter of the sound administration of justice, one judicial actor is better positioned than another to decide the issue in question. Where, for example ... the relevant legal principle can be given meaning only through its application to the particular circumstances of a case, the Court has been reluctant to give the trier of fact's conclusions presumptive force .... In contrast, other considerations often suggest the appropriateness of resolving close questions concerning the status of an issue as one of "law" or "fact" in favor of extending deference to the trial court.[184]

Courts must take care not to answer every standard of review question, which in turn allocates who decides an issue, simply by asking who decides it. Thus, they should recognize that even the Supreme Court's most pragmatic approach does not abandon analytical factors, and it acknowledges no need for policy review where there is a clear natural classification. Law-fact often is more of a continuum than a simple duality.[185]

Most law-fact dilemmas boil down to an analysis of how the court treats so-called mixed questions. In a mixed question of law and fact, the trial court has applied existing law to fact through a process of three steps: (1) establish a fact, (2) select the applicable rule of law, and (3) apply the law to the fact to determine whether the rule has been violated.[186] Nationally, courts are split over the proper standard of review for mixed questions of law and fact.[187]

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[181] Cooper, *supra* note 14, at 660; *see also* Paul D. Carrington, *The Power of District Judges and the Responsibility of Courts of Appeal 3* GA. L. REV. 507, 518 (1969) (" [F]indings of fact may be defined as the class of decisions we choose to leave to the trier of fact subject only to limited review, while conclusions of law are the class of decisions which reviewers choose to make for themselves without deference to the judgment of the trial forum.").

[182] Lough v. Brunswick Corp., 103 F.3d 1517, 1521, 41 U.S.P.Q.2d 1385, 1388 (Fed. Cir. 1997).

[183] United States v. J.B. Williams Co., 498 F.2d 414, 431 (2d Cir. 1974) (citation omitted).

[184] Miller v. Fenton, 474 U.S. 104, 114 (1985) (citations omitted); *see also* United States v. Taylor, 487 U.S. 326, 336-37 (1998).

[185] For a good review of questions of law versus questions of fact as related to the constitutional right to a jury trial, especially in the context of a declaratory judgment action, see *In re Lockwood,* 50 F.3d 966, 33 U.S.P.Q.2d 1406 (Fed. Cir.), *vacated sub nom. by,* Am. Airlines, Inc. v. Lockwood, 515 U.S. 1182 (1995). The Federal Circuit issued an published order (1) granting Lockwood's petition for a writ of mandamus and directing the district court to reinstate Lockwood's jury demand, and (2) declining a suggestion for rehearing en banc. *Id.* at 980, 33 U.S.P.Q 2d at 1417-18. See also the dissenting opinion by Judges Nies, Archer, and Plager from the denial of the suggestion for rehearing en banc. *Id.* at 980-90, 33 U.S.P.Q.2d at 1908-16.

[186] See *In re* Brana, 51 F.3d 1560, 1568, 34 U.S.P.Q.2d 1436, 1443 (Fed. Cir. 1995) (quoting Campbell v. Merit Sys. Prot. Bd., 27 F.3d 1560, 1565 (Fed. Cit. 1994)).

One approach to mixed questions avoids generalizations about the application of law to facts; it breaks the mixed questions down into unmixed halves of fact and law. It simplifies the inquiry by making it a two-step analysis and separating the analysis into two groups that are clearer than one blended conclusion. The Federal Circuit has adopted this approach, and tends to break down a number of inquiries into law and fact elements and then applies separate standards of review to each element. Using this analysis, appellate courts may avoid the inconsistent characterizations that have resulted from viewing the mixed question as a unified entity. Of course, because the facts may be dispositive of an ultimate issue such as validity, a mixed question, in that sense it is an over statement to say that validity, a legal conclusion, is always reviewed *de novo*.

In *Dennison Manufacturing Co. v. Panduit Corp.*,[188] the Supreme Court offered the Federal Circuit a unique opportunity to foray into the gray area 1 presented by mixed questions of law and fact when faced with the problem of assessing the obviousness of a patented invention. The district court held the patent in suit invalid on the ground that the invention would have been obvious to a person skilled in the art at the time of the invention.[189] The Federal Circuit reversed, without mentioning the clearly erroneous standard or explaining why that standard was inapplicable.[190] The Supreme Court remanded to the Federal Circuit for a statement of its "informed opinion on the complex issue of the degree to which the obviousness determination is one of fact."[191]

On remand, the Federal Circuit reaffirmed its rule that a determination of obviousness is a conclusion of law subject to independent review, without deference to Rule 52(a), although that conclusion is based upon underlying factual questions.[192] The appellate court analyzed functional factors, including the decisional process, a literal impression in which the inquiry "partakes" more of law, drawn from facts, and precedent, citing the circuits and scholars and analyzing previous Supreme Court dicta. Perhaps the most important part of its opinion was the observation that treating the question as one of law would "facilitate a consistent application of [the patent] statute in the courts and in the Patent and Trademark Office (PTO)."[193] A major purpose of conferring jurisdiction over appeals in patent cases on the Federal Circuit was to reduce the wide variations in patent law that had emerged from review by the regional circuits.[194]

> With regard to judgment calls, those questions that fall "[s]omewhere near the middle of the fact-law spectrum," this court has recognized "the falseness of the fact-law dichotomy, since the determination at issue, involving as it does the application of a general legal standard to particular facts, is probably most realistically described as neither of fact nor law, but mixed."

Brana, 51 F.3d at 1568, 34 U.S.P.Q 2d at 1443.

[187] Evan Ben Lee, *Principled Decision Making and the Proper Role of Federal Appellate Courts: The Mixed Questions Conflict*, 64 S. CAL. L. REV. 235, 235-36 (1991).

[188] 475 U.S. 809, 229 U.S.P.Q. 478 (1986).

[189] Panduit Corp. v. Dennison Mfg. Co., 774 F.2d 1082, 1086-90, 227 U.S.P.Q. 337, 339-41 (Fed. Cir. 1985).

[190] Id. at 1102, 227 U.S.P.Q. at 351.

[191] *Dennison,* 475 U.S. at 811, 229 U.S.P.Q. at 479.

[192] Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1565-66, 1 U.S.P.Q.2d 1593, 1594-95 (Fed. Cir. 1987).

[193] *Id.* at 1567, 1 U.S.P.Q.2d at 1596. *See generally* Maureen McGirr, Note, *Panduit Corp. v. Dennison Manufacturing Co.: De Novo Review and the Federal Circuits Application of the Clearly Erroneous Standard* 36 Am. U. L. REV. 963 (1987).

[194] HOWARD T. MARKEY, THE FIRST *Two* THOUSAND DAYS, REPORT OF THE UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT, 1982-1988, at 2-4 (1988).

Consideration of the congressional desire to achieve national uniformity in determining the scope of review seems entirely appropriate.

The determination of obviousness is just one example of many *mixed* issues that the Federal Circuit characterizes as a legal conclusion based upon underlying factual inquiries.[195] The court consistently separates the analysis of such issues into two steps: the legal conclusion is reviewed under the *de novo* standard, and the factual inquiries are reviewed under a more deferential standard of review. As another example, consider the determination of whether an invention was placed on sale more than one year before a patent application covering the invention was filed. If so, the inventor is not entitled to a patent.[196] The Federal Circuit has stated: "The ultimate determination that a product was placed on sale under section 102(b) is a question of law, based on underlying facts. We review the ultimate determination *de novo,* but any subsidiary fact findings must be reviewed, in this case, for clear error.[197]

B. Mixed Questions of Fact and Discretion

As it does for mixed questions of fact and law, the Federal Circuit's approach to mixed questions of fact and discretion avoids generalizations about the application of discretion to facts; it breaks the mixed questions down into unmixed halves of fact and discretion. Because it is an equitable issue, for example, the ultimate determination of inequitable conduct is committed to the discretion of the trial court, and is reviewed by the Federal Circuit for abuse of discretion.[198] Establishing that inequitable conduct occurred during prosecution of a patent requires proof by clear and convincing evidence of two underlying facts: that a misrepresentation or omission was material, and that the patentee acted with intent to deceive.[199] Although the ultimate determination of whether inequitable conduct occurred is reviewed under the abuse of discretion standard, the question of whether the trial judge correctly found the existence of these underlying facts is reviewed under the traditional standard for fact finding, the clearly erroneous standard.[200]

Another issue that mixes fact finding with discretionary determinations is the determination of patent infringement damages. The amount of a prevailing party's damages for patent infringement is a finding of fact.[201] "However, certain subsidiary decisions underlying a damage theory are discretionary with the court, such as the choice of an accounting method for determining profit margin or the methodology for arriving at a reasonable royalty. Such decisions are, of course, reviewed under the abuse of discretion standard."[202] Note that the Federal Circuit emphasized that the trial tribunal does not have the discretion to choose between lost profits damages or a reasonable royalty as the basis for an award; that it is not choosing

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[195] *See* Appendix.

[196] 35 U.S.C. § 102(b) (1994).

[197] Ferag AG v. Quipp Inc., 45 F.3d 1562, 1566, 33 U.S.P.Q.2d 1512, 1514-15 (Fed. Cir. 1995) (citation omitted).

[198] Kingsdown Med. Consultants v. Hollister Inc., 863 F.2d 867, 876, 9 U.S.P.Q2d 1384, 1392 (Fed. Cir. 1988) (en banc).

[199] Id. at 872, 9 U.S.P.Q.2d at 1389.

[200] Baxter Healthcare Corp. v. Spectramed, Inc., 49 F.3d 1575, 1584, 34 U.S.P.Q2d 1120, 1127 (Fed. Cir. 1995).

[201] SmithKline Diagnostics, Inc. v. Helena Labs. Corp., 926 F.2d 1161, 1164, 17 U.S.P.Q.2d 1922, 1924-25 (Fed. Cir. 1991).

[202] Id., 17 U.S.P.Q.2d at 1925.

methodology. Rather, if a patent owner seeks and proves lost profits, then he or she is entitled to an award reflecting the amount of profits lost.[203]

Still another issue that mixes fact-finding with discretionary determinations is the decision of whether to award attorney fees. "In considering an award of attorney fees, '[t] he district court must first determine whether the case is exceptional, a factual determination that we review for clear error; if the case is found to be exceptional, the court must then determine whether attorney fees should be awarded, a determination that we review for abuse of discretion.'"[204] Thus, for all such issues, the Federal Circuit breaks the mixed questions down into unmixed halves of fact and discretion.

IV. You Mean There's More Gray?

The review standard should also include within it any burdens or presumptions from the substantive law applicable to the issue under review at the trial level.[205] Judge Nies, former Chief Judge of the Federal Circuit, directly tackled the interplay between standards of proof at the trial level and standards of review at the appellate level, at least with respect to questions of fact.[206] Judge Nies did so because she perceived "a recurring confusion" between the different standards.[207] Because her perception of such confusion was and, unfortunately, remains entirely accurate, the thorough analysis provided by Judge Nies is highly recommended. Judge Nies' colleagues on the Federal Circuit have turned often to that analysis.[208]

Standards of proof are typically judge-made requirements shaped in accordance with considerations of due process, the importance of certain facts, or both. The function of a standard of proof is "to instruct the factfinder concerning the degree of confidence our society thinks he should have in the correctness of factual conclusions for a particular type of adjudication."[209] Thus, the standard serves to allocate the risk of error between the litigants and to indicate the relative importance attached by society to the ultimate decision. The three standards of proof generally recognized for facts at the trial level are proof by a preponderance of the evidence, proof by clear and convincing evidence, and proof beyond a reasonable doubt.

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[203] Id at 1164 65 n.2, 17 U.S.PQ.2d at 1925 n.2.

[204] Union Pac. Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 694, 57 U.S.P.Q.2d 1293, 1299 (Fed. Cir. 2001) (quoting Enzo Biochem, Inc. v. Calgene, Inc., 188 F.3d 1362, 1370, 57 U.S.P.Q.2d 1129, *1134-35* (Fed. Cir. 1999)).

[205] CHILDRESS & DAVIS, *supra* note 4, § 3.06, at 3-61.

[206] SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 379-83, 218 U.S.P.Q. 678, 690-93 (Fed. Cir. 1983) (Nies, J., additional views).

[207] *Id.* at *379,* 218 U.S.P.Q. at 690.

[208] A partial list of the Federal Circuit cases (written by judges other than Judge Nies) which have cited Judge Nies's additional views in *SSIH* includes: *In re Epstein,* 32 F.3d 1559,156465,31 U.S.P.Q.2d 1817, 1820 (Fed. Cir. 1994); *A.C. Aukerman Co. v. R.L. Chaides Constr. Co.,* 960 F.2d 1020, 1045, 22 U.S.P.Q.2d 1321, 1338 (Fed. Cir. 1992) (en banc); *Buildex Inc. v. Kason Indus. Inc.,* 849 F.2d 1461, 1463, 7 U.S.P.Q.2d 1325, *1327* (Fed. Cir. 1988); *Luciano Pisoni Fabbrica Accessori Instrument Musicali v. United States,* 837 F.2d 465,467 (Fed. Cir. 1988); *Jaskiewicz v. Mossinghoff,* 822 F.2d 1053, 1058, 3 U.S.P.Q.2d 1294, 1299 (Fed. Cir. 1987); *Akzo N. V. v. United States Int'l Trade Comm'n,* 808 F.2d 1471, 1479, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986); *Surface Tech. Inc. v. United States Int'l Trade Comm'n,* 801 F.2d 1336, 1340 n.8,231 U.S.P.Q. 192,196 n.8 (Fed. Cir. 1986); *DeGeorge v. Bernier,* 768 F.2d 1318, 1321, 226 U.S.P.Q. 758,760 (Fed. Cit. 1985); *In re Caveney,* 761 F.2d 671, 674,226 U.S.P.Q. 1, 3 (Fed. Cir. 1985); *and Atlantic Sugar, Ltd. v. United States,* 744 F.2d 1556, 1562 n.23 (Fed. Cir. 1984).

[209] *In re* Winship, 397 U.S. 358, 370 (1970) (Harlan, J., concurring).

In civil cases, litigants are generally required to prove facts by a preponderance of the evidence.[210] Such evidence is the *rock bottom* at the fact-finding level of civil litigation.[211] Because society has minimal concern with the outcome of most civil suits, which involve only money, the plaintiffs burden of proof is a mere preponderance of the evidence—evidence which is more convincing to the trier than the opposing evidence. The litigants thus share the risk of error in approximately equal fashion.

In a criminal case, the interests of the defendant are magnified so that they are protected by a standard of proof designed to exclude as nearly as possible the likelihood of an erroneous finding of fact. Society imposes on itself almost the entire risk of error. Thus, the state must prove the guilt of an accused defendant beyond a reasonable doubt.

The clear and convincing standard of proof of facts is an intermediate standard that lies between beyond a reasonable doubt and a preponderance of the evidence.[212] Although not susceptible to precise definition, clear and convincing evidence has been described as evidence that produces in the mind of the trier of fact "an abiding conviction that the truth of [the] factual contentions are 'highly probable.'"[213] This intermediate standard applies in civil cases involving allegations of fraud or some other quasi-criminal wrongdoing by the defendant. The interests at stake are more substantial than mere loss of money and, therefore, the risk to the defendant of receiving erroneously a tarnished reputation warrants an increase in the plaintiffs burden of proof.[214]

The interrelationship between the two standards of proof applicable in civil appeals heard by the Federal Circuit can be illustrated by reviewing the process of obtaining a patent from the USPTO and enforcing that patent against an infringer in a district court. Patents are entitled to a presumption of validity.[215] A party asserting patent invalidity must support the assertion of facts, therefore, by clear and convincing evidence.[216] In contrast, patent applications are not entitled to the procedural advantages of § 282, and the standard of proof required of the USPTO to properly reject claims of a patent application is necessarily lower than that required to invalidate claims of an issued patent—the USPTO must meet only the lower preponderance of the evidence standard in rejecting claims.[217] When the USPTO rejects claims based on a violation of the duty of disclosure,[218] however, clear and convincing evidence is required.[219] A higher standard for proving inequitable conduct is warranted due to the seriousness of such alleged wrongdoing.[220]

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[210] *A.C. Aukerman Co.,* 960 F.2d at 1045, 22 U.S.P.Q2d at 1338; 9 JOHN HENRY WIGMORE, WIGMORE ON EVIDENCE § 2498 (Chadbourn ed. 1981).

[211] *SSIH Equip.,* 718 F.2d at 380, 218 U.S.P.Q. at 690.

[212] Addington v. Texas, 441 U.S. 418, 423-24 (1979); *see also SSIH Equip.,* 718 F.2d at 380, 218 U.S.P.Q at 691 (Nies, J., additional views).

[213] Buildex, Inc. v. Kason Indus., Inc., 849 F.2d 1461, 1463, 7 U.S.P.Q.2d 1325, 1327 (Fed. Cir. 1988) (quoting Colorado v. New Mexico, 467 U.S. 310,316 (1984); MCCORMICK ON EVIDENCE § 340, at 796 (Edward W. Cleary, ed., 3d ed. 1984)).

[214] The Federal Circuit has adopted the preponderance of the evidence standard as the appropriate evidentiary standard to establish the facts relating to the laches issue. It has adopted the same standard in connection with the proof of equitable estoppel factors, "absent special circumstances, such as fraud or intentional misconduct." *Aukerman,* 960 F.2d at 1046, 22 U.S.P.Q2d at 1339.

[215] *See* 35 U.S.C. § 282 (1994).

[216] Ryco Inc. v. Ag-Bag Corp., 857 F.2d 1418, 1423, 8 U.S.P.Q.2d 1323, 1327 (Fed. Cir. 1988) ("Under 35 U.S.C. § 282, a patent is presumed valid, and the party attacking validity has the burden of proving facts supporting a conclusion of invalidity by clear and convincing evidence.").

[217] *In* re Epstein, 32 F.3d 1559,1563, 31 U.S.P.Q.2d 1817, 1820 (Fed. Cir. 1994) (stating that preponderance of the evidence is the standard that must be met by the USPTO in making rejections).

[218] *See* 37 C.F.R. § 1.56 (2001).

The application of the wrong quantum of proof is an error of law subject to plenary review.[221] For example, in *DeGeorge v. Bernier,*[222] the Federal Circuit vacated a decision by the BPAI because it applied an erroneously high standard of proof (a standard above the correct clear and convincing standard that is closer to the beyond a reasonable doubt standard) to the party who copied claims to provoke an interference.[223]

The nature of the questions to be resolved affects the standard of proof in the same way as the standards of review. The preponderance of the evidence standard applied to most issues in civil litigation represents, for example, a varying standard of persuasion having a variety of levels.[224] Taken together, the standards of proof, like the standards of review, form a continuum rather than discrete categories.[225]

In reality, application of the standard of review varies according to the standard of proof imposed at trial. The Supreme Court stated that application of a directed verdict standard should be adjusted to reflect that more evidence is required to persuade a rational jury if the proposition must be proved by clear and convincing evidence than if the proposition must be proved only by a preponderance of the evidence.[226] The policies that justify an enhanced standard of proof apply equally to justify a strict standard of review.[227]

An agency, such as the Veterans Administration, is required to prove its case before the Merit Systems Protection Board (MSPB) in an action to establish an employee's misconduct by a preponderance of the evidence.[228] The relevant regulation defines preponderance of the evidence as: "That degree of relevant evidence that a reasonable person, considering the record as a whole, would accept as sufficient to find that a contested fact is more likely to be true than

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[219] *In re* Caveney, 761 F.2d 671, 674, 226 U.S.P.Q. 1, 3 (Fed. Cir. 1985).

[220] *Id.* at 674 n.4, 226 U.S.P.Q. at 3 n.4.

[221] Gargoyles, Inc. v. United States, 113 F.3d 1572, 1577 n.4, 42 U.S.P.Q.2d 1760, 1765 n.4 (Fed. Cir. 1997).

[222] 768 F.2d 1318, 226 U.S.P.Q. 758 (Fed. Cir. 1985).

[223] *Id.* at 1321, 226 U.S.P.Q at 760; *see also* Jamesbury Corp. v. Litton Indust. Prods. Inc., 756 F.2d 1556, 1559, 225 U.S.P.Q. 253, 255 (Fed. Cir. 1985) (reversing a district court judgment of patent invalidity because the district court committed legal error when it instructed the jury that anticipation must be proven by a preponderance of the evidence rather than by clear and convincing evidence).

[224] As a simple illustration, Professor Cooper points out that "it is more important that the defendant be correctly identified as one who had some involvement with the events in suit than it is that each element of damages be precisely determined following a proper determination of liability." Cooper, *supra* note 14, at 656.

[225] Perhaps in contrast to the shifting nature of standards of *review,* however, "[o]nce the standard of proof has been determined . . . it applies without regard to the circumstances of a particular case. Permitting [an] exception . . . could significantly undermine the designated standard of proof, since litigants always can assert, and sometimes effectively, that their cases involve special circumstances." Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980, 41 U.S.P.Q2d 1782, 1786 (Fed. Cir. 1997).

[226] Anderson v. Liberty Lobby, Inc., 477, U.S. 242, 254 (1985) (stating that in assessing whether the defendants are entitled to summary judgment, the court must view the evidence "through the prism of the substantive evidentiary burden" [e.g., clear and convincing evidence]); Glaverbel Societe Anonyme v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1554, 33 U.S.P.Q.2d 1496, 1498 (Fed. Cir. 1995) ("When trial is to the court, the district court's finding with respect to anticipation is reviewed for clear error, with due regard to the burden and standard of proof."); Klein v. Peterson, 866 F.2d 412, 414, 9 U.S.P.Q.2d 1558, 1559 (Fed. Cir. 1989) (The question on appeal is "whether a reasonable mind could have found the evidence of misconduct clear and convincing.").

[227] Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1221, 36 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1995) (stating that willfulness finding requires proof by clear and convincing evidence because it is a punitive finding).

[228] 5 U.S.C. § 7701(c) (1994).

untrue."[229] The MSPB may not sustain an agency decision unsupported by substantial evidence if the action is in Chapter 43.[230]

Therefore, a true standard of review takes into consideration, at least implicitly, the burden under which the trial tribunal first decided the issue. This is because the process of review realistically asks how the trial tribunal performed its initial job; review necessarily considers the assumptions the trial tribunal understood and applied. Trial burdens are relevant in applying Rule 52, for example, in that the judgment whether the court was clearly erroneous may include consideration of the appropriate burdens used below at trial.[231] Thus, the substantial evidence review test offers various degrees of deference depending on the trial tribunal's burden of proof. As the Federal Circuit has stated,

> When reviewing a factual finding, a reviewing court must consider the quantum of proof required to prove the fact at trial in applying its standard of review. Thus, when this court reviews the factual findings underlying the ITC's conclusion of invalidity for "substantial evidence," we must review those findings to ascertain whether they were established by evidence that a reasonable person might find dear and convincing. We must determine not only that the findings were satisfactorily established, but also whether those findings form an adequate predicate for the legal determination of invalidity.[232]

In some cases, confusion may arise because the Federal Circuit applies the same substantive test on review that the district court earlier applied. This occurs, for example, when both the court of appeals and the district court ask whether a genuine dispute over material facts precludes summary judgment. Each court reviews the preliminary record and determines whether the test of Rule 56 of the Federal Rules of Civil Procedure is met.[233] The appellate court's standard of review is actually *de novo,* however, because it arrives at its substantive decision irrespective of the trial court's decision.[234]

V. At What Stage Are We?

The standard of review may vary depending upon the route by which the question reaches the Federal Circuit including, without limitation, such procedural routes as summary judgment, motions for dismissal, preliminary injunction motions, bench trial or jury trials, motions for relief from a final judgment, contempt proceedings, or motions for sanctions. Some of these procedural aspects of a case have been addressed above during the course of discussion of the various standards of review. They are briefly collected below to illustrate how the stage of trial independently serves as an additional factor in defining the scope of appellate review.

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[229] 5 C.F.R. § 1201.56(c)(2) (2000).

[230] *See* Lovshin v. Dep't of Navy, 767 F.2d 826,840-43 (Fed. Cir. 1985) (en banc) (stating that chapter 43, covering unacceptable performance, does not provide the exclusive procedures for performance-based adverse actions by an agency covered by Chapter 75).

[231] Cooper, *supra* note 14, at 650 ("Application of the clear error standard also should vary according to the standard of proof imposed at trial.").

[232] Checkpoint Sys., Inc. v. United States Int'l Trade Comm'n, 54 F.3d 756, 761 n.5, 35 U.S.P.Q.2d 1042, 1046 n.5 (Fed. Cir. 1995).

[233] Celotex Corp. v. Catrett, 477 U.S. 317, 322-26 (1986).

[234] *See* Markman v. Westview Instruments, Inc., 52 F.3d 967, 975, 34 U.S.P.Q.2d 1321, 1326 (Fed. Cir. 1995) (en banc) ("On appeal, we review *de novo* the correctness of the district court's grant of JMOL by reapplying the JMOL standard."), *aff'd* 517 U.S. 470 (1996).

A. Pretrial

Of course, the trial tribunal may decide a case, or at least certain issues involved in a case, before a full trial on the merits. Summary judgment is appropriate, for example, when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law."[235] The Federal Circuit applies the same legal standard as that applied by the trial court in determining whether summary judgment was appropriate.[236] In reviewing a denial of a motion for summary judgment, the Federal Circuit gives considerable deference to the trial court, and "will not disturb the trial court's denial of summary judgment unless we find that the court has indeed abused its discretion."[237] Neither a denial of summary judgment nor a reversal of summary judgment on appeal are dispositive; these decisions merely remit the case for trial.[238] On the other hand, the Federal Circuit undertakes plenary or *de novo* review of a grant of summary judgment, which does finally decide at least an issue if not the entire case.[239]

Federal Rule of Civil Procedure 41(b) provides that, in a non-jury case, the defendant may move, after the plaintiff has presented its case, for a dismissal on the grounds that the facts and the law show no right to relief.[240] The trial judge evaluates and resolves conflicts of evidence and credibility, and findings entered following such a motion are "reviewed under the same clearly erroneous standard as are findings entered at the close of all the evidence."[241] "A dismissal pursuant to Rule 41(b) is deemed to be on the merits unless the dismissing court specifies otherwise.[242]

The injunctive orders reviewed by the Federal Circuit are usually those granting or denying preliminary relief before a trial on the merits. The district court is given broad discretion, pursuant to 35 U.S.C. § 283, in determining whether the facts of a case warrant an injunction and in determining the scope of the injunctive relief.[243] The grant, denial, or modification of an injunction under § 283 is reviewed by the Federal Circuit under an abuse of discretion standard.[244]

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[235] FED. R. Civ. P. 56(c); *see also* Celotex Corp. v. Catrett, 477 U.S. 317, 322-26 (1986).

[236] Nike Inc. v. Wolverine World Wide, Inc., 43 F.3d 644, 646, 33 U.S.P.Q.2d 1038, 1039 (Fed. Cit. 1994); Imperial Van Lines Int'l, Inc. v. United States, 821 F.2d 634, 637 (Fed. Cit. 1987).

[237] Elekta Instrument S.A. v. O.U.R Scientific Int'l, Inc., 214 F.3d 1302, 1306, 54 U.S.P.Q2d 1910, 1912 (Fed. Cir. 2000) (quoting Suntiger, Inc., v. Scientific Research Finding Group, 189 F.3d 1327, 1333, 51 U.S.P.Q2d 1811, 1815 (Fed. Cir. 1999)).

[238] SRI Int'l v. Matsushita Elec. Corp. of Am., 775 F.2d 1107, 1116, 227 U.S.P.Q. 577, 582 (Fed. Cir. 1985).

[239] Scaltech Inc. v. Retec/Tetra, 178 F.3d 1378, 1381, 51 U.S.P.Q2d 1055, 1057 (Fed. Cit. 1998) ("We undertake plenary review of a grant of summary judgment."); Petrolite Corp. v. Baker Hughes Inc., 96 F.3d 1423, 1425,40 U.S.P.Q.2d 1201,1203 (Fed. Cir.1996) ("We review a district court's grant of summary judgment *de novo.*")*.*

[240] FED. R. Civ. P. 41(b).

[241] Lemelson v. United States, 752 F.2d 1538,1547, 224 U.S.P.Q 526,530-31 (Fed. Cir. 1985).

[242] Kearns v. General Motors Corp., 94 F.3d 1553, 1555, 39 U.S.P.Q2d 1949, 1951 (Fed. Cir. 1996).

[243] 35 U.S.C. § 283 (1994 & Supp. II 1997).

[244] Ortho Pharm. Corp. v. Smith, 959 F.2d 936, 945, 22 U.S.P.Q.2d 1119, 1127 (Fed. Cir. 1992).

B. Bench Versus Jury Trial

The standard by which the appellate court reviews the judgment of a district court differs from the standard applied to a jury verdict. When the judgment arises from a jury verdict, the appellate court gives greater deference to the judgment because appellate review is more limited as compared to review of a trial judge's decision. The jury's verdict must be affirmed unless the evidence is of such quality and weight that reasonable persons in the exercise of impartial judgment could not have returned that verdict.[245] Indeed, reviewability of a jury verdict for sufficiency of the evidence absent a post-verdict motion is extremely limited. In the Federal Circuit, there is virtually no review, absent some post-verdict disposition either by a deferred ruling or a motion.[246]

A party during a jury trial may file a Motion for Judgment as a Matter of Law (JMOL) after the opposing party has been fully heard on an issue and when "there is no legally sufficient evidentiary basis for a reasonable jury to find for [the opposing] party."[247] The moving party may renew its request for JMOL, assuming that it was initially denied, by filing a motion no later than ten days after the entry of judgment.[248] The same reasonable standard applies whether or not the trial judge grants or denies the motion and whether or not the motion is decided before or after the jury deliberates. Courts often restate their reasonableness review in terms of a test for substantial evidence. "[I]t is clear that the courts intend no real difference in meaning or result."[249] They present this substantial evidence test as the flip-side of review for reasonableness. Many circuits, including the Federal Circuit, seem settled on reviewing the whole record and, especially, rejecting a scintilla or complete absence threshold.[250]

Under Federal Rule of Civil Procedure 50(b), when a motion for JMOL is made after a verdict is returned, the court may allow the judgment to stand, order a new trial, or direct entry of judgment as a matter of law.[251] The Federal Circuit reviews the district court's grant of JMOL

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[245] FED. R. Civ. P 50(a)(1).

[246] Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1281, 54 U.S.P.Q.2d 1673, 1678 (Fed. Cir. 2000). "[A] party's failure to make a motion for JMOL, see FED. R. Civ. P. 50(b), at any phase of the litigation precludes an appellate court from reviewing the sufficiency of the evidence underlying the jury verdict." *Id.* (citations omitted). Thus, it behooves counsel to file non-frivolous motions for JMOL or for a new trial. "Where a party fails to make a motion for JMOL at the close of the evidence, the sufficiency of the evidence underlying presumed jury findings of fact cannot be challenged through a renewed motion for JMOL or on appeal." Young Dental Mfg. Co. v. Q3 Special Prods., Inc., 112 F.3d 1137, 1141, 2 U.S.P.Q.2d 1589, *1592* (Fed. Cir. 1997). Generally, Rule 50(b) precludes a motion for JMOL after a jury's verdict unless the motion was first presented at the close of evidence under Rule 50(a). A narrow exception to that preclusion exists when the Rule 50(b) motion challenges an irreconcilably inconsistent jury verdict, such as when the jury finds a broader, independent claim not invalid but the narrower, dependent claim invalid.

[247] FED. R. Civ. P. 50(a). As of December 1, 1991, Motions for Judgment Notwithstanding the Verdict (JNOV) and for directed verdict are now Motions for Judgment as a Matter of Law (JMOL); the change in name was made to emphasize the correlation in standards for grant of JNOV and directed verdict motions, as well as motions for summary judgment under Rule 56, and did not change the existing standard of review. *See* Brooktree Corp. v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1569 n.2, 24 U.S.P.Q.2d 1410, 1421 n.2 (Fed. Cir. 1992).

[248] Fed. R. Civ. P. 50(b).

[249] CHILDRESS & DAVIS, *supra* note 4, § 3.01, at 3-11.

[250] Connell v. Sears, Roebuck & Co., 722 F.2d 1542, 1546, 220 U.S.P.Q 193, 197 (Fed. Cir. 1983).

[251] When a motion for JMOL is made under Rule 50(a), but not followed by a motion for JMOL under Rule 50(b), the appellate court that determines a jury verdict was not supported by substantial evidence ordinarily has authority only to order a new trial. *See* Johnson v. N.Y., New Haven, & Hartford R.R., 344 U.S. 48, 54 (1952); *see also* R.R. Dynamics, Inc. v. A. Stucki Co., 727 F.2d 1506, 1511, 220 U.S.P.Q. 929, 934 (Fed. Cir. 1984); Smith v.

"by reapplying the JMOL standard. After a jury verdict, the standard involves two inquiries. First, the court determines whether substantial evidence supports the jury's express or implied factual findings. Second, the court determines the correctness of any legal conclusions implied in the verdict."[252] Similarly, "[i]n reviewing the trial judge's denial of [a party's] motion for JMOL, [the judges of the Federal Circuit] keep in mind [their] standard of review, which is the same standard that was applicable at the trial court level."[253] The Federal Circuit cautions that "granting a JMOL for the party bearing the burden of proof is reserved for `extreme' cases," but a non-movant party's own admissions or other evidence it presents may support the moving party's JMOL motion.[254]

The court may grant anew trial under Federal Rule of Civil Procedure 59, "even where substantial evidence supports the verdict, if the verdict is against the clear weight of evidence."[255] Whether the trial was conducted before the bench or a jury, the question of whether a new trial motion should be granted turns on "whether an error occurred in the conduct of the trial that was so grievous as to have rendered the trial unfair."[256] The appellate court may inquire into the action of the trial court on a motion for new trial only under certain circumstances.[257] "Because the denial of a motion for a new trial is a procedural issue not unique to patent law, [the Federal Circuit often applies] the law of the regional circuit where the appeal from the district court would normally lie."[258] Typically, however, the Federal Circuit reviews the grant or denial of a motion for a new trial under the abuse of discretion standard.[259]

In a jury trial, the court may require the jury to return a special verdict in the form of a special written finding on each issue of fact. The court may also "submit to the jury . . . written

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TransWorld Drilling Co., 772 F.2d 157 (5th Cir. 1985); 5A J. MOORE & J. LUCAS, MOORE's FEDERAL PRACTICE 150.12 (2d ed. 1988).

[252] Motorola, Inc. v. Interdigital Tech. Corp., 121 F.3d 1461, 1466, 43 U.S.P.Q2d 1481, 1484 (Fed. Cir. 1997) (citations omitted); *see also* Nobelpharma AB v. Implant Innovations, Inc., 141 F.3d 1059, 1064, 46 U.S.P.Q.2d 1097, 1101 (Fed. Cir. 1998). Affirming the district court's denial of a JMOL and a motion for a new trial following the jury verdict imposing antitrust liability on the patentee, the Federal Circuit stated: "We review a district court's grant of a motion for JMOL under Fed. R. Civ. P. 50(a)(1) *de novo by* reapplying the standard applicable at the district court." *Nobelpharma,* 141 F.3d at 1059, 46 U.S.P.Q2d at 1101.

[253] Dawn Equip. Co. v. Kentucky Farms Inc., 140 F.3d 1009, 1014, 46 U.S.P.Q.2d 1109, 1111 (Fed. Cir. 1998); *see also* SmithKline Diagnostics, Inc. v. Helena Labs. Corp., 926 F.2d 1161, 1164-65 n.2, 17 U.S.P.Q2d 1922, 1925 n.2 (Fed. Cir. 1991) ("The damage award, thus, is reviewed under the clearly erroneous standard when fixed by the court and under the more restrictive substantial evidence standard when we review a denial of a motion for JNOV.") (citing SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365,38 183, 218 U.S.P.Q. 678, 690-93 (Fed. Cir. 1983) (Nies, J., additional views)).

[254] *Nobelpharma,* 141 F.3d at 1065,46 U.S.P.Q2d at 1102 (Fed. Cit. 1998) (quoting 9A CHARLES ALLEN WRIGHT & ARTHUR R. MILLER, FEDERAL PRACTICE AND PROCEDURE § 2535, at 325 (2d ed. 1994)); *see generally Christopher R.* Benson, *Jury Decisions, in* FEDERAL CIRCUIT PATENT LAW DECISIONS (Kenneth E. Krosin ed., 2d ed. 1992).

[255] Litton Sys., Inc. v. Honeywell, Inc., 84 F.3d 1559, 1576,39 U.S.P.Q.2d 1321, 133233 (Fed. Cir. 1996).

[256] Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1581, 1 U.S.P.Q.2d 1081, 1092 (Fed. Cir. 1986) (quoting DMI, Inc. v. Derre & Co., 802 F.2d 421, 427, 231 U.S.P.Q. 276, 280 (Fed. Cir. 1986)).

[257] Cabot Corp. v. United States, 788 F.2d 1539,1542-43 (Fed. Cir. 1986) (holding that the trial court's order was not a final, appealable order, therefore the appellate court could not review it); Fairmount Glass Works v. Coal Co., 287 U.S. 474, 482 (1932).

[258] WMS Gaming Inc. v. Int'l Game Tech., 184 F.3d 1339, 1361, 51 U.S.P.Q.2d 1385, 1401 (Fed. Cir. 1999).

[259] Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1284, 54 U.S.P.Q.2d 1673, 1681 (Fed. Cir. 2000) ("This court reviews a denial of a motion for a new trial under the abuse of discretion standard."); Litton Sys., Inc. v. Honeywell, Inc., 87 F.3d 1559, 1576, 39 U.S.P.Q.2d 1321, 1333 (Fed. Cit. 1996) ("The decision to grant or deny a new trial rests with the sound discretion of the trial court.").

interrogatories on one or more issues of fact, the decision of which is necessary to a verdict."[260] The Supreme Court has endorsed and encouraged the use of special verdict interrogatories as "very useful in facilitating review, uniformity, and possibly post-verdict judgments as a matter of law."[261] The Federal Circuit strongly recommends use of these techniques,[262] especially in complex cases.[263]

C. Post Trial

On motion and upon such terms as are just, the district court may relieve a party or a party's legal representative from a final judgment, order, or proceeding for a variety of reasons enumerated in Federal Rule of Civil Procedure 60(b). In reviewing rulings under Rule 60(b), the Federal Circuit generally defers to the law of the regional circuit because "such rulings commonly involve procedural matters that are not unique to patent law."[264] When the district court's Rule 60(b) determination turns on substantive matters unique to patent law, however, the Federal Circuit applies its own law.[265] The grant or denial of a motion for relief from judgment under Rule 60(b) is discretionary under Federal Circuit law, and the standard of review is abuse of discretion.[266] The Federal Circuit applies Rule 60(b) most liberally to judgments in default, and "even a slight abuse [of discretion] may justify a reversal" of a denial of a party's motion to be relieved from a default judgment.[267]

The Federal Circuit set forth a standard for deciding whether an accused infringer is in contempt of an injunction entered under Federal Rule of Civil Procedure 65, which prohibited future infringement, in *KSM Fastening Systems, Inc. v. H.A. Jones Co.*[268] Essentially, to show contempt, the patent owner must prove by clear and convincing evidence that "the modified device falls within the admitted or adjudicated scope of the claims and is, therefore, an infringement."[269] A contempt proceeding is "not a sword for wounding a former infringer who has made a good-faith effort to modify a previously adjudged or admitted infringing device to remain in the marketplace."[270] Therefore, "the modifying party generally deserves the opportunity to litigate the infringement question at a new trial, `particularly if expert and other

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[260] FED. R. Civ. P. 49.

[261] Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 39 n.8, 41 U.S.P.Q.2d 1865, 1875 n.8 (1997).

[262] Richardson-Vicks, Inc. v. Upjohn Co., 122 F.3d 1476, 1484-85, 44 U.S.P.Q.2d 1181, 1188 (Fed. Cit. 1997) (recommending special verdicts); Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1190, 48 U.S.P.Q2d 1001, 1008 (Fed. Cir. 1998) (recommending a special jury interrogatory informing the court how each claim limitation was met, i.e., literally or by equivalents, because otherwise the defendant challenging a district court's denial of its motion for JMOL based on non-infringement must demonstrate why there is no substantial evidence from which a jury could find that a particular limitation is met literally, and then demonstrate the deficiency of the evidence on equivalents).

[263] Union Oil Co. of Cal. v. Atlantic Richfield Co., 208 F.3d 989, 997, 54 U.S.P.Q.2d 1227, 1232 (Fed. Cir. 2000) (reiterating the Federal Circuit's "counsel to use special verdicts in complex cases").

[264] Broyhill Furniture Indus., Inc. v. Craftmaster Furniture Corp., 12 F.3d 1080, 1082, 29 U.S.P.Q.2d 1283, 1284 (Fed. Cir. 1993).

[265] *Id.* at 1083, 29 U.S.P.Q2d at 1285.

[266] *Id.*

[267] Info. Sys. & Networks Corp. v. United States, 994 F.2d 792, 795 (Fed. Cir. 1993) (quoting Seven Elves, Inc. v. Eskenazi, 635 F.2d 396, 402 (5th Cir. 1981)).

[268] 776 F.2d 1522, 227 U.S.P.Q. 676 (Fed. Cir. 1985).

[269] *Id.* at 1530, 227 U.S.P.Q. at 682.

[270] Arbek Mfg., Inc. v. Moazzam, 55 F.3d 1567, 1570, 34 U.S.P.Q.2d 1670, 1671 (Fed. Cit. 1995).

testimony subject to cross-examination would be helpful or necessary.'"[271] "If there are any substantial open issues with respect to infringement to be tried, contempt proceedings are inappropriate."[272]

Before entering a finding of contempt of an injunction in a patent infringement case, a district court must address two, separate questions. The first is whether a contempt hearing is an appropriate forum in which to determine whether a redesigned device infringes, or whether the issue of infringement should be resolved in a separate infringement action.[273] That decision turns on whether the differences are such that "substantial open issues" of infringement are raised by the new device. If contempt proceedings are appropriate, the second question is whether the new accused device infringes.[274] Whether to proceed by way of contempt rather than supplemental complaint for violation of an injunction against patent infringement is within the discretion of the court.[275] If the correct legal standards for contempt are applied, a finding of civil contempt invokes the clearly erroneous standard.[276]

All aspects of determinations to award sanctions under either Rule 11 or 28 U.S.C. § 1927 are reviewed under an abuse of discretion standard.[277] "In matters of sanctions, particular deference is owed the trial court's discretion, for the trial judge has viewed the matter first hand, has considered all the circumstances, and made assessments of [witness] credibility and other intangibles that escape the written record."[278] Sanctions pursuant to local court rules, as well as the terms of a disciplinary order issued under the trial court's inherent authority to sanction attorneys for unprofessional conduct, are also reviewed for abuse of discretion.[279]

The Supreme Court has suggested that less searching review may be warranted "as the trial becomes longer and more complex . . . when trial judges have lived with the controversy for weeks or months instead of just a few hours."[280] Some courts and commentators have suggested that a "more searching appellate review is appropriate if a trial court had adopted, essentially verbatim, findings proposed by one party."[281] The Federal Circuit has indicated that adoption of a party's proposals verbatim "may increase wariness on review."[282] The Supreme Court has

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[271] *Id.* (quoting *KSM,* 776 F.2d at 1531, 227 U.S.P.Q at 683).

[272] *KSM,* 776 F.2d at 1532, 227 U.S.P.Q. at 683-84.

[273] Additive Controls & Measurement Sys., Inc. v. Flowdata, Inc., 154 F.3d 1345, 1349, 47 U.S.P.Q2d 1906, 1908 (Fed. Cir. 1998) (citations omitted).

[274] *Id,* at 1349, 47 U.S.P.Q.2d at 1908 (citations omitted). Following entry of an injunction, it is not unreasonable for a district court to require the defendant to obtain the court's permission before attempted sales of modified machines. *See* Spindelfabrik Suessen-Schurr v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft, 903 F.2d 1568, 1577, 14 U.S.P.Q 2d 1913, 1921 (Fed. Cir. 1990); *Additive Controls,* 154 F.3d at 1356, 47 U.S.P.Q2d at 1914.

[275] *KSM,* 776 F.2d at 1530, 227 U.S.P.Q. at 682.

[276] Preemption Devices, Inc. v. Minn. Mining & Mfg. Co., 803 F.2d 1170, 1173 n.4, 231 U.S.P.Q 297, 299 n.4 (Fed. Cir. 1986).

[277] S. Bravo Sys., Inc. v. Containment Tech. Corp., 96 F.3d 1372, 1375, 40 U.S.P.Q2d 1140, 1143 (Fed. Cir. 1996) ("[A]ll aspects of the Rule 11 determination are reviewed for an abuse of discretion."); Baldwin Hardware Corp. v. Franksu Enterprise Corp., 78 F.3d 550, 561, 37 U.S.P.Q.2d 1829, 1836 (Fed. Cir. 1996) ("We review all aspects of a sanctions award under section 1927 for abuse of discretion.").

[278] Abbott Labs. v. Brennan, 952 F.2d 1346, 1350, 21 U.S.P.Q.2d 1192, 1196 (Fed. Cir. 1992).

[279] *Baldwin Hardware, 78* F.3d at 562, 37 U.S.P.Q.2d at 1837.

[280] Bose Corp. v. Consumers Union of United States, Inc., 466 U.S. 485, 500 (1984).

[281] *See, e.g.,* Cooper, *supra* note 14, at 655.

[282] Pentec, Inc. v. Graphic Controls Corp., 776 F.2d 309, 313, 227 U.S.P.Q 766, 768 (Fed. Cir. 1985). Arguing such wariness is particularly warranted when the adopted findings were proposed by a party before trial. *See*

stated, however, "that even when the trial judge adopts proposed findings verbatim, the findings are those of the court and may be reversed only if clearly erroneous."[283] The Federal Circuit has followed that statement, despite its strong criticism of verbatim adoption of a prevailing party's proposed findings or brief.[284]

VI. Where Are We?

The standard of review applied by the Federal Circuit may also be dictated, or at least affected, by the type of court or administrative agency that conducted the proceeding under review. Consideration of the various courts and agencies from which the Federal Circuit hears appeals is given below. Moreover, as a matter of common sense and of human nature, the level of appellate scrutiny may be adjusted according to the level of confidence reposed in the particular trier-of-fact who decided the case initially. Years of experience with a particular judge, for example, may provide a court of appeals with a basis to conclude that the judge's decisions are more trustworthy than those of other judges. Court observers have asserted that this variability occurs in fact.[285]

A. The U.S. Patent and Trademark Office

Under 28 U.S.C. § 1295, the Federal Circuit has exclusive jurisdiction over an appeal from the decision of "the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office with respect to patent applications and interferences."[286] Similarly, Under 28 U.S.C. § 1295, the court has exclusive jurisdiction over appeals from decisions of "the Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office or the Trademark Trial and Appeal Board with respect to applications for registration of marks" and other proceedings under the Trademark Act of 1946.[287]

The standards for review of administrative agency action are set forth in the Administrative Procedure Act (APA), 5 U.S.C. § 706 (1994). The Act adopts the four standards emphasized above, in Section II, for review of court decisions. Section 706 mandates that "the reviewing court shall decide all relevant questions of law."[288] With regard to factual determinations, § 706 requires the reviewing court to "hold unlawful and set aside agency action, findings and conclusions found to be (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;[289] . . . [or] (E) unsupported by substantial evidence in a

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Lindemann Maschinenfabrik v. American Hoist & Derrick Co., 730 F.2d 1452, 1457, 221 U.S.P.Q. 481, 485 (Fed. Cir. 1984).

[283] Anderson v. City of Bessemer City, 470 U.S. 564, 572 (1985).

[284] *See, e.g.,* FMC Corp. v. Manitowoc Corp., 835 F.2d 1411, 1413 n.1, 5 U.S.P.Q.2d 1112, 1113 n.1 (Fed. Cir. 1987) (citing *Anderson,* 470 U.S. at 571-73).

[285] *See, e.g.,* Cooper *supra* note 14, at 655 n.39 (1988) (citing FLEMING JAMES, JR. & GEOFFREY C. HAZARD, JR., CIVIL PROCEDURE § 12.8, at 668 (3d ed. 1985)); Louis, *supra* note 178, at 1015-16 & n.160.

[286] 28 U.S.C. § 1295 (a)(4)(A) (1994).

[287] *Id.* at § 1295 (a)(4)(B); *see also* 35 U.S.C. § 141(1994); 15 U.S.C. § 1071(a)(1) (1994).

[288] 5 U.S.C. § 706 (2000).

[289] *Id.* at § 706(2)(A). "Agency action [USPTO in refusing late payment of maintenance fee] may be set aside if it is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.' *Id.* The scope of review under the arbitrary and capricious standard is narrow and a court is not to substitute its judgment for that of the agency." Ray v. Lehman, 55 F.3d 606, 610, 34 U.S.P.Q2d 1786, 1789 (Fed. Cir. 1995).

case subject to sections 556 or 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute."[290]

As with all reviews of agency legal conclusions, the Federal Circuit reviews the USPTO's legal conclusions *de novo.*[291] In contradiction to the APA, however, the Federal Circuit reviewed fact-findings by the USPTO under the clearly erroneous standard until recently.[292] This standard is less deferential than the APA's standards,[293] and "allows the appellate court to review factual findings based on its own reasoning, while the APA requires the court to review a case based on the agency's reasoning."[294]

The Federal Circuit's application of the clearly erroneous standard to USPTO factual determinations ended in 1999 when the Supreme Court, in *Dickinson v.* Zurko,[295] reversed the Federal Circuit, and held that it must apply the standards set forth in the APA.[296] The Court required the Federal Circuit to affirm USPTO fact-findings unless those findings are unsupported by substantial evidence, or are arbitrary and capricious.[297] The Supreme Court held that the clearly erroneous standard of review applied by the Federal Circuit to review court fact-findings under Rule 52(a) does not apply to review of agency fact-findings.[298] Furthermore, the Supreme Court rejected the Federal Circuit's position that § 559 of the APA, which creates an exception for an additional requirement that was recognized before 1947, permits the Federal Circuit to review factual findings relating to the USPTO's patentability determinations for clear error.[299] In the opinion written by Justice Breyer, the Supreme Court stated:

> The upshot in terms of judicial review is some practical difference in outcome depending upon which standard is used. The court/agency standard, as we have said, is somewhat less strict than the court/court standard. But the difference is a subtle one-so fine that (apart from the present case) we have failed to uncover a single instance in which a reviewing court conceded that the use of one standard rather than the other would in fact have produced a different outcome.[300]

The Supreme Court declined to decide precisely which APA standard should apply.[301] The Federal Circuit has recently determined, however, that it will apply the substantial evidence

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[290] 5 U.S.C. § 706(2)(E) (2000).

[291] Chatam Int'l, Inc. v. UDV N. Am., Inc., 99-1410, 2000 U.S. App. LEXIS 2087, at *1 (Fed. Cir. Feb. 15, 2000) (unpublished opinion).

[292] *In re* Epstein, 32 F.3d 1559, 1563, 31 U.S.P.Q.2d 1817, 1819 (Fed. Cit. 1994). The Federal Circuit has applied the same standard in non-jury trials from district courts pursuant to Fed. R. Civ. P. 52(a).

[293] SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 382, 218 U.S.P.Q. 678,692 (Fed. Cir. 1983) (Nies, J., concurring) ("A 'substantial evidence' standard restricts an appellate court to a greater degree than 'clearly erroneous' review.").

[294] Christian A. Chu, Comment, *Berkeley Technology Law Journal Annual Review of Law and Technology, Patent: Standards of Review:* Dickinson v. Zurko, 15 *BERKELEYTECH.* L.J. 209, 212 (2000).

[295] 527 U.S. 150, 50 U.S.P.Q2d 1930 (1999).

[296] *Id.* at 165, 50 U.S.P.Q.2d at 1937.

[297] *Id* at 164, 50 U.S.P.Q.2d at 1936.

[298] *Id.* at 155, 50 U.S.P.Q.2d at 1933.

[299] *Id.* at 161, 50 U.S.P.Q.2d at 1935.

[300] *Id.* at 162-63, 50 U.S.P.Q2d at 1936. The Supreme Court then spent a paragraph explaining why the distinction in standard of review may be one without difference.

[301] *Id* at 158, 50 U.S.P.Q.2d at 1934 (citing Ass'n of Data Processing Serv. Orgs., Inc., v. Bd. of Governors of Fed. Reserve Sys., 745 F.2d 677, 683-84 (D.C. Cir. 1984) (finding no difference between the APA's arbitrary and capricious standard and its substantial evidence standard as applied to court review of agency fact findings)).

standard of review to factual findings of the USPTO.[302] Thus, findings of fact by both the BPAI and by the TTAB are upheld unless they are unsupported by substantial evidence after *Zurko*.

An interesting contrast concerns the standard of review in actions brought (1) pursuant to 35 U.S.C. § 145 in the district court attacking USPTO patent application rejections,[303] or (2) pursuant to 35 U.S.C. § 146 in the district court attacking USPTO interference proceedings.[304] Under § 145, an inventor can sue the Director in the U.S. District Court for the District of Columbia following final rejection of the claims of a patent application, in lieu of a direct appeal to the Federal Circuit, pursuant to 35 U.S.C. § 141.[305] In such an action, the district court may adjudge that the applicant is "entitled to receive a patent for his invention ... as the facts in the case may appear.[306]

Similarly, under § 146, a party to an interference dissatisfied with an adverse final decision of the USPTO may file a complaint in a district court, again, in lieu of a direct appeal to the Federal Circuit, pursuant to 35 U.S.C. § 141. In such an action, "the record in the Patent and Trademark Office shall be admitted on motion of either party . . . without prejudice to the right of the parties to take further testimony. The testimony and exhibits of the record in the Patent and Trademark Office when admitted shall have the same effect as if originally taken and produced in the suit."[307]

In actions under % 145 and 146, the Federal Circuit reviews the district court's factual findings for clear error and its conclusions of law *de novo,* as with any bench trial.[308] The degree of deference inherent in the standard of review applied by the district court to the USPTO's decision, however, is not so clear. Of course, the district court reassesses the USPTO's conclusions of *law de novo.*[309] To the extent the parties rely solely on the record before the USPTO, the Federal Circuit has previously held that the district court reviews factual findings made on this record under the clear error standard.[310] The basis for the court's holding was historical, and the continued vitality of that holding after *Zurko* is unclear.[311]

What is clear is that, in the context of an appeal under 35 U.S.C. % 145 or 146 to a district court from a USPTO decision, when the district court admits live testimony on an issue, the district court conducts an entirely *de novo* trial on that issue.[312] Thus, as the law now stands, there are three different standards of review applied to USPTO fact-finding, depending on which court performs the review and whether live testimony is introduced before the district court:

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[302] On-Line Careline, Inc. v. Am. Online, Inc., 229 F.3d 1080, 1085, 56 U.S.P.Q2d 1471, 1474 (Fed. Cir. 2000) (holding that the substantial evidence standard applies when review of the Board's decision is confined to the factual record compiled by the Board) (citing *In re* Gartside, 203 F.3d 1305, 1315, 52 U.S.P.Q.2d 1769, 1775 (Fed. Cir. 2000)); Han Beauty, Inc. v. Trevive, Inc., 236 F.3d 1333, 1336, 57 U.S.P.Q2d 1557, 1559 (Fed. Cir. 2001) ("This court upholds the [Trademark Trial and Appeal] Board's factual findings if supported by substantial evidence.").

[303] 35 U.S.C. § 145 (1994).

[304] 35 U.S.C. § 146 (1994).

[305] 35 U.S.C. § 141 (1994).

[306] 35 U.S.C. § 145 (1994).

[307] 35 U.S.C. § 146 (1994).

[308] Genentech, Inc. v. Chiron Corp., 220 F.3d 1345, 1351, 55 U.S.P.Q2d 1636, 164041 (Fed. Cir. 2000) (citing Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1344-45, 53 U.S.P.Q.2d 1580, 1583 (Fed. Cit. 2000)).

[309] Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340,1344-45,53 U.S.P.Q.2d 1580, 1583 (Fed. Cir. 2000).

[310] Fregeau v. Mossinghoff, 776 F.2d 1034, 1038, 227 U.S-P.Q. 848, 851 (Fed. Cir. 1985).

[311] *See Winner,* 202 F.3d at 1347 n.4, 53 U.S.P.Q.2d at 1585 n.4.

[312] G*enentech,* 220 F.3d at 1349, U.S.P.Q.2d at 1640 (noting that the district court is not required to give any deference to a finding by the Board when live testimony is introduced); *Winner,* 202 F.3d at 1346, 53 U.S.P.Q.2d at 1584-85 (citing Burlington Indus., Inc. v. Quigg, 822 F.2d 1581, 1584, 3 U.S.P.Q.2d 1436, 1439 (Fed. Cir. 1987)).

(1) on all appeals directly to the Federal Circuit, the APA substantial evidence standard of review applies;[313] (2) on appeals to the district court in which the parties rely solely on the record before the USPTO, the district court apparently reviews factual findings made by the USPTO under the clear error standard, and the Federal Circuit applies that same standard to its review of the district court's findings;[314] and (3) on appeals to the district court in which the district court admits live testimony on an issue, the district court owes no deference at all to the factual findings made by the USPTO, and the Federal Circuit still applies the clear error standard in its review of the district court's findings.[315]

B. Masters

Federal Rule of Civil Procedure 53(a) defines a "master" as including "a referee, an auditor, an examiner, a commissioner, and an assessor." Courts have used masters to explain technology to the judge or jury or to make findings of fact on specific issues.[316] The district court's decision to refer all or part of a case to a master is considered discretionary.[317]

Rule 52(a) specifically provides: "The findings of a master, to the extent that the court adopts them, shall be considered as the findings of the court." Accordingly, the clearly erroneous rule applies on appeal of the fact-findings made by the master and adopted by the district court.[318] Rejection of a master's credibility determinations is regarded as "highly unusual."[319] In turn, Federal Rule of Civil Procedure 53(e)(2) states that, in an action tried to the bench without a jury, "the court shall accept the master's findings of fact unless clearly erroneous." The interplay between Rules 52 and 53(e)(2) establishes a two-tiered "review of review."

The Federal Circuit examined this two-tier system in *Milliken Research Corp. v. Dan River, Inc.*[320] One party had urged that the appellate court review the master directly, citing cases in the Second, Fifth, Sixth, Seventh, Eighth, Ninth, and Tenth Circuits; the opponent wanted review of the district court only, and cited the Fourth, Fifth, and Eighth Circuits' precedent for support.[321] The Federal Circuit rejected both arguments, because deference to both judge and master was due under Rules 52(a) and 53(e)(2).[322] The court applied a two-step process: (1) reviewing the correctness, as a matter of law, of the judge's setting aside any fact findings by the master, and (2) if that is upheld, reviewing any substitute or additional findings of the judge under Rule 52(a).[323]

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[313] *See supra* text accompanying note 293.

[314] *See supra* text accompanying notes 303-05.

[315] *See supra* text accompanying note 307.

[316] *See* Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 720, 223 U.S.P.Q 1264, 1274 (Fed. Cir. 1984) (citing J. Williams & B. Thierstein, *Use of Masters in Litigation,* 12 AIPLA Q.J. 227 (1984); Robert Kaufman, *Masters With the Federal Courts, Rule 53,* 58 COLUM. L. REV. 452 (1984)).

[317] *See* Wright, *supra* note 77, § 97, at 697 (stating, however, that "this is a power to be exercised only in rare cases").

[318] TWM Mfg. Co. v. Dura Corp., 789 F.2d 895, 899, 229 U.S.P.Q. 525, 528 (Fed. Cir. 1986).

[319] *Id.* at 900.

[320] 739 F.2d 587, 222 U.S.P.Q. 571 (Fed. Cit. 1984).

[321] *Id.* at 592, 222 U.S.P.Q. at 575.

[322] *Id.* 592-93, 222 U.S.P.Q. at 575-76.

[323] *Id.* at 593, 222 U.S.P.Q. at 576.

C. Magistrate Judges

Under Federal Rules of Civil Procedure 72-76 and 28 U.S.C. §§ 631-639,[324] district courts may refer matters to magistrate judges with authority ranging from acting on non-dispositive, pre-trial matters, to conducting full trials.[325] The standard of review applied to matters decided by magistrate judges hinges both on the basis for the referral and whether the parties have consented to that referral. When magistrate judges decide non-dispositive, pre-trial matters, with or without the consent of the parties, the district court can modify or set aside any portion of the decision "found to be clearly erroneous or contrary to law."[326] The district court makes a *de novo* determination of those portions of the magistrate judge's report or specified proposed findings or recommendations to which a party objects when the district court assigned the magistrate judge without consent of the parties to hear a dispositive claim or defense.[327]

The circuits increasingly approve full civil trials before magistrate judges, under 28 U.S.C. § 636(c)(1) and Rule 73(a) and (b), by party consent. The parties may appeal directly to the appropriate court of appeals from the judgment of the magistrate judge "in the same manner as an appeal from any other judgment of a district court."[328] Alternatively, the parties may further consent to appeal on the record to a judge of the district court and, then only upon petition, seek review of the district court's decision by the court of appeals.[329]

Neither the United States Code nor the Federal Rules of Civil Procedure specify the standard of review after a magistrate judge conducts a full trial whether the review is by the district court or the circuit court. The Advisory Committee Notes to Rule 74 assert that the clearly erroneous standard applies when the parties have agreed that an appeal from a magistrate judge exercising civil trial jurisdiction shall be taken to the district court.[330] It would appear logical that the magistrate judge's findings of fact should get the same clear error standard of review, as in trials by the district judge, regardless of which court reviews those findings.

D. Other Trial Tribunals

Finally, although the scope of this article is limited to intellectual property standard of review matters, it would not be complete unless it made at least passing reference to the following other subject matter jurisdictional areas of the Federal Circuit: (1) appeals from the Merit Systems Protection Board (MSPB), (2) appeals from the United States Court of Federal Claims (COFC), (3) cases arising under the Vaccine Act, (4) appeals from district courts in "Little Tucker Act" cases, (5) appeals from the Board of Contract Appeals, (6) appeals from the Court of International Trade (CIT) and the International Trade Commission (ITC), (7) appeals

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[324] The Federal Courts Improvement Act of 1996 changed the appeal route from magistrate judges with consent by deleting former 28 U.S.C. § 636(4) and (5). S. REP. No. 104-366, at 31 (1996), *reprinted in* 1996 U.S.C.C.A.N. 4202, 4211.

[325] Under the Judicial Improvements Act of 1990, magistrate judges are now officially called United States Magistrate Judges. *See* Judicial Improvements Act of 1990, Pub. L. No. 101-650, § 321, 104 Stat. 5089, 5117 (1990).

[326] FED. R. Civ. P. 72(a); *see also 28* U.S.C. § 636(b)(1)(A) (1994).

[327] FED. R. Civ. P. 72(b); *see also 28* U.S.C. § 636(b)(1) (1994).

[328] 28 U.S.C. § 636(c)(3) (1994); *see also* Fed. R. Civ. P. 73(c).

[329] 28 U.S.C. § 636(c)(4) and (5) (1994).

[330] The allocation of review of magistrate trial decisions between district courts and courts of appeal is explored in WRIGHT & MILLER, *supra* note 116, § 3901.1.

from the Court of Veterans Appeals, and (8) appeals of decisions by the Secretaries of Agriculture and Commerce.[331]

1. MSPB

The Civil Service Reform Act of 1978 (CSRA)[332] provides a statutory scheme governing labor relations between federal agencies and their employees. The CSRA created the MSPB to review adverse personnel actions taken by federal agencies against employees and applicants for employment.[333] The Federal Circuit has exclusive jurisdiction to hear appeals of a "final order or decision" from the MSPB.[334]

In reviewing agency decisions, the Federal Circuit's standard of review is deferential. The Federal Circuit must affirm the MSPB decision unless it is "(1) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law; (2) obtained without procedures required by law, rule, or regulation having been followed; or (3) unsupported by substantial evidence."[335] Thus, the Federal Circuit reviews factual determinations of the MSPB under the substantial evidence standard.[336] Pursuant to this standard of review, the Federal Circuit will not overturn a decision if it is supported by "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."[337] In determining whether the MSPB's decision is supported by substantial evidence, the Federal Circuit is limited to a review of the administrative record,[338] but must look to the record as a whole.[339] The burden of establishing reversible error in a MSPB decision rests upon the petitioner.[340]

Although appeals of MSPB decisions are generally heard in the Federal Circuit, the Federal Circuit may not review a final order or decision from the MSPB in cases involving claims of discrimination,[341] which include claims under § 717(c) of the Civil Rights Act of 1964;[342] § 15(c) of the Age Discrimination in Employment Act of 1967;[343] or § 16(b) of the Fair

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[331] The jurisdiction of the Federal Circuit is prescribed generally by 28 U.S.C. § 1295 (1994). In general, § 1295 (a) and 38 U.S.C. § 4092 (1994), which gives the Federal Circuit jurisdiction over appeals from the Court of Veterans Appeals and rulemaking of the Veterans Administration, give the court virtually exclusive jurisdiction in certain fields of law. Those fields include international trade, federal personnel, patents, government contracts and other claims for money against the federal government, and veterans affairs.

[332] 5 U.S.C. § 1101 (1994).

[333] 5 U.S.C. §7701 (a) (1994) (an employee may appeal to the MSPB "from any action which is appealable to the Board under any law, rule or regulation").

[334] *Id.* at § 7703(a)(1), (b)(1); *see also* 28 U.S.C. §1295(a)(9) (1994) (giving exclusive jurisdiction to the Federal Circuit).

[335] *Id.* at § 7703(c)(1)-(3) (1994 & Supp. IV 1999); *see also* Hayes v. Dep't of the Navy, 727 F.2d 1535, 1537 (Fed. Cir. 1984).

[336] Jackson v. Veterans Admin., 768 F.2d 1325, 1329 (Fed. Cir. 1985) (citing the applicable statute, 5 U.S.C. § 7703(c)).

[337] Bradley v. Veterans Admin., 900 F.2d 233, 234 (Fed. Cir. 1990) (quoting Consol. Edison Co. v. NLRB, 305 U.S. 197, 229 (1938)).

[338] Lucas v. Dep't of Def., No. 00-3264, 2000 U.S. App. LEXIS 25538, at *3 (Fed. Cir. Oct. 12, 2000) (unpublished opinion).

[339] Kimm v. Dep't of Treasury, 61 F.3d 888, 891 (Fed. Cit. 1995).

[340] Harris v. Dep't of Veterans Affairs, 142 F.3d 1463, 1467 (Fed. Cir. 1998).

[341] Williams v. Dep't of the Army, 715 F.2d 1485, 1492 (Fed. Cir. 1983).

[342] 42 U.S.C. § 2000e-16(c) (1994).

[343] 29 U.S.C. § 633a(c) (1994).

Labor Standards Act of 1938.[344] Claims of discrimination under these statutes must be brought in a district court with review available in the appropriate regional circuit court.[345]

Furthermore, the Federal Circuit may not review a final order or decision from the MSPB in "mixed" cases. Mixed cases involve a discrimination claim under one of the precluded statutes along with other claims that would otherwise be reviewable by the Federal Circuit.[346] Mixed cases must also be brought in a district court with review available in the appropriate regional circuit court.[347] Although the Federal Circuit may not entertain appeals of discrimination claims subject to 5 U.S.C. § 7702 (1994) or mixed claims on the merits, it has jurisdiction to review procedural or threshold matters not related to the merits of discrimination claims.[348]

2. COFC

Under 28 U.S.C. §1295, the Federal Circuit has exclusive jurisdiction over an appeal from a final decision of the COFC (formerly the Claims Court and, before that, the Court of Claims).[349] The principal statute governing jurisdiction is the Tucker Act.[350] Although the Tucker Act covers a variety of claims, most can be categorized as contract, taking, Indian, pay (civilian and military), tax, and vaccine claims.[351] One type of compensable taking involves patents. The theoretical basis for recovery is the doctrine of eminent domain,[352] and the governing statutory provision is 28 U.S.C. § 1498 (1994).[353] To maintain a cause of action pursuant to the Tucker Act that is based on a contract, the contract must be between the plaintiff and the government.[354] Further, under the "Little Tucker Act,"[355] a district court shares original

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[344] *Id* at § 216(b); *see also* 63 A.L.R. FED. 503, 505 (1983) ("The legislative history of the [CSRA] indicates that Congress excepted cases involving complaints of discrimination from the purview of § 7703 in order to protect the existing rights of employees to a trial *de novo* in discrimination cases.")

[345] *See* Cruz v. Dep't of the Navy, 906 F.2d 689, 691 (Fed. Cir. 1990).

[346] Daniels v. United States Postal Serv., 726 F.2d 723, 724 (Fed. Cir. 1984); Hilliard v. United States Postal Serv., 722 F.2d 1555,1555 (Fed. Cir. 1983); Granadov. Dep't of Justice, 721 F.2d 804, 807 (Fed. Cir. 1983).

[347] *See* Barnes v. Small, 840 F.2d 972, 979 (D.C. Cir. 1988).

[348] Smith v. Merit Sys. Protection Bd., 813 F.2d 1216, 1218 (Fed. Cir. 1987) (stating Federal Circuit has jurisdiction to hear appeals from MSPB orders dismissing employees' claims for lack of jurisdiction); Ballentine v. Merit Sys. Protection Bd., 738 F.2d 1244,1246 47 (Fed. Cir. 1984).

[349] 28 U.S.C. § 1295(a)(3) (1994).

[350] The Tucker Act states, in pertinent part: "The United States Court of Federal Claims shall have jurisdiction to render judgment upon any claim against the United States founded either upon the Constitution, or any Act of Congress or any regulation of an executive department, or upon any express or implied contract with the United States, or for liquidated or unliquidated damages in cases not sounding in tort." 28 U.S.C. § 1491 (a) (1) (1994).

[351] UNITED STATES COURT OF FEDERAL CLAIMS BAR ASSOCIATION, THE UNITED STATES COURT OF FEDERAL CLAIMS, A DESKTOP FOR PRACTITIONERS, at 3-47, 62-79 (1998).

[352] Motorola, Inc. v. United States, 729 F.2d 765, 768, 221 U.S.P.Q 297, 299 (Fed. Cir. 1984).

[353] 28 U.S.C. § 1498 (1994). Section 1498(a) states, in pertinent part:

> Whenever an invention described in and covered by a patent of the United States is used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, the owner's remedy shall be by action against the United States in the United States Court of Federal Claims for the recovery of his reasonable and entire compensation for such use and manufacture.

[354] Greenbrier v. United States, 193 F.3d 1348, 1354 (Fed. Cir. 1999) (stating that there must exist privity of contract between the plaintiff and the government that equates to finding a waiver of sovereign immunity).

jurisdiction with the COFC in non-tax Tucker Act cases not exceeding $10,000 in amount.[356] The Federal Circuit freely reviews the decisions of district courts in Little Tucker Act cases for errors of law, but will not set aside findings of fact unless they are clearly erroneous.[357]

In reviewing decisions of the COFC, the Federal Circuit examines findings of fact for clear error and reviews legal conclusions completely and independently.[358] Also, the Federal Circuit applies the same standard of review as the COFC.[359] In other words, the Federal Circuit might grant a *de novo* review on a legal question and use the standard of review applied by the COFC.

The Federal Circuit considers a question of jurisdiction to be an issue of statutory interpretation over which it exercises plenary review.[360] Likewise, the Federal Circuit reviews a grant of summary judgment in the COFC "under [the] *de novo* standard of review, with all justifiable factual inferences drawn in favor of the party opposing summary judgment."[361] "Summary judgment is appropriate only when the movant has established that no genuine issue of material fact exists and that the movant is entitled to judgment as a matter of law."[362] In some cases, in finding that the COFC correctly construed the law, the Federal Circuit will simply adopt the lower court's decision as its own.[363]

As with summary judgment cases, the Federal Circuit reviews without deference the COFC's decision to dismiss for failure to state a claim upon which relief can be granted.[364] The court has also stated that, "Because granting a motion [to dismiss for failure to state a claim] summarily terminates the case on its merits, courts [should] broadly construe the complaint."[365]

In contract cases, "[the issue of] whether a contract exists is a mixed question of law and fact."[366] Where the parties do not dispute the relevant facts, however, the issue is reduced to a question of law and, thus, is reviewed *de novo.*[367] Specifically, contract interpretation itself is a question of law to be reviewed *de novo.*[368] Likewise, "The underlying questions of treaty interpretation are questions of law which [the Federal Circuit] also review[s] *de novo*.[369]

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[355] 28 U.S.C. § 1346(a)(2) (1994).

[356] United States v. Hohri, 847 F.2d 779,779 (Fed. Cit. 1988); Cornetta v. United States, 851 F.2d 1372, 1375 (Fed. Cir. 1988) (en banc).

[357] *See, e.g.,* Spindelfabrik Suessen-Schurr Stahlecker & Grill v. Schubert & Salzer Maschinenfabrik Aktiengesellschaft, 829 F.2d. 1075, 1077,4 U.S.P.Q.2d 1044, 1049 (Fed. Cir. 1987).

[358] Columbia Gas Sys., Inc. v. United States, 70 F.3d 1244, 1246 (Fed. Cir. 1995).

[359] McCall Stock Farms, Inc. v. United States, 14 F.3d 1562, 1568 (Fed. Cir. 1993) (citing Heinemann v. United States, 796 F.2d 451, 454-55 (Fed. Cir. 1986)).

[360] Ed A. Wilson, Inc. v. Gen. Servs. Admin., 126 F.3d 1406, 1408 (Fed. Cir. 1997).

[361] Cook v. United States, 86 F.3d 1095, 1097 (Fed. Cir. 1996); *see also* Union Pac. Corp. v. United States, 5 F.3d 523, 525 (Fed. Cir. 1993) (stating that in an appeal from a grant of summary judgment, all facts are construed in favor of the non-movant); Montana v. United States, 124 F.3d 1269, 1273 (Fed. Cir. 1997) (stating that the Federal Circuit "employs complete and independent review over an appeal of the propriety of summary judgment").

[362] *Montana,* 124 F.3d at 1273.

[363] Crenkovich v. United States, 202 F.3d 1325, 1326 (Fed. Cir. 2000) ("Because the Court of Federal Claims' analysis needs no amplification, this court adopts as its own the opinion of the Court of Federal Claims . . . .").

[364] Rigsbee v. United States, 226 F.3d 1376, 1378 (Fed. Cir. 2000).

[365] Ponder v. United States, 117 F.3d 549, 552-53 (Fed. Cir. 1997).

[366] Greenbrier v. United States, 193 F.3d 1348, 1354 (Fed. Cit. 1999) (citing Cienega Gardens v. United States, 162 F.2d 1123, 1129-30 (Fed. Cit. 1998)).

[367] *Id.*

[368] *Id* (citing *Cienega Gardens,* 162 F.3d at 1129-30).

[369] Cook v. United States, 86 F.3d 1095, 1097 (Fed. Cit. 1996).

With regulatory interpretations, the Federal Circuit, adopting the *Chevron* test, must give substantial deference to an agency's interpretation of its own regulations.[370] "Deference is particularly appropriate when the agency is applying its regulations to a complex or changing circumstance, thus requiring the agency to bring to bear its unique expertise and policy-making prerogatives."[371] "When such judicial deference is appropriate, [the Federal Circuit] must accept the agency's reasonable interpretation of a regulation, even if there may be other reasonable interpretations to which the regulation is susceptible, and even if the [Federal Circuit] would have preferred an alternative interpretation."[372] The Federal Circuit has found, however, that it would be unfair to give the government a distinct advantage during an ordinary breach of contract litigation by giving deference to an agency's contract interpretation where the agency itself is a party to the contract.[373]

Prejudice in an award of a government contract is a question of fact in a post-award bid protest.[374] In a post-award protest, the Federal Circuit applies the standard of review for agency action under the APA.[375] Therefore, the Federal Circuit reviews the administrative record before the agency and the COFC using the arbitrary or capricious standard.[376] "This standard requires [the Federal Circuit] to sustain an agency action evincing rational reasoning and consideration of relevant factors."[377] Finally, "Where no adequate basis exists upon which to review the appealed judgment due to insufficient findings of fact and conclusions of law, the judgment should be vacated and the action remanded for further consideration."[378]

3. Vaccine Act Cases

Concerns regarding the remedies available to victims of vaccine injuries, and the decreasing availability of vaccines due to prior litigation, led Congress to enact the national Childhood Vaccine Injury Act .[379] The Act consists of two parts: the National Vaccine Program and the National Vaccine Injury Compensation Program.[380] By eliminating the need for plaintiffs to demonstrate either a defendant-manufacturer's negligence in producing or marketing the drug, or a vaccine's defectiveness, Congress hoped the federal alternative would reduce the number of civil actions filed in state court.[381]

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[370] Princess Cruises, Inc. v. United States, 201 F.3d 1352, 1359-60 (Fed. Cir. 2000).

[371] S. Cal. Edison Co. v. United States, 226 F.3d 1349, 1357 (Fed. Cir. 2000) (citing Martin v. Occupational Safety & Health Review Comm'n, 499 U.S. 144, 151 (1990)).

[372] *Id.*

[373] *Id.*

[374] Advanced Data Concepts, Inc. v. United States, 216 F.3d 1054, 1057 (Fed. Cir. 2000).

[375] Section 706 directs a reviewing court to: "(2) hold unlawful and set aside agency action, findings, and conclusions found to be—(A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law . . . (E) unsupported by substantial evidence in a case subject to sections 556 and 557 . . . or otherwise reviewed on the record of an agency hearing provided by statute . . . ." 5 U.S.C. § 706 (1994).

[376] *Advanced Data,* 216 F.3d at 1057.

[377] *Id.* at 1058.

[378] Patton v. Sec'y of Dep't of Health & Human Servs., 25 F.3d 1021, 1031 (Fed. Cir. 1994).

[379] 42 U.S.C. §§ 300aa-1-300aa-34 (1994 & Supp. II 1998).

[380] *Id.* at §§ 300aa-10-300aa-17.

[381] H.R. REP. No. 99-908, at 12 (1986), *reprinted in* 1986 U.S.C.C.A.N. 6346, 6353.

Jurisdiction is established in the COFC, where each contest is assigned to a special master who hears the arguments.[382] If either party disagrees with the decision of the special master, they may appeal to the COFC for review of the special master's decision.[383] After that, the Federal Circuit will take appeals within sixty days of the date of the judgment of the COFC.[384]

The applicable statute provides no standard of appellate review in Vaccine Act cases.[385] The Federal Circuit has interpreted the statute, however, as instructing it to affirm a special master's factual findings unless they are arbitrary, capricious, or an abuse of discretion under 42 U.S.C. § 300aa-12(e)(2)(B).[386] Further, the Federal Circuit will consider only the record developed by the special masters in the proceedings below.[387]

On the other hand, the Federal Circuit will review legal decisions of the lower court *de novo.*[388] In that light, the Federal Circuit has determined that the COFC's review under the arbitrary and capricious standard of the special master's findings is a question of law. Thus, the Federal Circuit reviews *de novo* the COFC's determination as to whether or not the special master's decision was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.[389] For example, the Federal Circuit reviews issues of statutory interpretation under a "not in accordance with the law standard," which is *a de novo* standard.[390] Therefore, the Federal Circuit does not defer to the interpretation of the statute by the special master.[391]

4. Boards of Contract Appeals

The Contract Disputes Act of 1978 (CDA)[392] gives the heads of executive agencies the right to establish Boards of Contract Appeals.[393] The different Boards of Contract Appeals hear cases arising from disputes between the government and a contractor, with "contractor" defined as "a party to a Government contract other than the Government."[394] Each Board handles cases within its own subject matter jurisdiction, ranging from contracts with the Armed Services to the

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[382] 382 42 U.S.C. § 300aa-12(a)-(b) (1994).
[383] *Id.* at § 300aa-12(e).
[384] *Id.* at § 300aa-12(f).
[385] *Id.*
[386] Whitecotton v. Sec'y of Dep't of Health & Human Servs., 81 F.3d 1099 (Fed. Cir. 1996):

> Our review of the special master's findings of fact is very limited. As we have recognized in the past, `Congress assigned to a group of specialists, the Special Masters . . . the unenviable job of sorting through these painful cases and, based upon their accumulated expertise in the field, judging the merits of the individual claims.' For this reason, Congress has instructed us to affirm a special master's factual findings unless they are arbitrary, capricious, or an abuse of discretion.

Id. at 1104 (citations omitted).
[387] Hodges v. Sec'y of Dept. of Health & Human Servs., 9 F.3d 958,961 (Fed. Cir. 1993).
[388] *Whitecotton,* 81 F.3d at 1106.
[389] Hines v. Sec'y of Dep't of Health & Human Servs., 940 F.2d 1518, 1524 (Fed. Cir. 1991).
[390] Euken v. Sec'y of Dep't of Health & Human Servs., 34 F.3d 1045, 1047 (Fed. Cir. 1994).
[391] *Id.*
[392] 41 U.S.C. § 601-13 (1994 & Supp. III 1997).
[393] 41 U.S.C. § 607(a) (1994).
[394] *Id* at § 601(4).

Department of Transportation.[395] Each Board's jurisdiction is limited to claims from contracting officers' final decisions.[396] Either the government or the contractor may appeal an unfavorable decision to the Federal Circuit.[397] Before the government may appeal a Board decision, however, the head of the agency must determine that an appeal should be taken and obtain the approval of the attorney general.[398]

The CDA gives a contractor the option of filing an appeal with either the COFC[399] or an agency's Board of Contract Appeals.[400] In either case, under 28 U.S.C. §§ 1295(a)(3) (1994) and 1295(a)(10), the Federal Circuit has exclusive jurisdiction over any subsequent appeal. The standard of review under the CDA for reviewing a Board decision on a question of law "shall not be final or conclusive," but the decision on a question of fact "shall be final and conclusive and shall not be set aside unless the decision is fraudulent, or arbitrary, or capricious, or so grossly erroneous as to necessarily imply bad faith, or if such decision is not supported by substantial evidence."[401] Substantial evidence is defined as "relevant evidence as a reasonable mind might accept as adequate to support a conclusion."[402]

Although questions of law are freely reviewable, the Federal Circuit has frequently stated that "some deference is given to the Board's expertise in interpreting contract regulations."[403] The Federal Circuit has also stressed that, even if adequate evidence exists to support an alternative finding of fact, the Board's finding-if supported by substantial evidence-"is binding on this court regardless of how we might have decided this issue upon a *de novo* review."[404] Note that the factual findings of the Boards of Contract Appeals, reviewed under the substantial evidence standard, are apparently accorded greater deference than the factual findings of the COFC, which are reviewed under the clearly erroneous standard.[405]

Finally, in order to sue the government, privity must exist between the parties.[406] The rules governing this relationship are known as the *Severin* doctrine.[407] As a general rule, subcontractors under government contracts do not have standing to sue the government.[408] If the prime contractor is liable for damages to the subcontractor, however, then the prime contractor

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[395] There are eleven Boards of Contract Appeals: the Armed Services Board of Contract Appeals (ASBCA), the Corps of Engineers Board of Contract Appeals (ENGBCA), the Department of Agriculture Board of Contract Appeals (AGBCA), the Department of Energy Board of Contract Appeals (EBCA), the Department of Housing and Urban Development Board of Contract Appeals (HUDBCA), the Department of Interior Board of Contract Appeals (IBCA), the Department of Labor Board of Contract Appeals (LBCA), the Department of Transportation Board of Contract Appeals (DOTBCA), the Department of Veterans Affairs Board of Contract Appeals (VABCA), General Services Board of Contract Appeals (GSBCA), and the Postal Service Board of Contract Appeals (PSBCA).

[396] 141 U.S.C. § 607(d) (1994).

[397] 28 U.S.C. § 1295(a)(10) (1994); 41 U.S.C. § 607(g)(1) (1994).

[398] 41 U.S.C. § 607(g)(1).

[399] *Id.* at § 609(a)(1).

[400] 41 U.S.C. § 606 (1994 & Supp. III 1997); *Id.* at § 607(d).

[401] 41 U.S.C. § 609(b).

[402] United States v. Gen. Elec. Corp., 727 F.2d 1567, 1572 (Fed. Cit. 1984) (quoting Richardson v. Perales, 402 U.S. 389, 401 (1971)).

[403] *See, e.g.,* SMS Data Prods. Group, Inc. v. United States, 900 F.2d 1553, 1555 (Fed. Cir. 1990).

[404] Blount Bros. v. United States, 872 F.2d 1003, 1005 (Fed. Cir. 1989).

[405] *See supra* text accompanying note 350.

[406] W.G. Yates & Sons Constr. Co. v. Caldera, 192 F.3d 987, 990-91 (Fed. Cir. 1999) (citing Severin v. United States, 99 Ct. Cl. 435, 442 (1943)).

[407] *Id* at 991.

[408] *Id* at 990-91.

has standing to sue the government in a pass-through suit on behalf of the subcontractor.[409] In addition, if dismissal is sought, the burden of proof rests with the government in proving that the prime contractor is not responsible for the damages incurred by the subcontractor.[410]

5. CIT and ITC

Under 28 U.S.C. § 1295(a)(5)-(a)(6) (1994), respectively, the Federal Circuit has exclusive jurisdiction "of an appeal from a final decision of the United States Court of International Trade" and to "review the final determinations of the [International Trade Commission] relating to unfair practices in import trade, made under section 337 of the Tariff Act of 1930."[411] The CIT (formerly the United States Customs Court) "was intended to [have] . . . *broad residual authority* over civil actions arising out of federal statutes governing import transaction."[412] The most frequent types of cases appealed to the Federal Circuit from the CIT involve classification or valuation of goods and antidumping or countervailing duties.[413]

a. CIT

The Federal Circuit reviews the CIT's fact-findings under a clearly erroneous standard; "questions of law are subject to full and independent review [i.e., *de novo* review]."[414] The Federal Circuit applies a different standard of review, however, when reviewing a decision by the CIT to reverse or affirm an agency determination. Under 19 U.S.C. § 1516(a) (b) (1) (B), the CIT reviews an agency determination for substantial evidence.[415] Beginning with *Atlantic Sugar Ltd. v. United States,*[416] the Federal Circuit announced that it would "review the [CIT's] review of an ITC determination by applying anew the statute's express judicial review standard."[417] Therefore, the Federal Circuit must affirm the CIT's decision unless it concludes that the agency's determination was not supported by substantial evidence or was "otherwise not in accordance with law."[418] In essence, by focusing on whether the agency's determination was supported by substantial evidence, the Federal Circuit is duplicating the efforts of the CIT.[419]

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[409] *Id* at 991.

[410] *Id.*

[411] 28 U.S.C. § 1295(a)(5)-(a)(6) (1994).

[412] United States Shoe Corp. v. United States, 114 F.3d 1564, 1571 (Fed. Cir. 1997) (emphasis added) (quoting Conoco, Inc. v. United States Foreign-Trade Zones Bd., 18 F.3d 1581, 1588 (Fed. Cir. 1994)).

[413] Edward D. Re, *Litigation Before the Court of International Trade, in* 19 U.S.C.A. XXV, XXX (West Supp. 1999).

[414] Medline Indus. v. United States, 62 F.3d 1407, 1409 (Fed. Cir. 1995); *see also* Superior Wire v. United States, 867 F.2d 1409, 1411 (Fed. Cir. 1989).

[415] Section 1516(a)(b)(1)(B) states: "The court shall hold unlawful any determination, finding, or conclusion found in an action brought under paragraph (2) of subsection (a) of this section, to be unsupported by substantial evidence on the record, or otherwise not in accordance with law." 19 U.S.C. § 1516(a)(b)(1)(B) (1994).

[416] 744 F.2d 1556 (Fed. Cir. 1984).

[417] *Id.* at 1559.

[418] *Id; see also* Am. Permac, Inc. v. United States, 831 F.2d 269, 273 (Fed. Cir. 1987).

[419] Because of this duplication, the "anew" standard of review announced in *Atlantic Sugar* has been criticized. Judge Plager, in his concurring opinion in *Zenith Electronics Corp. v. United States,* 99 F.3d 1576 (Fed. Cir. 1996), stated:

> For us to purport to review again the agency record of decision to determine if substantial evidence exists has at least three pernicious consequences. First, it encourages disappointed

The case of *Luciano Pisoni Fabbrica Accessori Instrumenti Musicali v. United States,*[420] illustrates these principles. A producer and an importer of pads for woodwind instrument keys successfully challenged, in the CIT, an antidumping order issued by the ITC .[421] They "then applied for attorney fees and expenses under the Equal Access to Justice Act (EAJA), 28 U.S.C. § 2412(d)(1)(A)."[422] Although it had determined that the order was unreasonable and not in accordance with law, the CIT declined to award fees and expenses because the government's actions were substantially justified.[423] The Federal Circuit heard the appeal by the producer and importer and affirmed the denial of fees and expenses.[424] The court stated that' Under the EAJA, we review the trial tribunal's finding that the government's position was substantially justified under the clearly erroneous standard because that is a factual decision."[425] The appellate court distinguished its review, under the substantial evidence standard, of facts determined by the trial tribunal on the merits as opposed to the fee application.[426]

b. ITC

In *Corning Glass Works v. United States International Trade Commission,*[427] the Federal Circuit set forth in detail its appellate function when appeals are taken from the ITC. "Any person adversely affected by a final determination of the Commission under subsection (d) [exclusion orders], (e) [temporary exclusion orders], (f) [cease-and-desist orders against defaulting persons]" is authorized to appeal to the Federal Circuit in accordance with the APA.[428]

> litigants with deep pockets to seek a second bite at the apple, often with no visible benefits except to the litigators since generally we are not likely to reverse on that ground. Second, such appeals waste scarce judicial resources and deflect our attention from substantive issues which might be determinative. And third, the judges of the CIT cannot help but feel their efforts at review of the record, often extensive and thorough, are unappreciated.

Id. at 1579.

[420] 837 F.2d 465 (Fed. Cir. 1988).

[421] *Id.* at 466.

[422] *Id.*

[423] *Id.*

[424] *Id* at 469.

[425] *Id* at 467.

[426] *Id* at 466-67.

[427] 799 F.2d 1559, 230 U.S-P.Q. 822 (Fed. Cir. 1986).

[428] *Id.* at 1565, 230 U.S.P.Q. at 825 (quoting 19 U.S.C. § 1337(c) (1994)). APA § 706 provides:

> To the extent necessary to decision and when presented, the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall—
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> (1) compel agency action unlawfully withheld or unreasonably delayed; and
>
> (2) hold unlawful and set aside agency action, findings, and conclusions found to be—
>
> (A) arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law;
>
> (B) contrary to constitutional right, power, privilege, or immunity;
>
> (C) in excess of statutory jurisdiction, authority, or limitations, or short of statutory right;

The APA requires the Federal Circuit to "decide all relevant questions of law" and set aside findings of fact found to be unsupported by substantial evidence.[429] Therefore, the Federal Circuit reviews the ITC's interpretation of statutory provisions *de novo* as questions of law.[430] In contrast, "Deference must be given to an interpretation of a statute by the agency charged with its administration.[431] The administrative law judge's (ALJ) decision is part of the record, of course, and the appellate court accords that decision "such probative force as it intrinsically commands."[432]

Accordingly, following the APA, the Federal Circuit determines whether, on the record, the holding of the ITC is arbitrary, capricious, and abuse of discretion, or otherwise not in accordance with the law.[433] In contrast, issues of fact may be overturned "only if unsupported by substantial evidence."[434] Under this standard, the Federal Circuit will not disturb the ITC's factual findings if they are supported by "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."[435] Finally, "[a]dvisory opinions issued by the Commission are not final determinations and are not reviewable on appeal."[436]

6. Veterans Appeals

The Veterans Judicial Review Act of 1988[437] established the United States Court of Veterans Appeals (CVA), now the United States Court of Appeals for Veterans Claims (CAVC),[438] as an Article I court for the review of Board of Veterans Appeals decisions.[439] The

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> (D) without observance of procedure required by law;
>
> (E) unsupported by substantial evidence in a case subject to sections 556 and 557 of this title or otherwise reviewed on the record of an agency hearing provided by statute; or
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> (F) unwarranted by the facts to the extent that the facts are subject to trial *de novo* by the reviewing court.

5 U.S.C. § 706 (1994).

[429] *Corning Glass,* 799 F.2d at 1565, 230 U.S.P.Q. at 826 (quoting 5 U.S.C. § 706); *see* SSIH Equip. S.A. v. United States Int'l Trade Comm'n, 718 F.2d 365, 371-72, 218 U.S.P.Q. 678, 684 (Fed. Cir. 1983).

> This court reviews factual findings of the ITC under the "substantial evidence" standard. Under this standard, we will not disturb the ITC's factual findings if they are supported by "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." We review de novo the ITC's legal determinations, including those relating to claim interpretation and patent validity.

Checkpoint Sys., Inc. v. United States Int'l Trade Comm'n, 54 F.3d 756, 759-60, 35 U.S.P.Q.2d 1042, 1045 (Fed. Cir. 1995) (citations omitted).

[430] Farrel Corp. v. United States Int'l Trade Comm'n, 949 F.2d 1147, 1151 (Fed. Cir. 1991).

[431] *Corning Glass,* 799 F.2d at 1565, 230 U.S.P.Q. at 826.

[432] Universal Camera Corp. v. NLRB, 340 U.S. 474,495 (1951); *see also* Fischer & Porter Co. v. United States Int'l Trade Comm'n, 831 F.2d 1574, 1577, 4 U.S.P.Q.2d 1700, 1701 (Fed. Cir. 1987).

[433] 5 U.S.C. § 706.

[434] *Corning Glass,* 799 F.2d at 1565, 230 U.S.P.Q. at 826 (quoting 5 U.S.C. § 706(2)(E)).

[435] *Id.* at 1566 (quoting Consol. Edison Co. v. NLRB, 305 U.S. 197, 229 (1938)).

[436] 19 JAMES WM. MOORE ET AL., MOORE's FEDERAL PRACTICE § 208.21, at n.17 (3d ed. 2000) (citing Allied Corp. v. United States Int'l Trade Comm'n, 850 F.2d 1573, 1578 (Fed. Cir. 1988)).

[437] Pub. L. No. 100-687, 102 Stat. 4105 (codified as amended at 38 U.S.C. § 7292 (2000)).

[438] Pub. L. No. 105-368, § 512(a)(1), 112 Stat. 3315, 3340.

decisions of the CAVC are subject to review on issues of law by the Federal Circuit.[440] The limited jurisdiction of the Federal Circuit over appeals from the CAVC is outlined in 38 U.S.C. § 7292. [441] Under § 7292(a), the Federal Circuit may review a decision involving "the validity or interpretation of any statute or regulation [other than a factual matter determination] relied on by the CAVC."[442] As a limitation on the Federal Circuit's review, however, § 7292(d)(2) provides that, "Except to the extent that an appeal under this chapter presents a constitutional issue, the Court of Appeals may not review (A) a challenge to a factual determination, or (B) a challenge to a law or regulation as applied to the facts of a particular case."[443] Thus, the Federal Circuit's scope of review is very narrow.

The Federal Circuit's first task is to determine whether it has subject matter jurisdiction over the action.[444] Specifically, if it is an appeal from the CAVC, the Federal Circuit must be satisfied that the CAVC had jurisdiction as well.[445] "For the purpose of determining a court's jurisdiction, [the Federal Circuit] accept[s] the allegations in the complaint or petition as true, making reasonable factual assumptions and drawing plausible inferences in favor of the petitioner."[446] Unless without any "plausible basis, [disputed facts] are resolved in favor of the petitioner for jurisdictional purposes."[447] "Jurisdiction is established when the factual allegations and inferences place the subject matter within the court's authority as assigned by statute."[448] In addition to its appellate function, the Federal Circuit has original jurisdiction over an action of the Secretary of Veterans Affairs pursuant to 38 U.S.C. § 502.[449]

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[439] Pub. L. No. 100-687, 102 Stat. 4105 (codified as amended at 38 U.S.C. § 7292).

[440] 38 U.S.C. § 7292(d)(1) (2000).

[441] *Id.* at § 7292.

[442] Summers v. Gober, 225 F.3d 1293, 1295 (Fed. Cir. 2000). 38 U.S.C. § 7292(a) states:

> After a decision of the United States Court of Appeals for Veterans Claims is entered in a case, any party to the case may obtain a review of the decision with respect to the validity of any statute or regulation (other than a refusal to review the schedule of ratings for disabilities adopted under section 1155 of this title) or any interpretation thereof (other than a determination as to a factual matter) that was relied on by the Court in making the decision. Such a review shall be obtained by filing a notice of appeal with the Court of Appeals for Veterans Claims within the time and in the manner prescribed for appeal to United States court of appeals from United States district courts.

[443] 38 U.S.C. § 7292(d)(2).

[444] Aronson v. Brown, 14 F.3d 1578, 1580 (Fed. Cir. 1994) ("We first determine whether it is within this court's authority to review any of these issues.").

[445] Bailey v. West, 160 F.3d 1360, 1362 (Fed. Cir. 1998) ("Because our review of this decision involves a question of statutory interpretation—namely the ability of the Court of Veterans Appeals to equitably toll a particular statutory time limit and thereby exercise jurisdiction over a late-filed notice of appeal—we have jurisdiction over this matter."); *see* Mayer v. Brown, 37 F.3d 618, 619 (Fed. Cir. 1994) (Federal Circuit reviews Court of Veterans Appeals' interpretation of its jurisdictional statutes).

[446] Ephraim v. Brown, 82 F.3d 399, 401 (Fed. Cir. 1996).

[447] Id.

[448] *Id.*

[449] 38 U.S.C. § 502 (1994) states: "An action of the Secretary to which section 552(a)(1) or 553 of title 5 (or both) refers . . . is subject to judicial review [which] may be sought only in the United States Court of Appeals for the Federal Circuit." Splane v. West, 216 F.3d 1058, 1062 (Fed. Cir. 2000). Jurisdiction is proper where the action being "challenged is the creation and publication of an agency rule—in the form of a precedential general counsel opinion-which falls under the ambit of Sections 552(a)(1) and 553." *Id.*

Once jurisdiction is established, "the Federal Circuit will reach the merits" of the appeal.[450] "Construction of a statute or regulation is a question of law that [the Federal Circuit] review[s] *de novo.*"[451] The "'court shall hold unlawful and set aside any regulation or any interpretation thereof . . . relied upon in the decision of the [CAVC]' held to be, among other things, 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'"[452] In upholding § 7292(d) (1), the Federal Circuit applies the two-step test articulated in *Chevron,* because its review of Veterans Court judgments entails the review of the underlying agency action.[453]

Under the first step in *Chevron,* if the Federal Circuit finds that the statutory "intent of Congress is clear, that is the end of the matter."[454] To define congressional intent, the Federal Circuit looks "to the language of the . . . statute. If the statutory language is 'unambiguous,' the Federal Circuit will treat its unambiguous meaning as controlling, 'absent a clearly expressed legislative intention to the contrary.'"[455] In determining ambiguity, the Federal Circuit will consider the "plain meaning" of a statute, using various methods.[456] For example, the court may look to the ordinary meaning of the language used,[457] the relationship of terms within the statute,[458] or the purpose of the statute.[459]

If the plain meaning of the statute cannot be derived, the Federal Circuit may look to legislative history to determine congressional intent.[460] A very strong showing of legislative

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[450] Gershon M. Ratner, *The Federal Circuit's Approach to Statutory and Regulatory Construction, with Emphasis on Veterans Law,* 6 FED. CIR. B.J. 243, 246 (1996).

[451] Summers v. Gober, 225 F.3d 1293, 1295 (Fed. Cir. 2000).

[452] Smith v. Brown, 35 F.3d 1516, 1517 (Fed. Cir. 1994). 38 U.S.C. § 7292(d)(1) (2000) states:

> The Court of Appeals for the Federal Circuit shall decide all relevant questions of law, including interpreting constitutional and statutory provisions. The court shall hold unlawful and set aside any regulation or any interpretation thereof (other than a determination as to a factual matter) that was relied upon in the decision of the Court of Appeals for Veterans Claims that the Court of Appeals for the Federal Circuit holds to be-
>
> (A) arbitrary, capricious, and abuse of discretion, or otherwise not in accordance with law;
>
> (B) contrary to constitutional right, power, privilege, or immunity;
>
> (C) in excess of statutory jurisdiction, authority, or limitations, or in violation of a statutory right; or
>
> (D) without observance of procedure required by law.

[453] *Smith,* 35 F.3d at 1517 (citations omitted).

[454] Skinner v. Brown, 27 F.3d 1571, 1572 (Fed. Cir. 1994) (citing *Chevron,* 467 U.S. at 842).

[455] Ratner, *supra* note 450, at 248 (quoting Jones v. Brown, 41 F.3d 634, 640 (Fed. Cir. 1994)).

[456] *Id* at 248-55.

[457] Jones v. Brown, 41 F.3d 634, 638 (Fed. Cir. 1994).

[458] Smith v. Brown, 35 F.3d 1516, 1524 (Fed. Cir. 1994) (The meaning of a term is "directly controlled and limited, under the principle of *noscitur a sociis* (it is known from its associates)".).

[459] *Jones,* 41 F.3d at 640 ("[I]n a statutory provision dealing specifically with fee proceedings, it would be illogical to assume that Congress did not intend the phrase `any case or appeal pending' to include pending fee proceedings.").

[460] *Id.* (" [L] egislative history may aid our understanding of the function and purposes of [a] statute, and in cases of doubt assist in interpretation of the language . . . ."); Burton v. Derwinski, 933 F.2d 988, 989 (Fed. Cir.

intent is necessary, however, to convince the Federal Circuit that Congress meant something different than what it actually said.[461]

The last measure the court may take in determining the congressional intent of a statute is to apply broad construction.[462] The Federal Circuit has explained that the veterans benefits statute should be construed liberally to effectuate the statute's purposes.[463] If the statute has an explicit plain meaning, however, even if it is harmful to veterans, then the court may not broadly construe the statute.[464]

If the court is unable to determine congressional intent using the methods outlined above, it may move to step two of the *Chevron* analysis. Only where the statute is silent or ambiguous may the Federal Circuit defer to an agency's interpretation of the specific issue.[465] An important exception to note is that the Federal Circuit will not defer to an agency's interpretation simply because that interpretation has been long-standing.[466] For example, in *Gardner v. Brown,*[467] the court reasoned that because applicable regulations were not subject to judicial review until 1988, many nicely aged interpretations had gone unscrutinized, and the length of a regulation's existence should not be a presumed basis for validity.[468]

The phrase *de novo* review is often used by the Federal Circuit and the CAVC; it is also misunderstood in some instances.[469] Although *de novo* refers to judicial review without deference to lower court decisions, the term fails to accurately describe the appellate process when it is applied to a review of issues for which the court affords deference to the lower court's decision.[470]

As the CAVC put it, "Because we are a court of review, it is not appropriate for us to make a *de novo* finding, based on the evidence, of [a factual matter]."[471] Thus, the Federal Circuit must ensure that the CAVC correctly restricts itself when reviewing the Board of Veterans Appeals decisions.

7. Secretaries of Agriculture and Commerce

The Federal Circuit has subject matter jurisdiction over appeals from decisions of the Secretaries of Agriculture and Commerce in matters specified by 28 U.S.C. § 1295(a)(7)-(8)

1991) (explaining that since Congress chose the very term for the new statute, it was unlikely that its failure to revise the interpretation was mere oversight).

[461] Gardner v. Brown, 5 F.3d 1456, 1460 (Fed. Cir. 1993).

[462] *Smith,* 35 F.3d at 1525 ("The World War Veterans Act was remedial legislation and as such should be construed broadly to the benefit of the veteran."); 38 C.F.R. § 3.102 (2000) ("It is the defined and consistently applied policy of the Department of Veterans Affairs to administer the law under a broad interpretation . . . .").

[463] *Smith,* 35 F.3d at 1525.

[464] *Id.* at 1526 (A veteran may not "rely upon the generous spirit that suffuses the law generally to override the clear meaning of a particular provision.").

[465] Skinner v. Brown, 27 F.3d 1571, 1572 (Fed. Cir. 1994).

[466] *Gardner,* 5 F.3d at 1463.

[467] 5 F.3d 1456, 1460 (Fed. Cir. 1993).

[468] *1d* at 1463-64.

[469] Henley v. West, 212 F.3d 1255, 1263 (Fed. Cir. 2000).

[470] *Id.* For instance, it is incorrect to describe appellate review of "well-groundedness" as *de novo* since, with well-groundedness, "the ultimate conclusion is a question of law, but that conclusion rests on factual matters the determination of which by the agency fact finders is entitled on review to substantial deference." *Id.* In *Hensley,* the CAVC took it upon itself to review *de novo* the BVA's determination of well-groundedness, effectively dissecting the factual record in detail.

[471] *Id.* (citing Webster v. Derwinski, 1 Vet. App. 155, 159 (1991)).

(1994). Under 28 U.S.C. § 1295(a)(7), the only questions of law the Federal Circuit has exclusive jurisdiction to review are "findings of the Secretary of Commerce under U.S. note 6, subchapter X, chapter 98 of the Harmonized Tariff Schedule (HTS) of the United States (relating to importation of instruments or apparatus)."

Appeals of any decision by the Secretary of Agriculture under the Plant Variety Protection Act of 1970 (PVPA)[472] may be brought directly to the Federal Circuit[473] or to the U.S. District Court for the District of Columbia.[474] A district court decision is appealable to the Federal Circuit.[475] Under 28 U.S.C. § 1295(a)(8) and 7 U.S.C. § 2461, the Federal Circuit has jurisdiction over any appeal" [f]rom the decisions made under sections 2404, 2443, 2501, 2502, and 2568 of title 7.[476]

PVPA infringement actions are very similar to patent infringement claims.[477] When reviewing district court decisions in patent cases, the Federal Circuit "must determine all substantive law issues for [itself], even though on issues of procedural law in such cases, [it] must defer to the regional circuit, with certain exceptions."[478] "Thus, in reviewing evidentiary rulings, the Federal Circuit applies the law of the regional circuit where appeals from the district would normally lie."[479]

Conclusion

Like other appellate courts, the Federal Circuit avoids both the temptation and the effort of appellate retrial by applying certain carefully defined standards of review. There are several standards of review, most notably the *de novo,* clearly erroneous, substantial evidence, and abuse of discretion standards of review, as well as varying levels of review within each of these standards. As discussed in this article, the amount of deference accorded by the Federal Circuit to a decision on appeal depends on such factors as the type of issue under review (e.g., law versus fact versus equity); the burden of proof and any presumptions dictated by the substantive law applicable at the trial level to the issue under appellate review; the nature of the tribunal whose judgment is under review; and the route by which the issue reaches the Federal Circuit (i.e., the stage of the proceeding). A thoughtful consideration and practical application by the appellate advocate of the available standards of review will increase the advocate's chances of obtaining a favorable judgment on appeal.

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[472] Plant Variety Protection Act of 1970, 7 U.S.C. § 2321 to 2582 (1994) (protecting "sexually" reproduced plants).

[473] 7 U.S.C. § 2461 (1994).

[474] *Id.* at § 2462.

[475] 28 U.S.C. § 1295(a)(1) (1994).

[476] *Id* at § 1295(a)(8) and 7 U.S.C. § 2461.

[477] 19 JAMES WM. MOORE ET AL., MOORE's FEDERAL PRACTICE § 208.10[1] (3d ed. 2000).

[478] Delta & Pine Land Co. v. Sinkers Corp., 177 F.3d 1343, 1350, 50 U.S.P.Q.2d 1749, 1753-54 (Fed. Cir. 1999) (citing Nat'l Presto Indus., Inc. v. West Bend Co., 76 F.3d 1185, 1188 n.2, 37 U.S.P.Q2d 1685, 1686 n.2 (Fed. Cir. 1996)).

[479] MOORE ET AL., *supra* note 477, § 208.10[1] (citing Odetics, Inc. v. Storage Tech. Corp., 185 F.3d 1259, 1276, 51 U.S.P.Q.2d 1225, 1236 (Fed. Cir. 2000)).

Appendix A: Characterization of Specific Topics As Issues of Law or Questions of Fact for Purposes of Appellate Review

Patent Law Issues

I. Patent Validity: The ultimate question of patent validity is one of law, reviewed *de novo.*

A. Statutory Subject Matter: Whether a claim is directed to statutory subject matter under 35 U.S.C. § 101 is a question of law reviewed *de novo. AT*&T Corp. v. Excel Communications, Inc., 172 F.3d 1352, 1355, 50 U.S.P.Q.2d 1447, 1449 (Fed. Cir. 1999) ("The issue on appeal, whether the asserted claims of the '184 patent are invalid for failure to claim statutory subject matter under 35 U.S.C. § 101, is a question of law which we review without deference."); Arrhythmia Research Tech. v. Corazonix Corp., 958 F.2d 1053, 1055, 22 U.S.P.Q.2d 1033, 1035 (Fed. Cir. 1992).

B. Utility Requirement: Whether an invention meets the utility requirement of 35 U.S.C. § 101 is a question of fact reviewed for clear error or substantial evidence. *In re* Cortright, 165 F.3d 1353,1356, 49 U.S.P.Q.2d 1464,1465 (Fed. Cir. 1999) ("Utility is a factual issue, which we review for clear error [in the context of a bench trial].") (quoting Cross v. Iizuka, 753 F.2d 1040, 1044 n.7, 224 U.S.P.Q. 739, 742 n.7 (Fed. Cit. 1985)); Brooktree Corp. v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1571, 24 U.S.P.Q.2d 1401, 1413 (Fed. Cir. 1992); Newman v. Quigg, 877 F.2d 1575, 1581, 11 U.S.P.Q.2d 1340, 1345 (Fed. Cir. 1989); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1268, 229 U.S.P.Q. 805, 810 (Fed. Cir. 1986).

C. Anticipation:

1. Whether an invention meets the novelty requirement of 35 U.S.C. § 102 is a question of fact reviewed for clear error or substantial evidence. Glaverbel Societe Anonyme & Fosbel, Inc. v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1554, 33 U.S.P.Q.2d 1496, 1498 (Fed. Cit. 1995) ("Anticipation is a question of fact.") (citing Shatterproof Glass Corp. v. Libbey-Owens Ford Co., 758 F.2d 613, 619, 225 U.S.P.Q. 634, 637 (Fed. Cir. 1985)); *In re* Paulsen, 30 F.3d 1475, 1478, 31 U.S.P.Q 2d 1671, 1673 (Fed. Cir. 1994); Westvaco Corp. v. Int'l Paper Co., 991 F.2d 735, 746, 26 U.S.P.Q 2d 1353, 1362 (Fed. Cir. 1993).

2. The loss of right provisions in 35 U.S.C. § 102(b) based upon "public use" or placing the invention "on sale" present questions of law with subsidiary issues

of fact. Eiselstein v. Frank, 52 F.3d 1035, 1038, 34 U.S.P.Q 2d 1467, 1469 (Fed. Cir. 1995) ("Whether patentability is barred by § 102(b) is a question of law to be determined based upon underlying factual determinations."); Electro Med. Sys., S.A. v. Cooper Life Sci., Inc., 34 F.3d 1048, 1053, 32 U.S.P.Q2d 1017, 1020 (Fed. Cir. 1994) (citing Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1568-69, 1 U.S.P.Q.2d 1593, 159798 (Fed. Cir. 1987)); Petrolite Corp. v. Baker Hughes Inc., 96 F.3d 1423, 1425, 40 U.S.P.Q2d 1201 (Fed. Cir. 1996) ("Whether a public use has occurred is a question of law."); Lough v. Brunswick Corp., 86 F.3d 1113, 1120, 39 U.S.P.Q.2d 1100, 1104 (Fed. Cir. 1996) ("Whether an invention was in public use prior to the critical date within the meaning of § 102(b) is a question of law. . . . To determine whether a use is `experimental,' a question of law, the totality of the circumstances must be considered . . . ."); Allied Colloids Inc. v. Am. Cyanamid Co., 64 F.3d 1570,35 U.S.P.Q.2d 1840 (Fed. Cir. 1995); In re Epstein, 32 F.3d 1559, 1564, 31 U.S.P.Q.2d 1817, 1820 (Fed. Cir. 1994) ("Whether something is `in public use or on sale' within the meaning of section 102(b), and thus properly considered prior art, is a question of law with subsidiary issues of fact.") (quoting Manville Sales Corp. v. Paramount Sys., Inc., 917 F.2d 544, 549,16 U.S.P.Q.2d 1587,1591 (Fed. Cir. 1990)); Tone Bros. v. Sysco Corp., 28 F.3d 1192, 1197, 31 U.S.P.Q.2d 1321, 1324 (Fed. Cir. 1994); Baxter Int'l, Inc. v. Cobe Labs., Inc., 88 F.3d 1054, 1060, 39 U.S.P.Q.2d 1437, 1441 (Fed. Cir. 1996) ("An analysis of experimental use, which is also a question of law, requires consideration of the totality of circumstances and the policies underlying the public use bar."); Keystone Retaining Wall Sys. v. Westrock, Inc., 997 F.2d 1444, 1451, 27 U.S.P.Q.2d 1297, 1303 (Fed. Cir. 1993).

3. Whether a reference is in the prior art (i.e., what constitutes prior art under § 102) is a legal question. Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1568, 1 U.S.P.Q.2d 1593, 1597 (Fed. Cir. 1987).

4. "The enablement issue in the context of whether a prior art reference is enabling the features for which it has been cited is a mixed question of law and fact." *In re* Epstein, 32 F.3d 1559, 1568, 31 U.S.P.Q.2d 1817, 1823 (Fed. Cir. 1994).

5. Whether information is inherent in the teaching of the prior art is a question of fact. *In re* Zurko, 111 F.3d 887, 889, 42 U.S.P.Q.2d 1476, 1479 (Fed. Cir. 1997) (citing *In re* Napier, 55 F.3d 610, 613, 34 U.S.P.Q.2d 1782, 1784 (Fed. Cir. 1995), for the principle that the inherent teaching of a prior art reference is a question of fact); *In re* Grasselli, 713 F.2d 731, 739, 218 U.S.P.Q. 769, 775 (Fed. Cir. 1983).

D. Abandonment, Suppression, and Concealment: Whether an invention has been abandoned, suppressed, or concealed within the context of 35 U.S.C. §§ 102(c)and 102(g) is a question of law. Fujikawa v. Wattanasin, 93 F.3d 1559, 1567, 39 U.S.P.Q.2d 1895, 1901 (Fed. Cir. 1996) ("Suppression or concealment is a question of law which we review *de novo.");* Myers v. Feigelman, 455 F.2d 596, 604, 172 U.S.P.Q. 580, 587 (C.C.P.A. 1972); Brokaw v. Vogel, 429 F.2d 476, 480, 166 U.S.P.Q. 428, 431 (C.C.P.A.

1970); Checkpoint Sys., Inc. v. United States Int'l Trade Comm'n, 54 F.3d 756, 761, 35 U.S.P.Q.2d 1042, 1046 (Fed. Cir. 1995) ("As the parties asserting invalidity, respondents at the ITC bore the burden of establishing, by clear and convincing evidence, facts which support the ultimate legal conclusion of invalidity under § 102(g).").

E. Obviousness: A determination of obviousness under 35 U.S.C. § 103 is a legal conclusion based upon factual inquiries. Kolmes v. World Fibers Corp., 107 F.3d 1534,1541, 41 U.S.P.Q.2d 1829,1833 (Fed. Cir. 1997); *In re* Huang, 100 F.3d 135, 138, 40 U.S.P.Q.2d 1685, 1688 (Fed. Cir. 1996) ("We review the ultimate legal determination of obviousness without deference to the Board, while we review the underlying factual inquiries for clear error."); *In re* Donaldson Co., 16 F.3d 1189, 1192, 29 U.S.P.Q.2d 1845, 1848 (Fed. Cir. 1994) ("Obviousness under section 103 is a question of law that this court reviews *de novo. "); In re* Van Geuns, 988 F.2d 1181,1184, 26 U.S.P.Q.2d 1057,1059 (Fed. Cir. 1993); Miles Labs, Inc. v. Shandon, Inc., 997 F.2d 870, 877, 27 U.S.P.Q 2d 1123, 1128 (Fed. Cit. 1993); Davis v. Loesch, 998 F.2d 963, 969, 27 U.S.P.Q.2d 1440,1446 (Fed. Cir. 1993).

1. The scope and content of the prior art is one of the four underlying fact questions. Graham v. John Deere Co., 383 U.S. 1, 17,148 U.S.P.Q 459,467 (1966); Minnesota Mining & Mfg. Co. v. Johnson &Johnson Orthopaedics, Inc., 976 F.2d 1559, 1572-73, 24 U.S.P.Q.2d 1321, 1332-33 (Fed. Cir. 1992); Sibia Neurosciences, Inc. v. Cadus Pharms. Corp., 225 F.3d 1349, 1356, 55 U.S.P.Q.2d 1927, 1931 (Fed. Cir. 2000) ("Determining whether there is a suggestion or motivation to modify a prior art reference is one aspect of determining the scope and content of the prior art, a fact question subsidiary to the ultimate conclusion of obviousness."); Heidelberger Druckmaschinen AG v. Hantscho Commercial Prods., 21 F.3d 1068, 1071, 30 U.S.P.Q.2d 1377, 1379 (Fed. Cir. 1994) (whether a prior art reference is analogous); In re Clay, 966 F.2d 656, 658, 23 U.S.P.Q.2d 1058, 1060 (Fed. Cir. 1992) (whether a prior art reference is analogous); Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1568, 1 U.S.P.Q.2d 1593, 1597 (Fed. Cir. 1987) (whether a prior art reference is analogous).

2. The differences between the subject matter claimed and the prior art is another one of the four underlying fact questions. Graham v. John Deere Co., 383 U.S. 1, 17,148 U.S.P.Q. 459,467 (1966); Minnesota Mining & Mfg. Co. v. Johnson &Johnson Orthopaedics, Inc., 976 F.2d 1559, 1572-73, 24 U.S.P.Q.2d 1321, 1332-33 (Fed. Cir. 1992).

3. The level of ordinary skill in the art is the third of the four underlying fact questions. Graham v. John Deere Co., 383 U.S. 1, 17,148 U.S.P.Q. 459,467 (1966); *In re* Epstein, 32 F.3d 1559, 1564 n.4,31 U.S.P.Q.2d 1817,1820 n.4 (Fed. Cir. 1994) ("The level of skill in the art is one of the underlying factual findings in support of an-obviousness rejection.").

4. Consideration of objective indicia of nonobviousness (such as commercial success, long felt but unresolved need, and acquiescence of others in the industry

to the patent's validity) is the fourth underlying fact question. Graham v. John Deere Co., 383 U.S. 1, 17, 148 U.S.P.Q. 459, 467 (1966).

5. What a reference teaches and whether it teaches toward or away from the claimed invention are questions of fact. Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1349, 53 U.S.P.Q.2d 1580, 1587 (Fed. Cir. 2000) ("What a reference teaches and whether it teaches toward or away from the claimed invention are questions of fact.") (quoting *In re* Bell, 991 F.2d 781, 784, 26 U.S.P.Q.2d 1529, 1531 (Fed. Cit. 1993)); Roton Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1127, 37 U.S.P.Q.2d 1816, 1828 (Fed. Cir. 1996) ("What a reference teaches is a question of fact reviewed under the clearly erroneous standard."); Para-Ordnance Mfg., Inc. v. SGS Imps. Int'l, Inc., 73 F.3d 1085, 1090, 37 U.S.P.Q.2d 1237, 1241 (Fed. Cir. 1995).

6. Whether an invention achieves unexpected results is a question of fact. *In re* Mayne, 104 F.3d 1339,1343, 41 U.S.P.Q. 2d 1451, 1455 (Fed. Cir. 1997) ("An examination for unexpected results is a factual, evidentiary inquiry, which this court reviews for clear error.").

7. Whether a suggestion or motivation exists to combine references is a question of fact. Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1348, 53 U.S.P.Q.2d 1580, 1586 (Fed. Cir. 2000) ("Whether motivation to combine the references was shown we hold a question of fact."); *In re* Dembiczak, 175 F.3d 994, 1000, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999) ("particular factual findings regarding the suggestion, teaching, or motivation to combine").

F. Section 102(b) On-Sale Bar: "The determination of whether an invention was on sale within the meaning of § 102 is a question of law that we review without deference." Robotic Vision Sys., Inc. v. View Eng'g, Inc., 249 F.3d 1307, 1310, 58 U.S.P.Q.2d 1723, 1725 (Fed. Cir. 1993).

G. Originality: Whether a named inventor is truly an inventor is a legal conclusion based upon factual inquiries. Sewell v. Walters, 21 F.3d 411, 415, 30 U.S.P.Q.2d 1356, 1358 (Fed. Cit. 1994) (inventorship is a question of law, reviewed *de novo* on appeal, with "any facts found . . . [I]n reaching an inventorship holding . . . reviewed for clear error" in an appeal from an interference or for substantial evidence in an appeal from a jury verdict); Ethicon, Inc. v. United States Surgical Corp., 135F.3d 1456,1460, 45 U.S.P.Q.2d 1545, 1547 (Fed. Cir. 1998).

H. Misjoinder or Nonjoinder of Inventors: Whether an inventor is improperly named or improperly omitted is a question of fact. Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980,41 U.S.P.Q.2d 1782, 1785 (Fed. Cir. 1997) ("The burden of showing misjoinder or nonjoinder of inventors is a heavy one and must be proved by clear and convincing evidence.") (quoting Garrett Corp. v. United States, 422 F.2d 874, 880, 164 U.S.P.Q. 521, 526 (Ct. Cl. 1970)).

I. Priority of Invention: An evaluation of priority is a legal conclusion based upon factual inquiries. Eaton v. Evans, 204 F.3d 1094, 1097, 53 U.S.P.Q.2d 1696, 1698 (Fed. Cir. 2000) ("Priority and its constituent issues of conception and reduction to practice are questions of law predicated on subsidiary factual findings. . . . Accordingly, we review *de novo* the PTO Board's legal conclusions regarding priority, conception, and reduction to practice."); Kridl v. McCormick, 105 F.3d 1446, 1449, 41 U.S.P.Q.2d 1686, 1688 (Fed. Cir. 1997) ("Priority is a question of law that we review *de novo.");* Innovative Scuba Concepts, Inc. v. Fed. Indus., 26 F.3d 1112, 1115, 31 U.S.P.Q.2d 1132, 1134 (Fed. Cir. 1994); Price v. Symsek, 988 F.2d 1187, 1190, 26 U.S.P.Q.2d 1031, 1033 (Fed. Cir. 1993).

1. Conception is an issue of law based upon underlying factual inquiries. Cooper v. Goldfarb, 154 F.3d 1321, 1327,47 U.S.P.Q.2d 1896, 1901 (Fed. Cir. 1998) ("Priority, conception, and reduction to practice are questions of law which are based on subsidiary factual findings."); Kridl v. McCormick, 105 F.3d 1446, 1449, 41 U.S.P.Q.2d 1686, 1688 (Fed. Cir. 1997) ("we review de novo the board's ultimate determination of conception"); Bosies v. Benedict, 27 F.3d 539,541-42,30 U.S.P.Q.2d 1862, 1864 (Fed. Cit. 1994); Fiers v. Sugaro, 984 F.2d 1164, 1168, 25 U.S.P.Q.2d 1601, 1604 (Fed. Cir. 1993).

2. Reduction to practice is also an issue of law based upon underlying factual inquiries. Fujikawav. Wattanasin, 93 F.3d 1559,1564, 39 U.S.P.Q.2d 1895, 1899 (Fed. Cir. 1996) ("The ultimate determination of reduction to practice is a question of law which we review de novo."); Schendel v. Curtis, 83 F.3d 1399,1402, 38 U.S.P.Q.2d 1743,1746 (Fed. Cit. 1996) ("We review de novo the board's legal conclusion concerning an alleged reduction to practice."); *In re* Asahi/Am. Inc., 68 F.3d 442, 445, 37 U.S.P.Q.2d 1204, 1206 (Fed. Cir. 1995) ("The issue of reduction to practice is a question of law."); Scott v. Finney, 34 F.3d 1058, 1061, 32 U.S.P.Q.2d 1115, 1117 (Fed. Cir. 1994); Hybritech Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376, 231 U.S.P.Q. 81, 87 (Fed. Cir. 1986).

3. Due diligence for priority of invention under 35 U.S.C. § 102(g) is a question of fact. Texas Inst., Inc. v. United States Int'l Trade Comm'n, 871 F.2d 1054, 1068, 10 U.S.P.Q.2d 1257, 1261 (Fed. Cir. 1989).

J. Derivation: Derivation under 35 U.S.C. § 102(f) is a question of fact. Gambro Lundia AB v. Baxter Healthcare Corp., 110 F.3d 1573, 1576, 42 U.S.P.Q.2d 1378, 1381 (Fed. Cir. 1997) ("This court reviews a finding of derivation as a question of fact."); Hess v. Advanced Cardiovascular Sys., Inc., 106 F.3d 976, 980, 41 U.S.P.Q.2d 1782, 1786 (Fed. Cir. 1997) ("[O]ne claiming that the inventor listed in the patent derived the invention from the claimant's work must show derivation by clear and convincing evidence.").

K. Claiming the Benefit of Priority: "Entitlement to priority under § 120 is a matter of law, and receives plenary review on appeal." *In re* Daniels, 144 F.3d 1452,

1455-56, 46 U.S.P.Q.2d 1788, 1790 (Fed. Cir. 1998) (citing Racing Strollers, Inc. v. TRI Indus., Inc., 878 F.2d 1418, 1419, 11 U.S.P.Q.2d 1300, 1301 (Fed. Cir. 1989) (en banc)).

L. Double Patenting: Double patenting is an issue of law that is reviewed *de novo. In re* Berg, 140 F.3d 1428, 1432, 46 U.S.P.Q.2d 1226, 1229 (Fed. Cir. 1998) ("Obviousness-type double patenting is a question of law reviewed *de novo by* this court. . . . The question of whether the `one-way' test or the `two-way' test applies . . . is one of law and therefore reviewed by this court without deference."); Georgia-Pacific Corp. v. United States Gypsum Co., 195 F.3d 1322, 1326, 52 U.S.P.Q. 2d 1590,1593 (Fed. Cir. 1999) ("Double patenting is a question of law, which we review *de novo."); In re* Goodman, 11 F.3d 1046, 1052, 29 U.S.P.Q.2d 2010, 2015 (Fed. Cir. 1993); Texas Instruments Inc. v. Int'l Trade Comm'n, 988 F.2d 1165, 1179, 26 U.S.P.Q.2d 1018, 1029 (Fed. Cir. 1993).

M. Functionality of a Design Patent Claim: "We review for clear error the district court's determination that the design claimed in the [subject] patent is functional." Best Lock Corp. v. Ilco Unican Corp., 94 F.3d 1563, 1566, 40 U.S.P.Q. 2d 1048, 1050 (Fed. Cir. 1996).

N. Ownership: Although the ownership of a patent is a matter of law reviewed *de novo,* the determination of ownership may involve underlying factual inquiries. Kahn v. Gen. Motors Corp., 77 F.3d 457, 459, 38 U.S.P.Q.2d 1063, 1064 (Fed. Cir. 1996).

II. Issues Under 35 U.S.C. § 112:

A. Enablement Under § 112, First Paragraph: Enablement is a question of law reviewed *de novo,* but may involve subsidiary questions of fact. Union Pac. Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 690, 57 U.S.P.Q.2d 1293,1296 (Fed. Cir. 2001) ("Enablement is a question of law reviewed by this court independently and without deference."); PPG Indus., Inc. v. Guardian Indus. Corp., 75 F.3d 1558, 1564, 37 U.S.P.Q.2d 1618, 1623 (Fed. Cir. 1996) ("Enablement . . . is a question of law which we independently review, although based upon underlying factual findings which we review for clear error.") (quoting *In* re Vaeck, 947 F.2d 488, 495, 20 U.S.P.Q.2d 1438, 1444 (Fed. Cir. 1991)); *In re* Epstein, 32 F.3d 1559, 1568, 31 U.S.P.Q.2d 1817, 1823 (Fed. Cit. 1994); *In re* Goodman, 11 F.3d 1046, 1049-50, 29 U.S.P.Q.2d 2010, 2013 (Fed. Cir. 1993).

B. Written Description Under § 112, First Paragraph: Compliance with the "written description" requirement is a question of fact. Fujikawa v. Wattanasin, 93 F.3d 1559,1569-70,39 U.S.P.Q.2d 1895,1904 (Fed. Cit. 1996) ("Whether a disclosure contains a sufficient written description to support a proposed count [in an interference], is a question of fact which we review for clear error."); Eiselstein v. Frank, 52 F.3d 1035, 1038, 34 U.S.P.Q.2d 1467, 1469 (Fed. Cir. 1995) ("Compliance with the `written description' requirement is a question of fact, to be reviewed under the clearly erroneous standard."); Credle v. Bond, 25 F.3d 1566, 1573, 30 U.S.P.Q.2d 1911, 1917 (Fed. Cir. 1994).

C. Sufficient Disclosure in Priority Document: Whether a parent application contains a sufficient written description to support a continuing application is a question of fact. Augustine Med., Inc. v. Gaymar Indus., Inc., 181 F.3d 1291, 1302-03, 50 U.S.P.Q.2d 1900, 1908 (Fed. Cit. 1999); Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1563, 19 U.S.P.Q.2d 1111, 1116 (Fed. Cit. 1991).

D. Best Mode Under § 112, First Paragraph: Compliance with the best mode requirement is a question of fact. N. Telecom Ltd. v. Samsung Elecs. Co., 215 F.3d 1281, 1286, 55 U.S.P.Q.2d 1065, 1068 (Fed. Cir. 2000); Zygo Corp. v. Wyko Corp., 79 F.3d 1563, 1566-67, 38 U.S.P.Q.2d 1281, 1283 (Fed. Cir. 1996) ("Compliance with the best mode requirement of 35 U.S.C. § 1121 1 is a question of fact."); Transco Prods., Inc. v. Performance Contracting, Inc., 38 F.3d 551, 559, 32 U.S.P.Q.2d 1077, 1084 (Fed. Cir. 1994); *In re* Hayes Microcomputer Prods., 982 F.2d 1527, 1536, 25 U.S.P.Q. 2d 1241, 1248 (Fed. Cir. 1992); Scripps Clinic & Research Found. v. Genentech, Inc., 927 F.2d 1565, 1578, 18 U.S.P.Q.2d 1001, 1012 (Fed. Cir. 1991); Chemcast Corp. v. Arco Indus. Corp., 913 F.2d 923, 928, 16 U.S.P.Q.2d 1033, 1037 (Fed. Cir. 1990).

E. Indefiniteness Under § 112, Second Paragraph: Compliance with the definiteness standard of § 112 1 2 is a question of law. Union Pac. Res. Co. v. Chesapeake Energy Corp., 236 F.3d 684, 692, 57 U.S.P.Q.2d 1293,1297 (Fed. Cir. 2001) ("Whether a claim is invalid under 35 U.S.C. § 112, 1 2, for indefiniteness is a question of law reviewed *de novo.*"*);* Solomon v. Kimberly-Clark Corp., 216 F.3d 1372, 1378, 55 U.S.P.Q.2d 1279, 1281 (Fed. Cir. 2000) ("The determination whether a claim recites `the subject matter which the applicant regards as his invention,' like a determination whether a claim is sufficiently definite, is a legal conclusion . . . that we review *de novo.*" (citation omitted)); Personalized Media Communications v. Int'l Trade Comm'n, 161 F.3d 696, 702, 48 U.S.P.Q.2d 1880, 1886 (Fed. Cir. 1998); Credle v. Bond, 25 F.3d 1566, 1576, 30 U.S.P.Q.2d 1911, 1919 (Fed. Cir. 1994); Carl Zeiss Stiftung v. Renishaw, 945 F.2d 1173, 1181, 20 U.S.P.Q.2d 1094, 1101 (Fed. Cir. 1991).

F. Means-Plus-Function Claims Under § 112, Sixth Paragraph:

1. Whether the language of a claim is to be interpreted according to 35 U.S.C. § 112, ¶6 is a question of law reviewed *de novo*. Kemco Sales, Inc. v. Control Papers Co., 208 F.3d 1352, 1360, 54 U.S.P.Q.2d 1308, 1312 (Fed. Cir. 2000); Personalized Media Communications v. Int'l Trade Comm'n, 161 F.3d 696, 702, 48 U.S.P.Q.2d 1880, 1886 (Fed. Cir. 1998) ("Whether the language of a claim is to be interpreted according to 35 U.S.C. Section 112, Para. 6, i.e., whether a claim limitation is in means-plus-function format, is a matter of claim construction and is thus a question of law, reviewed *de novo*.").

2. Interpreting the "function" recited in a means-plus-function-claim is a legal issue. Desper Prods., Inc. v. Qsound Labs, Inc., 157 F.3d 1325, 1336, 48 U.S.P.Q. 2d 1088, 1096 (Fed. Cir. 1998) ("Interpreting the function of an element written in means-plus-function language is a question of law subject to complete and independent review on appeal."); Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc., 145 F.3d 1303, 1308, 46 U.S.P.Q.2d 1752, 1755 (Fed. Cit.

1998) ("A determination of the claimed function, being a matter of construction of specific terms in the claim, is a question of law, reviewed *de novo*.").

3. Deciding what constitute "equivalents" to a structure recited in a means-plus-function claim is question of law. Although the Federal Circuit previously expressly reserved the question of whether equivalents under § 112 16 is a question of law or fact, Markman v. Westview Instruments, Inc., 52 F.3d 967, 977 n.8, 34 U.S.P.Q.2d 1321, 1327 n.8 (Fed. Cir. 1995), this issue now appears to be legal in nature. WMS Gaming Inc. v. Int'l Game Tech., 184 F.3d 1339, 1347, 51 U.S.P.Q.2d 1385, 1390 (Fed. Cir. 1999) ("Determining the claimed function and the corresponding structure for a claim limitation written in means-plus-function format are both matters of claim construction. They therefore present issues of law that we review de novo."); Smiths Indus. Med. Sys., Inc. v. Vital Signs, Inc., 183 F.3d 1347, 1358, 51 U.S.P.Q.2d 1415, 1422 (Fed. Cir. 1999) ("The determination of the contours of the corresponding structure in a means-plus-function claim, as contrasted with the question of whether an accused structure is equivalent to such a corresponding structure, is a matter of law for courts to decide because it is a question of claim construction."); Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc., 145 F.3d 1303,1308, 46 U.S.P.Q.2d 1752,1755-56 (Fed. Cir. 1998); B. Braun Med., Inc. v. Abbott Lab., 124 F.3d 1419, 1424-25, 43 U.S.P.Q.2d 1896, 1899-1900 (Fed. Cir. 1997).

III. Rejection Grounds: "Preponderance of the evidence is the standard that must be met by the PTO in making rejections." *In re* Epstein, 32 F.3d 1559, 1565, 31 U.S.P.Q.2d 1817, 1820 (Fed. Cir. 1994); *In re* Caveney, 761 F.2d 671, 674, 226 U.S.P.Q. 1, 3 (Fed. Cir. 1985). The Federal Circuit reviews Board fact-findings under the clearly erroneous standard. *In re* Caveney, 761 F.2d 671, 674, 226 U.S.P.Q. 1, 3 (Fed. Cit. 1985). Under this standard of review, findings of the Board of Patent Appeals and Interferences are overturned only if the court is left with the definite and firm conviction that a mistake has been made. SSIH Equip. SA v. Int'l Trade Comm'n, 718 F.2d 365, 381, 218 U.S.P.Q. 678,692 (Fed. Cir. 1983) (Nies, J., additional views).

IV. Patent Interferences:

A. Disclosure: The question of what is disclosed in an application involved in an interference is a question of fact reviewed under the clearly erroneous standard. Credle v. Bond, 25 F.3d 1566, 1573, 30 U.S.P.Q.2d 1911, 1916 (Fed. Cir. 1994); Davis v. Loesch, 998 F.2d 963, 968-69,27 U.S.P.Q.2d 1440,1445 (Fed. Cir. 1993).

B. Support: Whether an application supports the subject matter of an interference count is a question of fact. Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555,1560, 1563, 19 U.S.P.Q.2d 1111, 1116 (Fed. Cir. 1991) (stating that whether specification supports claims corresponding to count, and thereby satisfies written description requirement of 35 U.S.C. § 112 **1, is question of fact).

C. Count Interpretation: The proper construction of a count, determined by the language as a whole, the grammatical structure and syntax, is an issue of law. Genentech, Inc. v. Chiron Corp., 112 F. 3d 495, 500, 42 U.S.P.Q.2d 1608, 1612 (Fed. Cir. 1997);

Credle v. Bond, 25 F.3d 1566, 1571, 30 U.S.P.Q.2d 1911, 1915 (Fed. Cir. 1994) (stating that to construe the count the court looks to the language as a whole and considers the grammatical structure and syntax); Davis v. Loesch, 998 F.2d 963, 967, 27 U.S.P.Q.2d 1440, 1444 (Fed. Cir. 1993); DeGeorge v. Bernier, 768 F.2d 1318, 1321, 226 U.S.P.Q. 758, 760 (Fed. Cir. 1985).

D. Judicial Review: If decision pursuant to permissive statute concerns only Patent and Trademark Office (PTO) practice, the Federal Circuit reviews the decision for abuse of discretion. Gerritsen v. Shirai, 979 F.2d 1524, 1527-28, 24 U.S.P.Q.2d 1912, 1915-16 (Fed. Cir. 1992) (vacating default judgment in interference for abuse of discretion).

V. Patent Claim Interpretation: The issue of claim construction is a question of law reviewed *de novo* on appeal. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1456, 46 U.S.P.Q.2d 1169, 1174 (Fed. Cir. 1998) (en banc) ("[W]e review claim construction *de novo* on appeal including any allegedly fact-based questions relating to claim construction."); Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1344, 47 U.S.P.Q.2d 1418, 1424 (Fed. Cir. 1998) ("We review a district court's claim construction anew and without deference."); Markman v. Westview Instruments, Inc., 52 F.3d 967, 979, 34 U.S.P.Q.2d 1321, 1329 (Fed. Cir. 1995) (en banc) (rejecting proposition that claim construction issue involves subsidiary or underlying questions of fact).

VI. Inequitable Conduct: The ultimate question of whether inequitable conduct occurred is equitable in nature and is reviewed under an abuse of discretion standard. Nordberg, Inc. v. Telsmith, Inc., 82 F.3d 394, 396, 38 U.S.P.Q.2d 1593, 1595 (Fed. Cir. 1996) ("We review the district court's conclusion concerning inequitable conduct for abuse of discretion."); Molins PLC v. Textron, Inc., 48 F.3d 1172,1178, 33 U.S.P.Q.2d 1823, 1827 (Fed. Cir. 1995) ("An abuse of discretion may be established by showing that the court based its ruling on clearly erroneous factual findings, an error of law, or a clear error of judgment."); Kingsdown Med. Consultants, Ltd. v. Hollister, Inc., 863 F.2d 867, 876, 9 U.S.P.Q.2d 1384, 1392 (Fed. Cir. 1988) (en banc). Inequitable conduct findings of the International Trade Commission (ITC) may be overturned only if they are unsupported by substantial evidence. Tandon Corp. v. Int'l Trade Comm'n, 831 F.2d 10 4 U.S.P.Q.2d 1283, 1284-85 (Fed. Cir. 1987).

VII. Reissue/Reexamination:

A. Statutory Reissue Requirements: "Whether the statutory requirements of 35 U.S.C. [§] 251 have been met is a question of law." Hester Indus., Inc. v. Stein, Inc., 142 F.3d 1472, 1479, 46 U.S.P.Q.2d 1641, 1647 (Fed. Cir. 1998) (stating that this legal conclusion can involve underlying factual questions); *In re* Clement, 131 F.3d 1464, 1468, 45 U.S.P.Q.2d 1161, 1163 (Fed. Cir. 1997).

B. Scope of Reissued Claims: "A determination of whether the scope of a reissue claim is identical with the scope of the original claim is a question of law, which we review *de novo.*" Westvaco Corp. v. Int'l Paper Co., 991 F.2d 735, 741, 26 U.S.P.Q.2d 1353, 1358 (Fed. Cit. 1993) (emphasis added); Tillotson, Ltd. v. Walbro Corp., 831 F.2d 1033, 1037, 4 U.S.P.Q.2d 1450, 1452 (Fed. Cit. 1987).

C. Scope of Reexamined Claims: Whether the scope of a reexamined claim is substantially identical with the scope of the original claim is an issue of law reviewed *de novo.* Hockerson-Halberstadt, Inc. v. Converse Inc., 183 F.3d 1369, 1373, 51 U.S.P.Q.2d 1518, 1521 (Fed. Cir. 1999) ("Whether amendments made during reexamination enlarge the scope of a claim is a matter of claim construction. Claim construction is a matter of law that this court reviews without deference to the trial court." (citation omitted)); Laitram Corp. v. NEC Corp., 163 F.3d 1342, 1346, 49 U.S.P.Q.2d 1199, 1202 (Fed. Cit. 1998) (stating that this standard flows from the general principle that the interpretation and construction of patent claims, which define the scope of the patentee's rights under the patent, are matters of law). "This court reviews without deference the district court's conclusion that the reexamined claims remained identical in scope." Minco, Inc. v. Combustion Eng'g, Inc., 95 F.3d 1109, 1115, 40 U.S.P.Q.2d 1001, 1005 (Fed. Cit. 1996).

D. Intervening Rights: Whether a third party is entitled to assert intervening rights is an issue reviewed under the abuse of discretion standard. Westvaco Corp. v. Int'l Paper Co., 991 F.2d 735, 743, 26 U.S.P.Q.2d 1353, 1360 (Fed. Cir. 1993).

VIII. Patent Infringement: The determination of whether claims, once properly interpreted, are infringed is a question of fact reviewed under the clearly erroneous or substantial evidence standards. Roton Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1125, 37 U.S.P.Q.2d 1816, 1827 (Fed. Cir. 1996) ("Infringement, both literal and under the doctrine of equivalents, is an issue of fact, reviewable under the clearly erroneous standard."); Southwall Techs,. Inc. v. Cardinal IG Co., 54 F.3d 1570, 1575, 34 U.S.P.Q.2d 1673, 1676 (Fed. Cir. 1995).

A. Determination of Literal Infringement: Literal infringement is a factual determination. *In re* Hayes Microcomputer Prods., 982 F.2d 1527, 1541, 25 U.S.P.Q.2d 1241, 1251 (Fed. Cir. 1992); Moleculon Research Corp. v. CBS, Inc., 793 F.2d 1261, 1269-70, 229 U.S.P.Q. 805, 811 (Fed. Cir. 1986).

B. Reverse Doctrine of Equivalents: The application of the reverse doctrine of equivalents, as a limitation on a finding of literal infringement, is reviewed as a question of fact. Hartness Int'l, Inc. v. Simplimatic Eng'g Co., 819 F.2d 1100, 1110, 2 U.S.P.Q.2d 1826, 1833 (Fed. Cir. 1987); SRI Int'l v. Matsushita Elec. Corp., 775 F.2d 1107, 1125, 227 U.S.P.Q. 577, 588 (Fed. Cir. 1985).

C. Infringement Under the Doctrine of Equivalents: Infringement under the doctrine of equivalents is also a factual determination. Bai v. L & L Wings, Inc., 160 F.3d 1350, 1353, 48 U.S.P.Q.2d 1674, 1676 (Fed. Cir. 1998); WarnerJenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 39, 41 U.S.P.Q.2d 1865, 1875 (1997). "When infringement under the doctrine is tried by a jury, an appellate court reviews the jury verdict for lack of substantial evidence." Genentech, Inc. v. Wellcome Found. Ltd., 29 F.3d 1555,1565, 31 U.S.P.Q.2d 1161,116869 (Fed. Cir. 1994): "[The Federal Circuit] must overturn the jury's finding on a factual issue if it is not supported by substantial evidence or if it is based on an erroneous legal determination." Kearns v. Chrysler Corp., 32 F.3d 1541, 154748, 31 U.S.P.Q.2d 1746, 1751 (Fed. Cir. 1994).

D. Limitations on the Doctrine of Equivalents:

1. "Determining whether the scope of equivalents accorded to a particular claim would encompass the prior art is an issue of law which [is reviewed] *de novo*." Streamfeeder v. Sure-Feed Sys., Inc., 175 F.3d 974, 981, 50 U.S.P.Q.2d 1515, 1519 (Fed. Cir. 1999) ("Determining whether the scope of equivalents accorded to a particular claim would encompass the prior art is an issue of law which we review de novo." (emphasis added)); Texas Instruments Inc. v. Int'l Trade Comm'n, 988 F.2d 1165, 1173, 26 U.S.P.Q.2d 1018, 1025 (Fed. Cir. 1993).

2. "Prosecution history estoppel is a legal question that is subject to de novo review by this court." Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 234 F.3d 558, 585, 56 U.S.P.Q.2d 1865, 1885 (Fed. Cir. 2000) (en banc), cert. granted, 121 S. Ct. 2519 (Jun. 18, 2001); Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1459-60 & n.5, 46 U.S.P.Q.2d 1169, 1177-78 & n.5 (Fed. Cir. 1998) (en banc) ("Prosecution history estoppel is a legal question subject to de novo review on appeal." (emphasis added)); Mark I Mktg. Corp. v. R.R. Donnelley & Sons Co., 66 F.3d 285, 291, 36 U.S.P.Q.2d 1095, 1100 (Fed. Cir. 1995); Hoganas AB v. Dresser Indus., Inc., 9 F.3d 948, 952, 28 U.S.P.Q.2d 1936, 1939 (Fed. Cir. 1993).

3. The application of case law limitations on the doctrine of equivalents is also reviewed as an issue of law. K-2 Corp. v. Salomon S.A., 191 F.3d 1356, 1367, 52 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 1999) (noting that the doctrine cannot encompass subject matter existing in the prior art; nor may it allow coverage of obvious or trivial variations of the prior art; or vitiate an element from the claim in its entirety; or recover subject matter surrendered during the prosecution history; all of these limitations on the doctrine of equivalents-are questions of law).

E. Willfulness of Infringement: Whether infringement is willful is a question of fact, and willful infringement must be established by clear and convincing evidence. Comark Communications, Inc. v. Harris Corp., 156 F.3d 1182, 1186, 48 U.S.P.Q.2d 1001, 1004 (Fed. Cir. 1998) ("This court therefore reviews a jury's finding of willful infringement to determine if there is substantial evidence to support that finding."); Stryker Corp. v. Intermedics Orthopedics, Inc., 96 F.3d 1409, 1413, 40 U.S.P.Q.2d 1065, 1068 (Fed. Cir. 1996) ("The court's finding of willful infringement is one of fact, subject to the clearly erroneous standard of review."); Bic Leisure Prods. v. Windsurfing Int'l, Inc., 1 F.3d 1214, 1222,27 U.S.P.Q.2d 1671,1678 (Fed. Cir. 1993); L.A. Gear, Inc. v. Tom McAn Shoe Co., 988 F.2d 1117, 1126, 25 U.S.P.Q.2d 1913, 1919 (Fed. Cir. 1993).

F. Design Patent Infringement: The determination of whether a design patent claim, once properly interpreted, is infringed is a question of fact reviewed under the clearly erroneous or substantial evidence standards. Oddzon Prods., Inc. v. Just Toys, Inc., 122 F.3d 1396, 1405, 43 U.S.P.Q.2d 1641, 1647 (Fed. Cir. 1997) ("Design patent infringement is a question of fact, which a patentee must prove by a preponderance of the

evidence."); L.A. Gear, Inc. v. Tom McAn Shoe Co., 988 F.2d 1117, 1124, 25 U.S.P.Q.2d 1913, 1918 (Fed. Cir. 1993).

G. Repair and Reconstruction: Whether actions constitute a permissible repair or an infringing reconstruction is a question of law reviewed *de novo.* Sandvik Aktiebolag v. E.J. Co., 121 F.3d 669, 672, 43 U.S.P.Q.2d 1620, 1622 (Fed. Cir. 1997) ("Whether defendant's actions constitute a permissible repair or an infringing reconstruction is a question of law which we also review *de novo.*" (emphasis added)); Sage Prods., Inc. v. Devon Indus., Inc., 45 F.3d 1575, 1577, 33 U.S.P.Q.2d 1765, 1766-67 (Fed. Cir. 1995) ("the question of whether the defendant's conduct constituted permissible repair is answerable as a question of law"); FMC Corp. v. Up-Right, Inc., 21 F.3d 1073, 1078, 30 U.S.P.Q.2d 1361, 1364 (Fed. Cit. 1994) (the distinction between repair and reconstruction is a legal standard).

IX. Remedies:

A. Amount of Damages: "The amount of damages determined by a district court is a question of fact that is reviewed for clear error on appeal, while the method used by a district court in reaching that determination is reviewed for an abuse of discretion." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1461, 46 U.S.P.Q.2d 1169, 1179 (Fed. Cir. 1998) (en banc); Stryker Corp. v. Intermedics Orthopedics, Inc., 96 F.3d 1409, 1413, 40 U.S.P.Q. 2d 1065, 1068 (Fed. Cit. 1996); Unisplay, S.A. v. Am. Elec. Sign Co., 69 F.3d 512, 517, 36 U.S.P.Q.2d 1540, 1544 (Fed. Cir. 1995) ("The determination of the amount of damages based on a reasonable royalty is an issue of fact.").

B. Methodology: Certain subsidiary decisions underlying a damage award, including the choice of an accounting method for determining profits and the methodology used to calculate a reasonable royalty, are discretionary and are reviewed for abuse of discretion. SmithKline Diagnostics Inc. v. Helena Labs., 926 F.2d 1161, 1165 & n.2,17 U.S.P.Q.2d 1922, 1925 & n.2 (Fed. Cir. 1991) ("However, certain subsidiary decisions underlying a damage theory are discretionary with the court, such as, the choice of an accounting method for determining profit margin . . . or the methodology for arriving at a reasonable royalty."); Rite-Hire Corp. v. Kelley Co., 56 F.3d 1538,1543-44,35 U.S.P.Q.2d 1065, 1067-68 (Fed. Cir. 1995) (en banc) ("In order to prevail on appeal on an issue of damages, an appellant must convince us that the determination was based on an erroneous conclusion of law, clearly erroneous factual findings, or a clear error of judgment amounting to an abuse of discretion."); Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1108, 39 U.S.P.Q.2d 1001, 1007 (Fed. Cir. 1996) ("We review the court's methodology used in calculating damages for an abuse of discretion. . . . We review the jury's determination of the amount of damages, an issue of fact, for substantial evidence."); Hughes Aircraft Co. v. United States, 86 F.3d 1566, 1572, 39 U.S.P.Q.2d 1065, 1069 (Fed. Cit. 1996) ("In determining what constitutes a reasonable royalty, the court has discretion to make certain subsidiary decisions, such as what methodology to use to arrive at a reasonable royalty, and those decisions are reviewed for an abuse of discretion.").

C. Non-Infringing Substitutes: "The court's finding that the [device] was not an acceptable noninfringing alternative is reviewed for clear error," which is a question of fact. Zygo Corp. v. Wyko Corp., 79 F.3d 1563,1571, 38 U.S.P.Q. 2d 1281, 1287 (Fed. Cir. 1996).

D. Enhanced Damages, Costs, and Attorney Fees: The determination of whether a case is exceptional and, thus, eligible for an award of attorney fees under § 285 is a two-step process. Reactive Metals & Alloys Corp. v. ESM, Inc., 769 F.2d 1578, 1582, 226 U.S.P.Q. 821, 824 (Fed. Cir. 1985). First, the district court must determine whether a case is exceptional, a factual determination reviewed for clear error. Baldwin Hardware Corp. v. Franksu Enter. Corp., 78 F.3d 550, 563, 37 U.S.P.Q.2d 1829, 1838 (Fed. Cir. 1996). After determining that a case is exceptional, the district court must determine whether attorney fees are appropriate, a determination reviewed for an abuse of discretion. Molins PLC v. Textron, Inc., 48 F.3d 1172, 1186, 33 U.S.P.Q.2d 1823, 1833 (Fed. Cir. 1995). A district court abuses its discretion when its decision is based on clearly erroneous findings of fact, is based on erroneous interpretations of the law, or is clearly unreasonable, arbitrary or fanciful. Fraige v. Am. Nat'l Watermattress Corp., 996 F.2d 295, 297, 27 U.S.P.Q.2d 1149, 1151 (Fed. Cir. 1993).

E. "Exceptional" Cases: Whether a case is "exceptional," supporting an award of increased damages and attorney fees, is a question of fact. Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1423, 1426, 46 U.S.P.Q.2d 1169, 1179 (Fed. Cir. 1998) (en banc) ("[W]hether the case is exceptional [is] a factual determination reviewed for clear error."); Bic Leisure Prods. v. Windsurfing Int'l, Inc., 1 F.3d 1214, 1222, 27 U.S.P.Q.2d 1671, 1678 (Fed. Cir. 1993).

F. Sanctions: The decision to impose sanctions under Federal Rule of Civil Procedure 11 or 37 is reviewed under an abuse of discretion standard. Cooter & Gell v. Hartmarx Corp., 496 U.S. 384,405 (1990) (holding that although a Rule 11 determination involves both factual and legal issues, all aspects of the Rule 11 determination are reviewed for an abuse of discretion); View Eng'g, Inc. v. Robotic Vision Sys., Inc., 208 F.3d 981, 984, 54 U.S.P.Q.2d 1179, 1181 (Fed. Cir. 2000) ("Rule 11 sanctions are reviewed for the error underlying them under the abuse of discretion standard. The abuse of discretion standard applies to both the decision to sanction, and the amount of the sanction."); DH Tech. Inc. v. Synergystex Int'l Inc., 154 F.3d 1333, 1343, 47 U.S.P.Q.2d 1865, 1873 (Fed. Cir. 1998) ("we review Rule 37 sanctions under an abuse of discretion standard"); New Idea Farm Equip. Corp. v. Sperry Corp., 916 F.2d 1561, 1568, 16 U.S.P.Q. 2d 1424, 1430 (Fed. Cir. 1990).

G. Interest: The choices of whether to award interest and, if so, of what interest type and at what rate are discretionary and are reviewed for abuse of discretion. Oiness v. Walgreen Co., 88 F.3d 1025, 1033, 39 U.S.P.Q.2d 1304, 1310 (Fed. Cir. 1996) ("This court reviews grant or denial of prejudgment interest for an abuse of discretion."); Hughes Aircraft Co. v. United States, 86 F.3d 1566, 1575, 39 U.S.P.Q.2d 1065, 1071 (Fed. Cir. 1996) ("It is well settled that the determination whether to award simple or compound interest is a matter largely within the discretion of the trial court."); Laitram Corp. v. NEC Corp., 115 F.3d 947, 955, 42 U.S.P.Q.2d 1897, 1904 (Fed. Cir. 1997)

("[T]he question of the rate at which such [a prejudgment interest] award should be made is a matter left to the sound discretion of the trier of fact.").

H. Prevailing Party: The question of whether a party is a "prevailing party" for purposes of awarding costs under Federal Rule of Civil Procedure 54 or 42 U.S.C. § 1988 is a matter of law, but the subsequent decision to award costs (and the amount of costs awarded, if any) to a prevailing party is a matter of discretion. Manildra Milling Corp. v. Ogilvie Mills, Inc., 76 F.3d 1178, 1183-85, 37 U.S.P.Q.2d 1707, 1712-13 (Fed. Cir. 1996) (noting that the regional circuit courts are split on this issue).

I. Marking. Compliance with 35 U.S.C. § 287(a) is a question of fact. Maxwell v. J. Baker, Inc., 86 F.3d 1098, 1111, 39 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1996).

J. Remittitur: The decision denying a grant of remittitur because of an excessive damage award is reviewed for an abuse of discretion. Oiness v. Walgreen Co., 88 F.3d 1025, 1029, 39 U.S.P.Q.2d 1304, 1307 (Fed. Cir. 1996) ("This court reviews for an abuse of discretion the decision denying a grant of remittitur or a new trial because of an excessive damage award.").

K. Section 1498 Damages: The amount of damages awarded in an action under 28 U.S.C. § 1498 against the government is a question of fact. "Valuation determinations for purposes of eminent domain are reviewed for clear error as are determinations of what constitutes a reasonable royalty." Hughes Aircraft Co. v. United States, 86 F.3d 1566, 1572; 39 U.S.P.Q.2d 1065, 1069 (Fed. Cir. 1996) (additionally, the "court has discretion in determining the delay compensation rate").

Trademarks

I. Validity:

A. Functionality: The question of whether a mark is functional is one of fact. Brunswick Corp. v. British Seagull Ltd., 32 U.S.P.Q.2d 1120, 1122 (Fed. Cir. 1994).

B. Distinctiveness: The question of whether a mark is distinctive is one of fact. *In re* Nett Designs, Inc., 236 F.3d 1339, 1340, 57 U.S.P.Q.2d *1564,* 1565 (Fed. Cir. 2001) ("Placement of a term on the fanciful-suggestive-descriptive-generic continuum is a question of fact."); Yamaha Int'l Corp. v. Hoshino Gakki Co. Ltd., 840 F.2d 1572, 1581, 6 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 1988); *In re* Loew's Theatres Inc., 769 F.2d 764, 769, 226 U.S.P.Q. 865,869 (Fed. Cir. 1985); The Hoover Co. v. Royal Appliance Mfg. Co., 238 F.3d 1357, 1359, 57 U.S.P.Q. 2d 1720, 1722 (Fed. Cit. 2001) ("The issue of inherent distinctiveness is a factual determination."); *In re* Bed & Breakfast Registry, 791 F.2d 157, 160, 229 U.S.P.Q. 818, 819 (Fed. Cir. 1986); *In re* Merrill Lynch, Pierce, Fenner & Smith, Inc., 828 F.2d 1567, 1570, 4 U.S.P.Q.2d 1141, 1143 (Fed. Cir. 1987) (whether a mark is ineligible for registration as merely descriptive under 15 U.S.C. § 1052(e) is a question of fact which we review for clear error).

C. Acquired Distinctiveness: Whether a mark has acquired distinctiveness is a question of fact. The Hoover Co. v. Royal Appliance Mfg. Co., 238 F.3d 1357, 1359, 57 U.S.P.Q.2d 1720, 1722 (Fed. Cit. 2001) ("Whether a mark has acquired distinctiveness is a question of fact."); Petersen Mfg. Co. v. Central Purchasing Inc., 740 F.2d 1541, 1550, 222 U.S.P.Q. 562,569 (Fed. Cir. 1984).

D. Generic Terms: The question of whether a mark is generic is one of fact. *In re* Merrill Lynch, 828 F.2d 1567, 1571, 4 U.S.P.Q.2d 1141, 1143 (Fed. Cir. 1987); *In re* Northland Aluminum Prods., Inc., 777 F.2d 1556, 1559, 227 U.S.P.Q. 961, 963 (Fed. Cir. 1985).

E. Misdescriptive Terms: The question of whether a mark is misdescriptive under 15 U.S.C. § 1052(e) is one of fact. The Hoover Co. v. Royal Appliance Mfg. Co., 238 F.3d 1357, 1361, 57 U.S.P.Q.2d 1720, 1723 (Fed. Cir. 2001) ("Whether a mark is misdescriptive is a question of fact.").

F. Scandalous Matter: The issue of whether a mark comprises scandalous matter under 15 U.S.C. § 1052(a) is one of law. *In re* Mavety Media Group Ltd., 33 F.3d 1367, 1371, 31 U.S.P.Q.2d 1923, 1925 (Fed. Cir. 1994).

G. Abandonment: Abandonment is a question of fact. Rivard v. Linville, 133 F.3d 1446, 1449, 45 U.S.P.Q.2d 1374, 1376 (Fed. Cir. 1997) ("Abandonment is a question of fact. We sustain the Board's fact findings unless they are clearly erroneous."); On-Line Careline, Inc. v. Am. Online, Inc., 229 F.3d 1080, 1088, 56 U.S.P.Q.2d 1471, 1476 (Fed. Cir. 2000).

II. Conflicting Rights: The question of trademark infringement is one of fact. Charles Greiner & Co. v. Mari-Med Mfg., 962 F.2d 1031,1034-35, 22 U.S.P.Q.2d 1526, 1528 (Fed. Cir. 1992).

A. Prior Use: The question of prior use is one of fact. West Florida Seafood, Inc. v. Jet Rests., Inc., 31 F.3d 1122, 1125, 31 U.S.P.Q.2d 1660, 1662 (Fed. Cir. 1994).

B. Comparison of Marks: The question of whether a mark is a "substantially exact representation" of another mark is a factual finding. *In re* Hacot-Colombier, 105 F.3d 616, 618, 41 U.S.P.Q.2d 1523, 1525 (Fed. Cir. 1997).

C. Likelihood of Confusion: The issue of likelihood of confusion is a legal conclusion predicated on underlying factual findings. *In re* Shell Oil Co., 992 F.2d 1204, 1206, 26 U.S.P.Q.2d 1687, 1688 (Fed. Cir. 1993); Century 21 Real Estate Corp. v. Century Life of Am., 970 F.2d 874, 876, 23 U.S.P.Q.2d 1698, 1700 (Fed. Cir. 1992) (stating that the court reviews the PTO Board's legal conclusions, including likelihood of confusion, *de novo*); *In re* Hearst Corp., 982 F.2d493, 494, 25 U.S.P.Q. 2d 1238, 1239 (Fed. Cir. 1992). Acknowledging that some circuit courts of appeals support the view that likelihood of confusion is a question of fact, "we hold that the issue of likelihood of confusion is the ultimate conclusion of law to be decided by the court, and that the clearly erroneous rule is not applicable." Giant Food, Inc. v. Nation's Foodservice, Inc., 710 F.2d 1565, 1569, 218 U.S.P.Q. 390, 394 (Fed. Cir. 1983).

PTO-Specific Issues and Questions

I. Maintenance Fee Payments: Ray v. Lehman, 55 F.3d 606, 608-09, 34 U.S.P.Q.2d 1786, 1787 (Fed. Cir. 1995) (denial of petition to reinstate patent for failure to pay maintenance fee properly reviewed by district court under APA's abuse of discretion standard).

II. Revival of Abandoned Patent Application: Morganroth v. Quigg, 885 F.2d 843, 845-46, 12 U.S.P.Q.2d 1125, 1126-27 (Fed. Cir. 1989) (refusal to revive application properly reviewed by district court under APR's arbitrary, capricious, abuse of discretion standard).

III. Patent Award: Heinemann v. United States, 796 F.2d 451, 454-55, 230 U.S.P.Q. 430, 433-34 (Fed. Cir. 1986) (award of patent to United States instead of employee properly reviewed by Claims Court under APA's arbitrary, capricious, abuse of discretion standard).

IV. Disciplinary Action: Klein v. Peterson, 866 F.2d 412, 414, 9 U.S.P.Q.2d 1558, 1559 (Fed. Cit. 1989) (stating that PTO bears the burden of proving charges of misconduct against a practitioner by clear and convincing evidence; the PTO's decision to impose disciplinary sanctions is reviewed under the substantial evidence standard); Jaskiewicz v. Mossinghoff, 822 F.2d 1053, 1056, 3 U.S.P.Q.2d 1294, 1299 (Fed. Cir. 1987).

Case Management Issues and Questions

I. Jurisdiction:

A. Personal Jurisdiction: A trial tribunal's determination regarding personal jurisdiction is an issue of law reviewed *de novo.* Viam Corp. v. Iowa Exp.-Imp. Trading Co., 84 F.3d 424, 427, 38 U.S.P.Q.2d 1833, 1834 (Fed. Cir. 1996) ("We review the district court's determination that it lacks personal jurisdiction over Spal, an issue of law, without deference to the view of the district court.") (citing Akro Corp. v. Luker, 45 F.3d 1541, 1543, 33 U.S.P.Q.2d 1505, 1506 (Fed. Cir. 1996)). 3D Sys., Inc. v. Aarotech Labs., Inc., 160 F.3d 1373, 1376, 48 U.S.P.Q.2d 1773, 1775 (Fed. Cir. 1998) ("Whether or not a court has personal jurisdiction over a party is a question of law that we review *de novo.*")*;* N. Am. Philips Corp. v. Am. Vending Sales, 35 F.3d 1576, 1578, 32 U.S.P.Q.2d 1203, 1204 (Fed. Cir. 1994) ("A district court's ultimate conclusion as to whether it has jurisdiction, and any subsidiary conclusions regarding the legal effect of particular jurisdictional facts" is reviewed *de novo.*).

B. Subject Matter Jurisdiction: Whether or not a court has subject matter jurisdiction over a party is a question of law reviewed *de novo;* thus, a decision on a motion to dismiss under Federal Rule of Civil Procedure 12(b)(1) for lack of subject matter jurisdiction is an issue of law reviewed *de novo.* Hunter Douglas, Inc. v. Harmonic Design, Inc., 153 F.3d 1318, 1325, 47 U.S.P.Q.2d 1769,1772 (Fed. Cir. 1998) ("Our review of jurisdiction determinations is plenary."); GAF Bldg. Materials Corp. v. ElkCorp., 90 F.3d 479, 481, 39 U.S.P.Q.2d 1463,1465 (Fed. Cir. 1996) ("We review *de novo* the district court's decision concerning jurisdiction."); Nat'l Presto Indus., Inc. v.

Dazey Corp., 107 F.3d 1576, 1580, 42 U.S.P.Q.2d 1070, 1073 (Fed. Cir. 1997) ("This court reviews an appeal for subject matter jurisdiction as a question of law."); Mars, Inc. v. Kabushiki-Kaisha Nippon Conlux, 24 F.3d 1368, 1371, 30 U.S.P.Q.2d 1621, 1622 (Fed. Cir. 1994).

C. Declaratory Judgment jurisdiction:

1. Whether an actual controversy exists for purposes of Article III is a question of law subject to *de novo* review. Cygnus Therapeutic Sys. v. Alza Corp., 92 F.3d 1153, 1159, 39 U.S.P.Q.2d 1666, 1670 (Fed. Cir. 1996) ("Whether an actual controversy exists is a question of law that we review *de novo*."); Super Sack Mfg. Corp. v. Chase Packaging Corp., 57 F.3d 1054, 1058, 35 U.S.P.Q. 2d 1139, 1141 (Fed. Cir. 1995) ("Whether, upon a particular set of facts, an actual controversy exists for purposes of Article III is a question of law subject to plenary review."); BP Chems. Ltd. v. Union Carbide Corp., 4 F.3d 975, 978, 28 U.S.P.Q.2d 1124-1127 (Fed. Cir. 1993); Shell Oil Co. v. Amoco Corp., 970 F.2d 885, 888, 23 U.S.P.Q.2d 1627, 1630 (Fed. Cir. 1992).

2. A court's discretionary decision to refuse to accept jurisdiction over a declaratory judgment complaint even when an actual controversy exists is reviewed under the "abuse of discretion" standard. Glaxo, Inc. v. Novopharm, Ltd., 110 F.3d 1562, 1570,42 U.S.P.Q.2d 1257, 1264 (Fed. Cir. 1997) ("the exercise of jurisdiction over [a declaratory judgment] action is within the discretion of the district court"); EMC Corp. v. Norand Corp., 89 F.3d 807, 813, 39 U.S.P.Q. 2d 1451, 1455-56 (Fed. Cir. 1996) (noting that Wilton v. Seven Falls Co., 115 S. Ct. 2137, 2143 (1995), stated the standard and "explicitly rejected the more probing review previously practiced by this court"); Serco Servs. Co. v. Kelley Co., 51 F.3d 1037, 1039, 34 U.S.P.Q.2d 1217, 1219 (Fed. Cir. 1995) (affirming district court's decision to dismiss first-filed declaratory judgment action in favor of later-filed infringement action).

D. Standing: Whether a party has standing to sue is an issue of law reviewed *de novo.* Prima Tek II v. A-Roo Co., 222 F.3d 1372, 1376, 55 U.S.P.Q.2d 1742, 1745 (Fed. Cir. 2000) ("Whether a party has standing to sue is a question that this court reviews *de novo.*"); Rite-Hite Corp. v. Kelley Co., 56 F.3d 1538, 1551, 35 U.S.P.Q.2d 1065, 1074 (Fed. Cir. 1995) ("The question of standing to sue is a jurisdictional one . . . which we review *de novo*").

II. Issue and Claim Preclusion: The question of "whether preclusion [claim preclusion or res judicata; issue preclusion or collateral estoppel] applies to a particular action is an issue of law." Jet, Inc. v. Sewage Aeration Sys., 223 F.3d 1360, 1362, 55 U.S.P.Q. 2d 1854, 1856 (Fed. Cir. 2000); Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376, 50 U.S.P.Q.2d 1033, 1036 (Fed. Cir. 1999) ("We likewise review a district court's application of collateral estoppel *de novo*."). *But see* Zeneca Ltd. v. Novopharm Ltd., 45 U.S.P.Q.2d 1055, 1057 (Fed. Cir. 1997) (unpublished) ("District court decisions not to employ collateral estoppel, an equitable doctrine, are reviewed on appeal for abuse of discretion.") (quoting Albemarle Paper Co. v. Moody, 422 U.S. 405, 424 (1975)).

III. Summary Judgment: A grant of summary judgment is reviewed *de novo;* in contrast, a denial of a motion for summary judgment is reviewed for abuse of discretion. Elekta Instrument Int'l, Inc., 214 F.3d 1302, 1306, 54 U.S.P.Q.2d 1910, 1912 (Fed. Cir. 2000) ("In reviewing a denial of a motion for summary judgment, we give considerable deference to the trial court, and will not disturb the trial court's denial of summary judgment unless we find that the court has indeed abused its discretion.'" (citation omitted)); Petrolite Corp. v. Baker Hughes Inc., 96 F.3d 1423, 1425, 40 U.S.P.Q.2d 1201, 1203 (Fed. Cir. 1996) ("We review a district court's grant of summary judgment *de novo.");* Glaverbel Societe Anonyme & Fosbel, Inc. v. Northlake Mktg. & Supply, Inc., 45 F.3d 1550, 1559, 33 U.S.P.Q.2d 1496, 1502 (Fed. Cir. 1995) ("We give plenary review to whether the issue was appropriately disposed of by summary judgment"); Tone Bros. v. Sysco Corp., 28 F.3d 1192, 1196, 31 U.S.P.Q.2d 1321, 1323 (Fed. Cir. 1994); Conroy v. Reebok Int'l, Ltd., 14 F.3d 1570, 1575, 29 U.S.P.Q.2d 1373, 1377 (Fed. Cir. 1994); Paragon Podiatry Lab. v. KLM Labs., 984 F.2d 1182, 1185, 25 U.S.P.Q.2d 1561, 1563 (Fed. Cir. 1993).

IV. Jury Trials:

A. Denial of a **Motion for Judgment As** a **Matter of Law:** A denial of a motion for judgment as a matter of law under Fed. R. Civ. P. 50(a) is subject to *de nova* review. NobelpharmaAB v. Implant Innovations, Inc., 141 F.3d 1059, 1164, 46 U.S.P.Q.2d 1097, 1101 (Fed. Cir. 1998). Affirming the district court's denial of JMOL and motion for new trial following a jury verdict imposing antitrust liability on the patentee, the Federal Circuit stated: "We review a district court's grant of a motion for JMOL under Fed. R. Civ. P. 50(a) (1) *de novo* by reapplying the standard applicable at the district court." *Id.* In addition, the Federal Circuit stated: "We review a district court's denial of a post-trial motion for JMOL under Fed. R. Civ. P. 50(a) *de novo by* reapplying the standard applicable at the district court." *Id.*; Dawn Equip. Co. v. Kentucky Farms Inc., 140 F.3d 1009, 1014, 46 U.S.P.Q.2d 1109, 1111 (Fed. Cir. 1998) ("In reviewing the trial judge's denial of [a party's] motion for JMOL, we keep in mind our standard of review, which is the same standard that was applicable at the trial court level."); Braun Inc. v. Dynamics Corp. of Am., 975 F.2d 815, 819, 24 U.S.P.Q.2d 1121, 1124 (Fed. Cir. 1992).

B. Grant of a Motion for Judgment As a Matter of Law: A grant of judgment as a matter of law under Fed. R. Civ. P. 50(a) is subject to *de novo* review. Eastman Kodak Co. v. Goodyear Tire & Rubber Co., 114 F.3d 1547, 1559, 42 U.S.P.Q.2d 1737, 1746 (Fed. Cir. 1997) ("A grant of judgment as a matter of law under Fed. R. Civ. P. 50(a) is subject to *de novo* review."); Read Corp. v. Portec, Inc., 970 F.2d 816, 821, 23 U.S.P.Q.2d 1426, 1431 (Fed. Cir. 1992) ("The district court's grant of judgment as a matter of law under Rule 50(a) is subject to *de novo* review."); Motorola, Inc. v. Interdigital Tech. Corp., 121 F.3d 1461, 1471, 43 U.S.P.Q.2d 1481, 1484 (Fed. Cir. 1997) ("[T]his court reviews the district court's grant of JMOL by reapplying the JMOL standard. That standard requires the court first to determine whether substantial record evidence supports the jury's express or implied factual findings and then to determine whether the legal conclusions implied in the verdict are correct as a matter of law." (citations omitted)).

C. Jury Instructions: Jury instructions are reviewed *de novo* as an issue of law. Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1282, 54 U.S.P.Q.2d 1673, 1679 (Fed. Cir. 2000) ("Whether a jury instruction is legally erroneous is a question of law."); Brooktree Corp. v. Advanced Micro Devices, Inc., 977 F.2d 1555, 1570, 24 U.S.P.Q.2d 1401, 1411 (Fed. Cir. 1992); Jamesbury Corp. v. Litton Indus. Prods., Inc., 756 F.2d 1556, 1558, 225 U.S.P.Q. 253, 255 (Fed. Cir. 1985) ("The standard of review of instructions is prejudicial legal error:"); Eastman Kodak Co. v. Goodyear Tire &-Rubber Co., 114 F.3d 1547, 1561, 42 U.S.P.Q.2d 1737, 1747 (Fed. Cir. 1997) ("A jury instruction is subject to review for prejudicial legal error.").

D. Form of Verdict: The trial tribunal's choice of verdict form (e.g., general verdict, special verdicts) is reviewed for abuse of discretion. The district court has discretion in how to conduct jury trials, including, but not limited to, the form of the jury verdict. Hoechst Celanese Corp. v. BP Chems. Ltd., 78 F.3d 1575, 1581, 38 U.S.P.Q.2d 1126, 1131 (Fed. Cir. 1996) (citing Allen Organ Co. v. Kimball Int'l, Inc., 839 F.2d 1556, 1561, 5 U.S.P.Q.2d 1769, 1773 (Fed. Cir. 1988)); Structural Rubber Prods. Co. v. Park Rubber Co., 749 F.2d 707, 720, 223 U.S.P.Q. 1264, 1274 (Fed. Cir. 1984) ("[I]t must be left to the sound discretion of the trial court what form of verdict to request of a jury.").

V. New Trial: The decision to grantor deny a motion for a new trial is reviewed under the abuse of discretion standard. Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1284, 54 U.S.P.Q.2d 1673, 1681 (Fed. Cir. 2000) ("This court reviews a denial of a motion for a new trial under the abuse of discretion standard."); NobelpharmaAB v. Implant Innovations, Inc., 141 F.3d 1059,1067, 46 U.S.P.Q.2d 1097, 1105 (Fed. Cir. 1998) ("We review a district court's denial of a motion for a new trial for an abuse of discretion."); Litton Sys., Inc. v. Honeywell, Inc., 87 F.3d 1559, 1576, 39 U.S.P.Q.2d 1321, *1333* (Fed. Cir. 1996) ("The decision to grant or deny a new trial rests with the sound discretion of the trial court."); Munoz v. Strahm Farms, Inc., 69 F.3d 501, 503,36 U.S.P.Q.2d 1499, 1501 (Fed. Cir. 1995); Kearns v. Chrysler Corp., 32 F.3d 1541, 1547, 31 U.S.P.Q.2d 1746, 1750 (Fed. Cit. 1994).

VI. Injunctions: A trial tribunal's decision granting, denying, or modifying an injunction and the scope of the injunction are reviewed for abuse of discretion. Int'l Communication Material, Inc. v. Ricoh Co., 108 F.3d 316, 318, 41 U.S.P.Q.2d 1957, 1558 (Fed. Cit. 1997) ("We have held that the standard of review of a district court's denial of a preliminary injunction order is narrow."); Sofa or Dane Group, Inc. v. Depuy-Motech, Inc., 74 F.3d 1216, 1219,37 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1996) ("To overturn the denial of a preliminary injunction, an appellant must show both that the trial court relied on clearly erroneous factors and abused its discretion."); Carborundum Co. v. Molten Metal Equip. Innovations, Inc., 72 F.3d 872, 881, 37 U.S.P.Q.2d 1169, 1172 (Fed. Cir. 1995); Joy Techs., Inc. v. Flakt, Inc., 6 F.3d 770, 772, 28 U.S.P.Q.2d 1378, 1380 (Fed. Cir. 1993); Mentor Graphics Corp. v. Quickturn Design Sys., Inc., 150 F.3d 1374,1377, 47 U.S.P.Q.2d 1683, 1685 (Fed. Cir. 1998) ("This court reviews the grant of a preliminary injunction for abuse of discretion."); Texas Instruments Inc. v. Tessera, Inc., 231 F.3d 1325, 1328, 56 U.S.P.Q.2d 1674, 1677 (Fed. Cit. 2000) ("Under Federal Circuit law, this court sustains a grant or denial of a preliminary injunction unless the district court abused its discretion, or based its decision on an erroneous legal standard or clearly erroneous findings of fact.").

VII. Motion to Transfer: A district court's decision on a motion to transfer under 28 U.S.C. § 1404 is governed by the law of the regional circuit in which it sits. Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1352, 53 U.S.P.Q.2d 1580, 1589 (Fed. Cir. 2000). Affirming the district court's decision to deny a motion to transfer under 28 U.S.C. § 1404 the court stated, "Our review of the district court's denial of Wang's motion to transfer, as a procedural matter, is governed by the law of the regional circuit in which it sits." *Id.*

VIII. Motion to Dismiss: A decision on a motion to dismiss under Fed. R. Civ. P. 12(b)(6) for failure to state a claim upon which relief can be granted is an issue of law reviewed *de novo.* Boyle v. United States, 200 F.3d 1369, 1371, 53 U.S.P.Q.2d 1433, 1434 (Fed. Cir. 2000); Young v. AGB Corp., 152 F.3d 1377, 1379, 47 U.S.P.Q.2d 1752, 1754 (Fed. Cir. 1998) ("We review the Trademark Trial and Appeal Board's dismissal of a claim under Rule 12(b)(6) *de novo.*"); Bristol-Myers Squibb Co. v. Royce Labs., Inc., 69 F.3d 1130, 1134, 36 U.S.P.Q.2d 1641, 1645 (Fed. Cir. 1995) ("Whether the district court properly granted [the defendant's] motion to dismiss is a question of law that we review *de novo.*"); Wyatt v. United States, 2 F.3d 398, 400 (Fed. Cir. 1993) (dismissal under Rule 12(b)(6) for failure to state a claim upon which relief can be granted is a question of law); Dehne v. U.S., 970 F.2d 890, 892 (Fed. Cir. 1992).

IX. Relief from Judgment: A district court's ruling on a motion for relief from judgment under Fed. R. Civ. P. 60(b) is reviewed for abuse of discretion. Engel Indus., Inc. v. The Lockformer Co., 166 F.3d 1379, 1384, 49 U.S.P.Q. 2d 1618, 1622 (Fed. Cir. 1999) ("We review a district court's [Federal] Rule [of Civil Procedure] 60(b) determination for abuse of discretion.") (citing Browder v. Dir., Dep't of Corrs. of Ill., 434 U.S. 257, 263 n.7 (1978)).

X. Contempt: Additive Controls & Measurement Sys., Inc. v. Flowdata, Inc., 154 F.3d 1345, 1349, 47 U.S.P.Q.2d 1906, 1908 (Fed. Cir. 1998) ("We review the district court's decision to proceed via a contempt hearing [rather than through a separate infringement action] for abuse of discretion."); Carborundum Co. v. Molten Metal Equip. Innovations, Inc., 72 F.3d 872, 883, 37 U.S.P.Q. 2d 1169, 1176 (Fed. Cit. 1995) ("We review a district court's finding of contempt for an abuse of discretion.").

XI. Extraordinary Writs: The standard of review of the denial of an extraordinary writ is abuse of discretion. *In re* Precision Screen Machs., Inc., 729 F.2d 1428, 1429, 221 U.S.P.Q. 1034, 1035 (Fed. Cit. 1984) (writ denied because no abuse of discretion and the writ was not "in aid of" jurisdiction).

XII. Procedural Rulings: Generally, procedural matters are committed to the sound discretion of the trial tribunal. Hendler v. United States, 952 F.2d 1364, 1379 (Fed. Cir. 1991) ("As a general rule, trial courts are given wide discretion to manage the course of a trial, and to direct the conduct of counsel."); Newell Co. v. Kinney Mfg. Co., 864 F.2d 757, 765, 9 U.S.P.Q.2d 1417, 1424 (Fed. Cir. 1988) ("Procedural errors that do not unfairly affect the outcome are to be ignored. Trials must be fair, not perfect.").

> **A. Amendment of Pleadings:** Decisions concerning the amendment of pleadings are reviewed under the abuse of discretion standard. E. W. Bliss Co. v. United States, 77 F.3d 445, 450 (Fed. Cir. 1996).

B. Recusal: The law of the regional circuit applies to decisions on recusal under 28 U.S.C. § 455. For example, under Ninth Circuit law, the standard is abuse of discretion. Baldwin Hardware Corp. v. Franksu Enter. Corp., 78 F.3d 550, 556, 39 U.S.P.Q.2d 1090, 1093 (Fed. Cir. 1996).

C. Whether An Issue Was Raised: "The question of whether a party properly raised an issue [e.g., before the PTO Board of Patent Appeals and Interferences] is a question of law based on subsidiary fact findings." Cooper v. Goldfarb, 154 F.3d 1321, 1331, 47 U.S.P.Q.2d 1896, 1904 (Fed. Cir. 1998).

D. Finality: "We review *de novo* a district court's determination whether a judgment is final with respect to one or more claims, while the determination that there was no just reason for delay [under Fed. R. Civ. P. 54(b)] is reviewed under an abuse of discretion standard." Spraytex, Inc. v. DJS&T & Homax Corp., 96 F.3d 1371, 1379, 40 U.S.P.Q.2d 1145, 1146 (Fed. Cir. 1996).

XIII. Evidentiary Rulings: Generally, evidentiary matters are committed to the sound discretion of the trial tribunal. Rotec Indus., Inc. v. Mitsubishi Corp., 215 F.3d 1246, 1256, 55 U.S.P.Q.2d 1001, 1008 (Fed. Cir. 2000) ("We review evidentiary rulings under an abuse of discretion standard."); Munoz v. Strahm Farms, Inc., 369 F.3d 501, 503, 36 U.S.P.Q.2d 1499, 1501 (Fed. Cir. 1995) ("We review evidentiary rulings under an abuse of discretion standard."); Roton Barrier, Inc. v. Stanley Works, 79 F.3d 1112, 1122, 37 U.S.P.Q.2d 1816, 1824 (Fed. Cir. 1996); Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340, 1351, 53 U.S.P.Q.2d 1580, 1582 (Fed. Cir. 2000) ("A district court's decision to admit or exclude evidence at trial is reviewed for abuse of discretion."); Kearns v. Chrysler Corp., 32 F.3d 1541, 1547, 31 U.S.P.Q.2d 1746, 1750 (Fed. Cir. 1994) ("The decision to admit or exclude evidence is within the sound discretion of the trial court and will be reversed on appeal only for a clear abuse of that discretion.").

XIV. Discovery Rulings: Generally, discovery matters are committed to the sound discretion of the trial tribunal. Eastman Kodak Co. v. Goodyear Tire & Rubber Co., 114 F.3d 1547, 1561, 42 U.S.P.Q.2d 1737, 1746 (Fed. Cir. 1997) ("This court reviews discovery and evidentiary rulings under an abuse of discretion standard."); Keebler Co. v. Murray Bakery Prods., 866 F.2d 1386, 1388, 9 U.S.P.Q.2d 1736, 1738 (Fed. Cir. 1989) (stating that the Board's imposition of sanctions for discovery violations must be upheld unless the Board has abused its discretion).

XV. Privilege: "Application of the attorney-client privilege is a question of fact." Am. Standard, Inc. v. Pfizer, Inc., 828 F.2d 734, 744, 3 U.S.P.Q.2d 1817, 1824 (Fed. Cir. 1987).

Intervening Courts

I. Bankruptcy: "We review a district court's review of a bankruptcy court decision involving patent issues independently, applying the clearly erroneous standard to the factual determinations of the bankruptcy court and *de novo* review to its conclusions of law. We thus give the determinations of the district court no special deference." *In re* Cambridge Biotech Corp., 186 F.3d 1356, 1368, 51 U.S.P.Q.2d 1321, 1329 (Fed. Cir. 1999) (citations omitted).

II. District of Columbia: In the context of an appeal under 35 U.S.C. § 145 to the district court for the District of Columbia from a PTO decision, the district court can reach a conclusion different from that reached by the PTO even on the same evidence. Winner Int'l Royalty Corp. v. Wang, 202 F.3d 1340,1347, 53 U.S.P.Q.2d 1580,1584-85 (Fed. Cir. 2000) (citing Burlington Indus., Inc. v. Quigg, 822 F.2d 1581, 1584, 3 U.S.P.Q. 2d 1436, 1439 (Fed. Cir. 1987)).

III. Arbitration Awards: "When reviewing district court decisions upholding arbitration awards, we accept findings of fact that are not clearly erroneous and decide questions of law *de novo*." Flex-Foot, Inc. v. CRP, Inc., 238 F.3d 1362, 1362, 57 U.S.P.Q.2d 1635, 1637 (Fed. Cir. 2001).

Miscellaneous Substantive Issues

I. Defenses of Estoppel and Laches: "As equitable defenses, laches and equitable estoppel are matters committed to the sound discretion of the trial judge and the trial judge's decision is reviewed by this court under the abuse of discretion standard." A.C. Auckerman Co. v. R.L. Chaides Constr. Co., 960 F.2d 1020, 1028, 22 U.S.P.Q.2d 1321, 1325 (Fed. Cir. 1992) (en banc).

II. Contracts & Licenses:

A. Interpretation of an Agreement/Contract Term: Interpretation of a contract is an issue of law reviewed *de novo*. Studiengesellschaft Kohle, M.B.H. v. Hercules, Inc., 105 F.3d 629, 632, 41 U.S.P.Q.2d 1518, 1521 (Fed. Cir. 1997) (Construction of a patent license agreement "is a question o contract interpretation under [state] law, which we review *de novo.*"); Cyrix Corp. v. Intel Corp., 77 F.3d 1381, 1384, 37 U.S.P.Q.2d 1884, 1887 (Fed. Cir. 1996) ("Interpretation of a contract is a question of law that we also review *de novo.*"); Intel Corp. v. ULSI Sys. Tech., Inc., 995 F.2d 1566, 1569, 27 U.S.P.Q.2d 1136, 1138 (Fed. Cir. 1993) (contract interpretation presents an issue of law); C. Sanchez & Son, Inc. v. United States, 6 F.3d 1539, 1544 (Fed. Cir. 1993).

B. Legal Impossibility in Contract Performance: The issue of legal impossibility in contract performance is a mixed issue of fact and law. Blount Bros. Corp. v. United States, 872 F.2d 1003, 1007 (Fed. Cir. 1989); Consolidated Molding Prods. Corp. v. United States, 600 F.2d 793, 797 (Ct. Cl. 1979).

C. Incorporation by Reference: "[W]hether and to what extent material has been incorporated by reference into a host document is a question of law." Advanced Display Sys., Inc. v. Kent State Univ., 212 F.3d 1272, 1283, 54 U.S.P.Q.2d 1673, 1680 (Fed. Cir. 2000) (stating that instructing the jury to determine whether and what material was incorporated by reference constituted legal error because court must make that determination).

D. Existence of Implied License: Glass Equip. Dev., Inc. v. Besten, Inc., 174 F.3d 1337, 1341, 50 U.S.P.Q.2d 1300, 1302 (Fed. Cir. 1999) ("The existence of an implied license is a question of law which we review *de novo.*"); Carborundum Co. v. Molten Metal Equip. Innovations, Inc., 72 F.3d 872, 877,37 U.S.P.Q.2d 1169, 1172 (Fed. Cir.

1995); Met-Coil Sys. v. Korners Unlimited, 803 F.2d 684, 687, 231 U.S.P.Q. 474, 476 (Fed. Cir. 1986).

E. Existence of Contract: Whether the parties have entered into a contract is governed by the law of the regional circuit in which the district court sits. *See* S &T Mfg. Co. v. County of Hillsborough, Fla., 815 F.2d 676, 678, 2 U.S.P.Q.2d 1280, 1281 (Fed. Cir. 1987) (applying Eleventh Circuit law and reviewing the question as one of fact).

F. Assignor Estoppel: The determination of whether assignor estoppel applies is committed to the discretion of the trial tribunal and is reviewed under an abuse of discretion standard. Carroll Touch, Inc. v. Electro Mech. Sys., Inc., 15 F.3d 1573, 1579, 27 U.S.P.Q.2d 1836, 1841 (Fed. Cir. 1993).

III. Interpretations of Law:

A. Issues of statutory construction are matters of law reviewed under a *de novo* standard of review. Imazio Nursery, Inc. v. Dania Greenhouses, 69 F.3d 1560, 1562, 36 U.S.P.Q.2d 1673, 1674 (Fed. Cir. 1995) ("We review issues of statutory construction under a *de novo* standard of review. We need not defer to the trial court."); *In re* Kathawala, 9 F.3d 942, 945, 28 U.S.P.Q.2d 1785, 1786 (Fed. Cir. 1993); Kimberly-Clark Corp. v. P&G Distrib. Co., 973 F.2d 911, 915, 23 U.S.P.Q.2d 1921, 1925 (Fed. Cir. 1992) (stating that interpretation of statute, specifically *35* U.S.C. § 116, is a matter of law); *In re* Carlson, 983 F.2d 1032, 1035, 25 U.S.P.Q.2d 1207, 1209 (Fed. Cir. 1992).

B. Interpretation of Regulations: Issues in interpreting regulations are matters of law reviewed under a *de novo* standard of review. United States v. Lockheed, 817 F.2d 1565, 1567 (Fed. Cir. 1987).

C. Statutory/Regulatory Interpretation By An Agency: Enercon GmbH v. Int'l Trade Comm'n, 151 F.3d 1376, 1381, 47 U.S.P.Q.2d 1725, 1728 (Fed. Cir. 1998) ("As the agency charged with the administration of section 337, the ITC is entitled to appropriate deference to its interpretation of the statute." (citations omitted)); *In re* Hacot-Colombier, 105 F.3d 616, 618, 41 U.S.P.Q.2d 1523, 1525 (Fed. Cir. 1997) (Federal Circuit "defers" to TTAB's interpretation of trademark statute).

D. Interpretation of Precedent: "The meaning or interpretation of precedent is a question of law." YBM Magnex, Inc. v. Int'l Trade Comm'n, 145 F.3d 1317, 1320, 46 U.S.P.Q.2d 1843,1845 (Fed. Cir.1998) (citing South Park Indep. Sch. Dist. v. United States, 453 U.S. 1301, 1304-05 (1981)).

E. Interpretation of Mandate: The Federal Circuit reviews the interpretation of its own mandate under a *de novo* standard. Engel Indus., Inc. v. Lockformer Co., 166 F.3d 1379, 1382, 49 U.S.P.Q.2d 1618, 1621 (Fed. Cir. 1999) ("We review the interpretation of our own mandate *de novo*."); Laitram Corp. v. NEC Corp., 115 F.3d 947, 950, 42 U.S.P.Q.2d 1897, 1899 (Fed. Cir. 1997) ("[T]he interpretation by an appellate court of its own mandate is properly considered a question of law, reviewed *de novo*.").

F. Tolling a Statute of Limitations: Whether tolling of a statute of limitations has occurred raises an issue of law involving statutory interpretation; therefore, the issue is one of law reviewed *de novo*. Weddel v. Sec'y, Health & Human Servs., 100 F.3d 929, 931 (Fed. Cir. 1996).