

What Can Inconsistency Robustness Theory Teach The Federal Circuit About Methods Of Reviewing Lower Court Patent Decisions?

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Inconsistency robustness is a paradigm shift in thinking about information system performance. Inconsistency robustness recognizes that modern, complex information systems must perform notwithstanding persistent and continuous inconsistencies. The focus on inconsistency robustness encourages designers and administrators to recognize the reality of persistent inconsistency when building robust systems that can perform reliably. The focus on inconsistency robustness is a shift from the previous dominant paradigm that sought to solve inconsistencies via inconsistency denial or inconsistency elimination.

This position statement posits that courts—and especially the Court of Appeals for the Federal Circuit—could learn from the paradigm shift from inconsistency elimination to inconsistency robustness. Courts, like systems administrators and computational scientists, constantly face factual questions as to what is the state of things, or what is the truth of a contention. Courts also face legal questions as to which of competing legal rules should apply in a given situation. Often, the policies underlying the competing legal rules are inconsistent with each other and pull the court in different directions. Courts also face issues of law based on underlying issues of fact, and mixed questions of fact and law.

Why do these categories of legal decision-making matter? They matter because classifying a question as an issue of law versus an issue of fact determines how easily an

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appellate court may second-guess and overturn a lower court. Courts have long recognized that the proximity that both the jury and trial judge have to the evidence presented at trial, and especially to the demeanor of fact witnesses, gives the trial judge and jury better vantage points from which to decide factual disputes than that occupied by an appellate court reviewing transcripts of the trial proceedings. Accordingly, juries and trial judges are given significant deference in deciding the truth among inconsistent, conflicting factual assertions. Thus, once a jury or trial judge has made determinations of fact, the general rule is that such factual determinations will only be overturned upon appellate review if the lower court fact finder's decision was "clearly erroneous."

When it comes to determining legal issues, however, the general rule is that appellate courts will give no deference to lower court interpretations of the law, and thus appellate courts will review trial court legal determinations *de novo*. The reasoning is that when it comes to deciding what a legal statute means, or the legal effect of the language of a contract, the trial court has no special vantage point or skill set to which deference need be granted. Thus, for example, in determining whether Section 101 of the Patent Act permits patents on methods of doing business, the appellate court will not recognize any need to defer to a lower court's opinion, as the appellate court believes that it is at least as capable, and probably more capable, of getting the legal answer "right."

Moreover, while the facts of individual cases will always vary—and thus the determination of the facts of a case will generally only affect the outcome of that case—a legal rule may be applicable to hundreds of cases and thousands of potential disputes. Assuming then, that "correctly" interpreting a statute gives better effect to the interests that Congress sought to serve in passing the statute, courts have a greater interest in

getting the legal determination correct. Thus, the investment of resources needed to determine the legal issue *de novo* is thought to be worthwhile, and to the benefit of society. Indeed, the hope is that by briefing and arguing the legal issues twice, and by having the advantage of the lower court's legal decision to consider, the appellate court will arrive at a better legal determination, or at any rate no worse a determination than the lower court made. Obviously the final step of Supreme Court review—when the Court accepts *certiorari* of a case—is supposed to add that much more quality to the determination of difficult legal issues.

One can see that the system by which the courts generally determine issues of fact and law can be said to have elements of both inconsistency elimination, and inconsistency robustness. On factual issues, trial courts strive to find the truth among inconsistent contentions of fact. Courts thus try to eliminate the inconsistency of falsehoods and partial truths and to discern the “true” facts of the case. The courts and Congress are aware, however, that trial courts may have incorrectly reconciled the conflicting factual contentions, and that similar factual issues may be decided differently in different trial courts. But the system is accepting of a certain amount of error and inconsistency as not being worth the cost of eliminating. In this way, one might say that the judicial system seeks robustness in the face of known information inconsistencies.

For legal issues, the courts strive to eliminate a good deal of inconsistency. Courts are less concerned about the effect of legal error and inconsistency on the parties of an individual case than they are about the erroneous and/or inconsistent application of law across numerous individual cases. For this reason courts seek to correct more error when it comes to legal questions, and to correct it at a higher level so that a correct rule can

then be applied consistently across numerous trial courts. Thus we see greater attempts at correcting errors and eliminating inconsistency for legal issues, based on the perceived greater benefit that such error correction and inconsistency elimination provides.

In the 1960's and 1970's in the United States, there came to be a general perception that the amount of uncertainty about the validity of patents, and the inconsistency with which patent cases were decided in different circuits, was harmful to both innovation and to allowing business to proceed with some level of certainty as to patent value. Accordingly, in 1982 Congress passed the Federal Courts Improvement Act, which merged the Court of Customs and Patent Appeals and the appellate division of the Court of Claims. The Act also mandated that henceforth all appeals of patent cases from any district court would be heard by the Federal Circuit. Prior to the act, patent cases were appealed from the district court in which they had been tried to whichever of the 12 federal appellate courts had geographic jurisdiction over the trial court. The result was that the legal rules governing patents varied from circuit to circuit. A potential patent defendant had little control over where it might be sued, and thus did not know which of the rules from the circuit courts might be applied to its activities. Likewise, a patent holder faced uncertainty as to the application of patent law because it might be sued by a potential defendant under the declaratory judgment statute in any circuit, or a case that it brought in a circuit of its choosing might be transferred to another venue upon a successful motion by the defendant.

The legislative history makes clear that Congress hoped that the consolidation of all patent appeals in one circuit court would both standardize the law that the district courts are required to apply to patent cases, and allow more expert review of patent

appeals by a specialized court with the ability to hire specialized, often scientifically trained, clerks. There is also evidence that at least some of the proponents of the Act instituting the Federal Circuit hoped that the Court would prove to be more favorably inclined to protecting and enforcing patent rights, especially given that in some circuits prior to the act the rates of invalidation of patents had become quite high.

In the almost thirty years since the Federal Circuit began hearing cases in 1983, the Court has produced a single body of law to which district courts can look to decide patent cases. Many commentators also believe that the Court indeed has been friendlier to patent interests than some of the circuit courts were before 1983. Moreover, the Federal Circuit seems to have tried to decide issues so as to promote both correctness of outcomes and predictability of results, seemingly without realizing that these goals are often in tension.

While the judicial system in general must attempt inconsistency robustness by designing adjudication so that serious errors and inconsistencies are minimized while less important errors and inconsistencies are let go so as to economize on the costs and delay of litigation, the Federal Circuit's unique position as the single court of appeals for patents has resulted in suboptimal decision making when it comes to inconsistency in two ways.

First, because the Federal Circuit reviews all patent appeals, it theoretically has the opportunity to correct every error that is appealed to it, unlike other circuit courts that can correct error only in the cases in their geographic area of appeal. The natural temptation that this has presented the Federal Circuit is to attempt to correct far too many errors, without adequately considering the cost-benefit tradeoff of such intensive review.

Evidence that the Federal Circuit has fallen victim to this temptation can be found in the fact that the Federal Circuit has re-characterized a number of questions as pure questions of law so that it may review these issues and correct errors *de novo*. Examples of questions that seem to have factual components that the Federal Circuit decides as matters of law include claim construction (treatment affirmed by Supreme Court), prosecution history estoppel, implied license, obviousness, enablement, written description, statutory bars, and prior invention. While some of these issues are based on underlying issues of fact, such as when an earlier invention was made, the Federal Circuit reserves to itself the final decision of each issue as a matter of law.

While this *de novo* review of all of these issues allows the Federal Circuit to attempt to correct each potential error regarding these issues, it also has a significant cost in the form of increased uncertainty and duplication of efforts at the appellate stage of litigation. Litigants know that they have a fresh chance to re-litigate these issues on appeal with no presumption that the lower court made the correct decision. Thus, for example, statistics show a 40% reversal rate for claim construction rulings on appeal. All of this leads to uncertainty after trial while the appeal is pending, and the expenditure of significant resources in re-litigating the issues on appeal. It also leads to frustration with frequent inconsistency in the way the trial courts and the Federal Circuit decide the same case. Indeed, the Federal Circuit's classification of issues with strong and determinative factual components as questions of law has compounded inconsistencies to inconsistencies and, in certain cases, has increased the level of uncertainty in patent law rather than reduced it with possible impact on incentive to innovate. This uncertainty and inconsistency has led the Federal Circuit to make a second type of mistake. To increase

predictability and decrease inconsistency i.e. to *manage* inconsistencies, the Federal Circuit has increasingly migrated toward using bright-line rules, rather than more nuanced standards, as methods to decide litigated issues.

Appellate courts in general decrease inconsistency between the trial and appellate level by giving deferential review to many of the lower court's decisions. Thus, the trial court is generally deferred to on issues of fact, equitable decisions, sanctions, and fee awards, and an appellate court will only reverse the district court if the lower court's decision rises to the appropriate standard of clear error, abuse of discretion, or the like. Because the Federal Circuit has sought to root out errors at the trial court level by reviewing so many issues *de novo*, with no deference to the trial court, it has faced a higher level of inconsistency between the trial and appellate court than is generally seen in other circuits. While the Federal Circuit may believe that giving greater consideration to each case can result in one form of inconsistency elimination—the inconsistency of judicial decision making done properly in some trial court cases but not in others—the result is a significantly higher number of reversals—and thus inconsistency—from the trial court to the Federal Circuit.

The Federal Circuit has been criticized for this inconsistency both from within—by members of the Court—and from without—by attorneys and scholars. The Federal Circuit seems to have reacted to that criticism by attempting to make rules that are so clear and predictable that they will be easy for trial courts to apply correctly, and thus will result in fewer reversals on appeal, which means less inconsistency and less uncertainty. Prior examples of areas in which the Federal Circuit moved to bright-line rules include obviousness (Teaching-Suggestion-Motivation test), prosecution history

estoppel (complete bar to doctrine of equivalents in cases of claim amendment during prosecution), the standard for declaratory judgments (reasonable apprehension of suit), and the standard for issuing injunctions (presumptive issuance). The Federal Circuit's treatment of patentable subject matter also fits within this trend toward bright-line rules, although with some meandering along the way. The Federal Circuit followed a general course of liberalizing the standard for patentable subject matter, including by ruling that business methods are patentable subject matter in the 1999 case of *State Street Bank*. Over the course of the next decade the Federal Circuit struggled with what limits there should be to patentable subject matter, especially for process patents, and eventually settled on a bright-line rule in *In re Bilski*. The Supreme Court, following the recent pattern, overturned the Federal Circuit's bright-line rule and replaced it with a more amorphous standard.

There is a rich literature on the application of rules versus standards to legal questions. Rules provide predictability and consistency, while standards are less predictable but provide the opportunity for nuanced, contextual decision making. The Federal Circuit's excessive focus on inconsistency elimination seems to have caused it to veer further toward bright-line rules and away from contextual standards than was likely sensible given the costs and benefits of each. The result of the Federal Circuit's rules were that more obvious patents issued, the doctrine of equivalents was never available for amended patent claims, it was difficult to sue for a declaratory judgment, and injunctions almost always issued. In a series of cases over the last six years, the Supreme Court has reversed each of the Federal Circuit's rules set forth above, and replaced them with more contextual standards. The Supreme Court does not start from the Federal Circuit's

inherently contradictory dual goals of review/correction of as many errors as possible coupled with maximum consistency with lower courts. Accordingly, the Supreme Court can concentrate more on robustness in the face of inconsistency, and can try to set standards that maximize desirable social outcomes from adjudication, even at the cost of higher levels of inconsistency. Judge Rader of the Federal Circuit acknowledged this result when recently - *I do not have access to BNA's website from home. I will check the article next week* - explained that the Supreme Court's job is to balance policy interests with the reality of a complex society. Consequently, he said, the Supreme Court favors solutions that have high consideration for the totality of circumstances rather than strict, bright-line rules that necessarily have less tolerance for the specifics of each case. The Federal Circuit, Judge Rader concluded, should be more mindful of this Supreme Court's approach to decision making.

From a different perspective, it is worth noting that the presence of inconsistencies is not a unique characteristic of judicial decisions and that in the past decades scientists have learn to accept and even to appreciate inconsistencies in scientific theories. In fact, since the 1960s, scientists have moved from the theory-centered, inconsistencies-intolerant Copernican paradigm to the Ptolemaic paradigm according to which "theories (if any) ... are tools in a toolbox alongside various other tools for solving the variety of problems that arise in the field."¹ This latest approach to scientific investigation favors local problem solving over design of unified theories and shows that the presence of inconsistencies is less problematic than expected.² In fact, it has been noted that "it may be useful (and hence permissible or "rational") in the heat of research

¹ Thomas Nickles, *From Copernicus to Ptolemy: Inconsistency and Method*, in Joke Meheus, *Inconsistency in Science*, 1-33 Kluwer Academic Publishers (2002)

² *Id.* at

to violate the consistency constraint.”³ In 1905 Albert Einstein simultaneously employed two incompatible fluid models to achieve an important result in his first paper on Brownian motion.⁴ The lesson to be drawn is clearly that “fertility trumps consistency,”⁵ particularly in cases in which absolute proof is unobtainable.⁶ To be sure, consistency remains an important constraint both in scientific investigation and judicial decision-making. Nevertheless, it is a constraint among others in a context in which the main goal is to achieve results that work.

To make the best decisions on what rules should govern patent litigation issues, and to decrease the likelihood of continued reversals by the Supreme Court, the Federal Circuit needs to recognize that in its recent decision making it has often fallen victim to overemphasizing both error reduction and inconsistency elimination. The Federal Circuit needs to shift to a paradigm of inconsistency robustness, so that it can be free of the anxiety caused by inconsistency and engage in straightforward determinations of the costs and benefits of both attempting error reduction on appeal, and attempting to eliminate inconsistency. A shift of paradigms should lead the Federal Circuit to reexamine the extent of its *de novo* review of trial court decisions as well as its rules and standards for determining complex, multi-factored patent issues. At times error reduction or inconsistency reduction may be called for. But at other times, the costs of error reduction and/or inconsistency reduction may be higher than is justified in terms of both strains on time and resources and constraints on making contextual decisions. To be sure, a shift of paradigms will not result in perfect rules and standards, but a focus on

³ *Id.* at

⁴ *Id.* at

⁵ *Id.* at

⁶ *Id.* at

inconsistency robustness rather than inconsistency elimination or denial will give the Court the correct mindset from which to do its work with maximum social benefit in mind.