LECTURE: Enabling the Jury to Apply Patent Law Rationally

The Hon. Paul R. Michel
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It is a great pleasure to speak to the Yale Law and Technology Society. What I would like to do is to comment about some of the current trends in intellectual property law as seen from the U.S. Court of Appeals for the Federal Circuit and emphasize certain areas where I think there are a lot of misunderstandings. I also hope to stimulate some responses, ranging from agreement to disagreement to bewilderment, because what I look forward to most is the dialogue that will hopefully follow my remarks.

I. INTRODUCTION

Let me start with the current scene for developing clearer methods of construing patent claims. Claim construction is the baseline for everything. It sets the baseline for literal infringement most plainly, but it is also critical to assessing what the potential extended protection under the doctrine of equivalents may be. It is also the baseline for judging all attacks on validity and usually it is highly germane to questions of inequitable conduct and hence to the enforceability of patents. Therefore, the question of how we construe patent claims is pervasive. Oddly enough, in view of the fact that we've had an organized patent system since the very start of this country, we have had a well-developed body of patent law only since the 1920s, when our predecessor court began to issue judge-made rules, both before and after the 1952 Patent Act. Now, of course, the Federal Circuit has exclusive jurisdiction to review patent cases, both from the Patent and Trademark Office and also from the district courts from which they come to us both as infringement and declaratory judgment actions. You might think that everything about claim construction has long since been settled, but that is far from the case.

The second area I want to touch on is the mysterious doctrine of equivalents which everybody talks about and tries to apply, but which, I think, nobody has thought through sufficiently. As a result, if you read the case law carefully, compare and contrast the cases, and try to integrate them, you will find a certain amount of dissonance in the case law that leads to unpredictability. You can ask very good patent lawyers in this country whether a certain device infringes a given patent, and a lot of them will tell you, "Well, I'm not sure." Some will say, "I think yes," and others will say, "I think no." Any system that routinely produces such a scattering of conclusions from competent, intelligent, and well-informed lawyers indicts itself in my view. So I think the doctrine of equivalents needs more development.

Another particularly tricky area of patent law concerns the role of the jury. In fact, I think we've paid much too little attention to specialization and the respective roles of all the different players. The system has many players with hugely different capabilities and responsibilities: from the claim drafter to the examiner, to the supervisor of the examiner, to the Board of Patent Appeals and Interferences, to the generalist district judges who run the infringement trials, to the jurors who decide the fact issues not subject to judgement as a matter of law. Finally, of course, there is the Court of Appeals for the Federal Circuit and, once in a while, the Supreme Court. There are many different players, but the one whose role has been least well-defined to date is that of the lay juror. Jurors may not know the law, the facts, the technology, nor the business, but they are average citizens who say to themselves, "I'm going to try to understand what I'm told and be fair and do a diligent job." The uncertainty surrounding the role of the juror arises because of what I consider not incorrect development, but inadequate development of particular methodologies that may be helpful to jurors in reaching a verdict. How do you teach a jury how to do its job so that it can do it with a higher degree of uniformity? From a given set of facts, we want to get the same outcome from one jury to the next. But what

+ Edited transcript of remarks delivered to the Yale Law and Technology Society on April 14, 1998.
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many of us see is that you get very different outcomes from one jury to the next. Why is that and how can it be minimized? In the last several years we have had a lot of dramatic developments, including a case called *Cybor Corp. v. FAS Technologies, Inc.*,¹ with which some of you may be familiar. *Cybor* is a recent decision of the Federal Circuit that basically squelches any notion that there is deferential review of the factual aspects that underlie claim construction. It builds on *Markman v. Westview Instruments, Inc.*,² which said that claim construction is essentially a legal, rather than a factual, issue and therefore is for the judge, not the jury. Furthermore, as legal issues, the judge’s determinations should be reviewed on appeal without the deference that findings of fact warrant.

II. CLAIM CONSTRUCTION IN THE COURTS

A. Level of Specificity in Claim Construction

Much clarity has been brought to bear on certain aspects of claim construction, but it is astounding how many things are still unsettled. For example, at what level of specificity is the trial judge to define the claim, particularly disputed language where the two parties have quite different interpretations of a certain word or phrase or clause? Ultimately, a highly detailed claim construction could obviate the infringement analysis. It would be absolutely clear whether or not there is infringement. You would not even need a trial. On the other hand, if the claim construction is done at too abstract, vague, or generalized a level, it may force the jury to do some further construction on their own before making its infringement decision. On appellate review, then, we would be dealing with a so-called black box because you cannot be quite sure what the jury’s construction of the claim was, and so it is hard to assess whether the construction was correct or not.

B. The Role of the Jury

We have a lot of nice-sounding language in cases that are designed to impart confidence to users and observers of the jury system. A judge simply determines whether, under the facts of record, there would have been enough evidentiary support that, had the jury used the proper claim construction, the verdict would be proper. That is a reassuring standard, but it has never been quite clear to me how you actually apply it. You do not know what the jurors’ findings of fact were because jurors are not district judges and therefore Federal Rule of Civil Procedure 52(a) does not apply.³ You do not get findings of fact, you do not get claim construction and, in many cases, you only get a general verdict: plaintiff wins. So reviewability becomes a big problem.

You can also look at it quite differently, whatever the level of specificity of the claim construction. Imagine being a juror and being read the typical multi-page set of instructions on the application of the doctrine of equivalents, including explanations of the so-called all-elements test, prosecution history estoppel, the function/way/result test, and so on. Patent law is a very complex area of law that has half a dozen big pieces, each of which has five or ten smaller pieces. These are all laid out in the thirty or forty pages that are read to jurors. Because the instructions are just too complicated, have too many parts, and are read only once to the jury, jurors may not be able to render a well-founded verdict. The jurors are supposed to apply the law as it was read to them, but often they are given no explanation of how to apply it. The jury is simply read a series

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¹ *Cybor Corp. v. FAS Technologies, Inc.*, 138 F.3d 1448 (Fed. Cir. 1998).
³ FED. R. CIV. P. 52(a) (requiring judges in non-jury trials to specifically find facts and state separately their conclusions of law arising from these factual findings).
of interlocking rules and told, “Now you go and decide.” So I think jury instructions are often inadequate and are part of the reason why results are so unpredictable from jury to jury.

In addition, irrational factors—that is, considerations other than the law and the facts—often seem to motivate the decisions of jurors. One such factor is whether the defendant is a corporation. Such considerations ought to have utterly nothing to do with a verdict, but you have to worry that sometimes they have too much influence in the decision-making. The decision should be made purely on the basis of the law and the facts. Everything else, such as how glib or handsome the trial lawyers are, should be extraneous, but they can become factors, too. The degree of influence of those factors can be exaggerated when the jury instructions are so opaque. Of course, in a patent case or other intellectual property cases—whether it is trade secrets, unfair competition, copyright, or even trademarks—jurors are fed much jargon. They are presented with complex scientific terminology that requires the jurors to learn to think in a new discipline and to speak a new language. Interweave all that technology with the rules of law that the judge instructs the jurors, and we just give juries too hard a job, one which they cannot do very well.

C. Proposals to Aid the Jury in Fulfilling Its Duties

I have become increasingly interested in ways of trying to teach jurors how to perform their role better, to define the jurors’ role more clearly, and to limit their role to the things that we have historically turned over to jurors on the assumption that they can do these things best-things like assessing credibility. Let us maximize that part of verdict rendering that has traditionally been the province of the jury and minimize the part that has to do with applying complex legal doctrines because that is probably what jurors do least well. Some of the techniques that we have talked about—techniques that hardly any attorneys and not very many trial judges use—include fairly elaborate special verdict forms that break down the infringement or validity issue, piece by piece. For example, some verdict forms may direct juries to first decide whether the later-claimed invention was actually on sale or in public use and whether it was more than a year before the patent application was filed. Only then does it declare the patent invalid. Other verdict forms may instruct juries to, for example, answer a series of sequential questions before arriving at a decision. These forms really break the issues down to two- or three-step outlines so that juries are not left to confront general questions like “Is there infringement?,” “Is there invalidity?,” or “Is there unenforceability?” Such questions are too generalized and difficult for the jury to handle.

Another possibility in which no rule changes would be needed would be to allow the jury to render a general verdict accompanied by answers to a series of interrogatories framed by the lawyers and the district judge. The point of this is twofold: first, to make sure that the jury did understand the issues, and second, to make sure that the trial judge on post-trial motions and the Court of Appeals on review understand the jury’s verdict and thought processes.

I have written an article about special verdict forms and their many uses. For example, every patent case tends to have an issue of alleged invalidity for obviousness. Obviousness is a question of law that is founded on underlying factual matters that cluster around the four inquiries emphasized by the U.S. Supreme Court in Graham v. John Deere Co. If you carry the logic of that forward to a fairly extreme extent, only the factual underpinnings really ought to be decided by the finder of fact, usually a jury. In contrast, the legal issue of whether or not the patent would have been obvious should be decided by a judge based on the jury’s findings.

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of fact, assuming each finding is supported by substantial evidence and could have been reached by a reasonable juror. So, unsurprisingly, there are two cases, both Seventh Circuit decisions, which reach these same conclusions. The first, *Panther Pump and Equipment Co. v. Hydrocraft, Inc.*[^6] is an en banc decision rendered shortly before the creation of the Federal Circuit, so it immediately became a sort of dead letter simply because the Federal Circuit soon thereafter inherited the responsibility of declaring the law of patents. But I think it is actually quite a brilliant decision, and I talk about it in my article. In that case, the Seventh Circuit held that the trial judge must instruct the jury with what I like to call “alternative mandatory instructions.” For example, the judge may instruct the jury that, “if you find that prior art reference A teaches X + Y, then you must find the patent invalid because the invention would have been obvious. On the other hand, if you find that Reference A teaches only X, then you must find that invalidity has not been proven.” This is how far you can separate the legal part from the factual part with regard to obviousness.

### III. THE DOCTRINE OF EQUIVALENTS

The so-called means-plus-function type of claim described in the Patent Act, 35 U.S.C. § 112, para. 6, presents all sorts of additional problems. These problems arise from its truncated notion of equivalent infringement as an aspect of literal infringement because the statute commands that the claim be construed so as to include both structures disclosed in the specification and their “equivalents.” So you already have a statutory but somewhat narrower doctrine of equivalents. This raises the questions of how much additional protection you get, if any, under the judicial doctrine of equivalents and whether any equivalents should be allowed. Does it really make sense to talk about having equivalents of equivalents? If so, how can you define what the difference is? Equivalence of two structures is another area where there is a great deal of confusion.

I want to say one thing more about the doctrine of equivalents because it goes back to this very fundamental choice between emphasizing the primacy of the judge for certain issues and the primacy of the jurors for fact finding and other issues. If you look closely at our case law and try to spot trends, I think you will detect that there have emerged in the last few years roughly six to ten separate doctrines that limit resort to infringement under the doctrine of equivalents.

All of them—and this is what many people do not realize—are issues of law and therefore are to be decided by the judge, not by the jury, and all are presumably amenable to summary judgment. Therefore in a significant percentage of cases, there is the possibility that equivalent infringement will disappear entirely as a viable issue long before the case goes to the jury. You might also speculate that, with so-called *Markman* hearings leading to a rather refined definition of the scope of the claim in many cases and with at least the meaning of disputed words and phrases settled long before the case goes to the jury, that even literal infringement might drop out in a fair proportion of cases. Again, this is at the summary judgement stage. So I think what is going to happen is something like this: in about half the cases, one form of infringement will drop out before the case goes to the jury. In some cases, it will be literal infringement that drops out and in others, it will be equivalent infringement that drops out. In some cases, both forms of infringement will drop out and the case will be over. More than sometimes obviating the need for any trial, the main impact of this will be that many more cases will go to the jury only on a narrower set of issues that still need to be decided.

[^6]: *Panther Pump and Equip. Co. v. Hydrocraft, Inc.*, 468 F.2d 225 (7th Cir. 1972); see also *Dual Mfg. and Eng’g, Inc. v. Burris Indus., Inc.*, 619 F.2d 660 (7th Cir. 1980) (ruling that juries must specify in writing, in response to detailed special verdict forms or interrogatories, the findings of fact underlying their obviousness decisions).

[^7]: See Michel, supra note 4, at 89.
This might help the jury to be more rational, predictable, and able to show more fidelity to the law. The problem of overly complex instructions would also be minimized.

At present we give juries too many issues to decide, too many rules of law, excessively long instructions, too many witnesses, too many days of trial, too much to remember, and too much technology. And then we get irrational results.

Part of the way out of this trap is to narrow, simplify, and explain how to apply the law in terms of methods of decision: first you decide this, second you decide that, and then fill out this verdict form so we can see what you really did and to some extent why. These are some of the trends that point in a good direction.

IV. THE UNIQUENESS OF THE FEDERAL CIRCUIT

The U.S. Court of Appeals for the Federal Circuit is a very unusual court. A lot of people think that our court is just a patent court, but actually we have more government personnel cases than patent cases. We also hear cases involving veterans’ benefits and contracts between private parties and the U.S. government involving everything from aircraft carriers to pencils. So contracts are a good part of our work. And, we hear all appeals from the Court of Federal Claims, which itself has jurisdiction over a bewildering variety of claims, including mineral and water rights cases on Indian reservations, tax and takings cases, just to give you an example.

Hence, we are a patent court because we have exclusive jurisdiction over all Patent and Trademark Office and district court patent decisions, but we are not solely a patent court.

Recent Supreme Court interventions in our area have shown that the Supreme Court can be quite helpful. I think their decisions in Markman\(^8\) and in what we call Hilton Davis\(^9\) (but they call Warner-Jenkinson) were quite useful. However, if you probe and dissect carefully, you begin to get a sense that the Justices are just a little bit beyond their comfort level. The point is that the era in which the Supreme Court was comfortable with patent law and its various complexities and challenges is now over. I do not think we are going to see many major patent issues decided by the Supreme Court over the next ten years. Thus, we have probably seen the highwater mark of Supreme Court intervention.

You could almost say the same with respect to intellectual property in general, except that there are certain types of copyright cases that the Justices love. The Supreme Court will always take some copyright cases, but very few trademark cases, trade secrets, unfair competition, and antitrust-related matters that connect to the intellectual property world.

Therefore, the patent part is going to be left largely to the Federal Circuit, and the copyright part left largely to the regional circuits, with the rest scattered around.

In that respect, you might want to be aware of what we call the “White Commission.” Retired Justice Byron White has a congressionally created commission to review, for the first time in over 100 years, the basic structures of federal appellate courts in America and how they might be altered. One of the possibilities is that the Federal Circuit will get more jurisdiction, and another is that we will have some of our existing jurisdiction taken away. If we were to get more jurisdiction, it would immediately raise the question of whether it would be logical to give the Federal Circuit exclusive review in copyright and/or trademark law.

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since we already have exclusive review in patent law. After all, patent, copyright, and trademark are the three
great divisions of the field that collectively we call intellectual property.

The Commission is supposed to report later in the year to Congress. What the Commission will recommend
or what Congress will do, I do not know. However, when the Federal Circuit was created, one of its primary
projected areas of jurisdiction was to be the exclusive tax review court of the United States, and obviously
that did not happen.

Whether that idea will be resurrected or not, is uncertain, but it gives you an idea of how much fluidity there
is behind the scenes when these kind of reviews are carried out. I am told that when the Federal Circuit was
created in 1982, the trademark and copyright bars were sufficiently happy with the status quo, that they
torpedoed similar proposals for merging those two fields with the patent field and giving them to us. Now
that we are the known devil, instead of the devil that nobody knows, we do not look so scary to those two
bars nor to the industries they serve. Perhaps they would be less nervous and may prefer this time to merge
the jurisdictions and give us a broader array of intellectual property matters.

Our court, however, is not a weird court. It operates exactly like every numbered circuit does, with life-
tenured, Article III judges, of which we have a dozen. We sit in panels of three like all the other circuits, and
once in a while we sit en banc. We follow identical procedures for voting, opinion writing, and case decision;
our work is absolutely indistinguishable from the work of any other circuit, except that our jurisdiction is
based on the tribunal below or on the subject matter, not on geography. We have nationwide geographic
scope, but limited subject matter scope. Otherwise we are like all the other circuits. That is not widely
understood and I think it comes partly from the notion that somehow we are the patent court or the “son” of
the patent court.

Of our twelve major areas of jurisdiction, patents is probably the most important, involving the most money,
and taking the most time. Patents comprise a third of our cases. But if you based it on the time patents
require, they take approximately half of our judge and clerk hours.

Because we have such a variety of jurisdictions, our judges come from a variety of backgrounds. There are
three former patent lawyers on our court, roughly proportionate to the percentage of patent cases we have.
We are a very diverse group, composed of one former professor, two former trial judges, several civil
litigators, and a couple of government lawyers. This diversity carries forward the intent of Congress not to
have the Federal Circuit be a truly specialized court (although it is more specialized than the other circuits).
This diversity also has the further effect of providing some very healthy cross-pollination. Lawyers whose
backgrounds were not so strong in patent law before they came to the court have actually helped the patent
decisions be better integrated with related fields of law. As a so-called non-patent judge, I may not have the
best standing to say this, but the people who usually support this point are the “patent judges” themselves.
They talk about how much better a trio of judges can decide a case precisely because of, not in spite of, the
fact that one or two of the judges on the panel have no real claim to being patent lawyers. Our patent work
also enables us to decide cases in other fields better. It is analogous to cross-training in sports. If you lift
weights one day and run the next, you have a larger range of capabilities that you are continually building.

We have tremendous internal debate. What you see in F.3d is the proverbial tip of the iceberg. For every page
of that, there are multiple pages of memos that go back and forth among colleagues. We argue and fight like
hell. We have extraordinarily cordial personal relations, which is somewhat paradoxical, but there might
actually be a connection.
We fight so hard on doctrinal matters that we have to be extremely nice and friendly with one another, lest we all come to hate working with each other every day. It is a wonderful court to serve on, and it’s a wonderful court to clerk on.