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Exactly Backwards: Exceptionalism and the Federal Circuit

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COMMENT:
EXACTLY BACKWARDS: EXCEPTIONALISM AND THE FEDERAL CIRCUIT

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First of all, I want to thank in particular Craig Nard for inviting me to this conference, and to Dan Burk and Mark Lemley for embarking upon a very interesting project.

I

We meet today in an era of accelerating technological development, of the ballooning use of patents as both shields and swords in the marketplace, and increasing criticism of the courts' ability to meaningfully deal with these changes. Given this, it would seem to be the rare and unique patent scholar whose responsive policy prescriptions center around unbounded policy-oriented judicial interventions into various details of the patent law.

Professors Burk and Lemley, however, are such patent scholars. Their basic premise is that the judiciary—in particular the Federal Circuit—should embrace and extend a trend towards technology-specific rules that they argue is a major feature of modern patent law. That is, they argue that judicially-created technological-exceptionalism—in which every technology, every industry, has its own set of rules and procedures, and in which patents are evaluated on different bases—will address the challenges of the current U.S. patent system.

I will make three points in this brief response to their proposal. The first two address Burk and Lemley's descriptive claim that the patent law is increasingly exhibiting a fundamental tech-

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nological-exceptionalism. That is, I first suggest that this trend is counterfactual to the reality of the current patent law. Second, I argue that the trend in fact runs counter to some major trends we see across the patent law. And finally, I consider the public policy questions raised by Burk and Lemley's call for judicially-created technological-exceptionalism, concluding that—even assuming they are descriptively correct—the dominant approach is exactly backwards of the one they advocate.

II

First let's look at whether technological-exceptionalism is counterfactual. An initial problem here is that it's really tough to figure out what is meant by technology-specific rules.[1] This is Professor Janis's point.[2] He says: Of course! The patent laws are unquestionably technology-specific. That's by design. That's the whole point. The key is, then, to distinguish between two different versions of technological-specificity.[3] The first I call *micro-exceptionalism*, which occurs when the same rules are applied to different technological facts and yield different results. This is the normal course of things, the way we think of the patent law: generally uniform rules, applied to very different technological facts, mediated by the patent law's ubiquitous "person having ordinary skill in the art" standard.

Although they fail to address the distinction, Professors Burk and Lemley discuss a far different form of exceptionalism: *macro-exceptionalism*, distinct rules or standards applied to different technological facts. This version creates not only technologically-variable results, *but also industry-variable results*. Professors Burk and Lemley explicitly claim that biotechnology is different than software and should be treated differently, and different sorts of rules and procedures should thus be developed.[4] It's important to understand that this is a vision of a very different sort of patent law than the *micro-exceptionalism* that is the conventional understanding. One problem with Burk and Lemley's descriptive effort

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[1] For more extended arguments on this point, see R. Polk Wagner, *(Mostly) Against Exceptionalism*, *in* PERSPECTIVES ON PROPERTIES OF THE HUMAN GENOME PROJECT 367 (F. Scott Kieff ed., 2003) [hereinafter Wagner, *(Mostly) Against Exceptionalism*]; R. Polk Wagner, *Of Patents and Path Dependency: A Comment on Burk and Lemley*, 18 BERKELEY TECH. L.J. 1341 (2003) [hereinafter Wagner, *Of Patents & Path Dependency*].

[2] Mark D. Janis, Comment, *Equilibrium in a Technology-Specific Patent System*, 54 CASE W. RES. L. REV. 743, 744 (2004).

[3] This analytic framework was developed in Wagner, *(Mostly) Against Exceptionalism*, supra note 1, and Wagner, *Of Patents & Path Dependency*, supra note 1, at 1345-47.

[4] Dan L. Burk & Mark A. Lemley, *Biotechnology's Uncertainty Principle*, CASE W. RES. L. REV. 691, 706 (2004).

is trying to tease out—when you look at the actual cases—what the Federal Circuit is doing: *Are the judges being macro-exceptionalists*? Are they really trying to do something distinctly different, or is this the ordinary run of patent law wherein similar rules are applied to different sets of technological facts to yield somewhat different results?

The second consideration, which is a very specific and perhaps the most original proposal Professors Burk and Lemley make, is to vary the person having ordinary skill in the art ("PHOSITA") in order to adjust the scope of the claim depending on the particular technology.[5] Table 1 below illustrates this.

Table 1

PHOSITA Level	***Obviousness Standard***	***Disclosure Standard***	***Scope-Effects (obviousness)***	***Scope-Effects (disclosure)***	***Scope-Effects (equivalents)***
High (easy field) [software]	*higher (lots of things are obvious)*	*lower (needn't disclose as much)*	*narrower*	*broader*	*indeterminate*
Low (hard field) [biotech]	*lower (fewer things are obvious)*	*higher (must disclose quite specifically)*	*broader*	*narrower*	*indeterminate*

The Indeterminate Effects of the PHOSITA Standard

A serious flaw in this proposal is that the variation of the PHOSITA standard has, ultimately, indeterminate effects on patent scope. For example, look to the first row in Table 1 above, where the PHOSITA standard is high, which means it is a relatively "easy" field (e.g., software). The obviousness standard will be somewhat higher, because many things are then obvious in that field. As a result, the disclosure requirement will be lower. The scope effects of the obviousness standard in this case will yield narrower patent claims: Because of the amount of obvious information, the claim will have to be narrower to avoid the prior art. Conversely, the disclosure requirements here will yield broader claims: The claim can be broader without disclosing the underlying invention quite as much. The scope effects with respect to equivalence, which under the doctrine combines both these effects,

[5] *Id.* at 736.

are indeterminate.[6] Whether a high level or low level of ordinary skill in the art ultimately results in broader or narrower patents depends on what one thinks about the balance between at least these three, and perhaps more, factors. Thus the scope effects of varying the PHOSITA standard are fundamentally indeterminate as a general matter, and are likely to be impossible to figure out even on a case-by-case basis. Obviously, one can make assumptions and try to determine the effects, but I think it is quite troublesome to do so.

Third, there are several alternative explanations for what is going on in biotechnology—the field that Burk and Lemley point to as the primary example of technological-exceptionalism.[7] For instance, one alternative explanation is that the jurisprudential dataset is characterized by a very small sample size; there are not many cases that deal directly with this. Another alternative explanation is judicial consistency. Shockingly, one judge, Judge Lourie, has authored almost all of the major opinions noted by Burk and Lemley as relevant to biotechnology; thus, one explanation for the unusual patterns is that Judge Lourie could be a very consistent judge.

A third alternative explanation is factual error. Perhaps the Federal Circuit is just wrong—Burk and Lemley note this in their article, but set it aside as an explanation.[8] The Federal Circuit may simply be wrong about the ordinary skill in the art level of different fields and continue to be wrong.

A fourth alternative explanation is fact-versus-law confusion. The court, at some point, might have said something that was factually based on biotechnology, or about computer software, and now the judges are confused about what is fact and what is law. For whatever reason, the court may continue to follow this fact that was put in place a long time ago without changing, such that it looks like the court is on a macro-exceptionalist mission when, in fact, it is just confused.

Importantly, however, each of these explanations suggests that any current exceptionalism is extremely unlikely to persist (even *if* it currently exists). It is not at all clear to me, even if you read the cases exactly as Professors Burk and Lemley do, that one can determine with any confidence that macro-exceptionalism, as opposed to micro-exceptionalism, is developing.

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[6] For further exposition on this point, see Wagner, *Of Patents and Path Dependency*, supra note 1, at 1348-50.

[7] Professors Burk and Lemley identify biotechnology as the primary example of technological-exceptionalism. *See* Burk & Lemley, *supra* note 4, at 691.

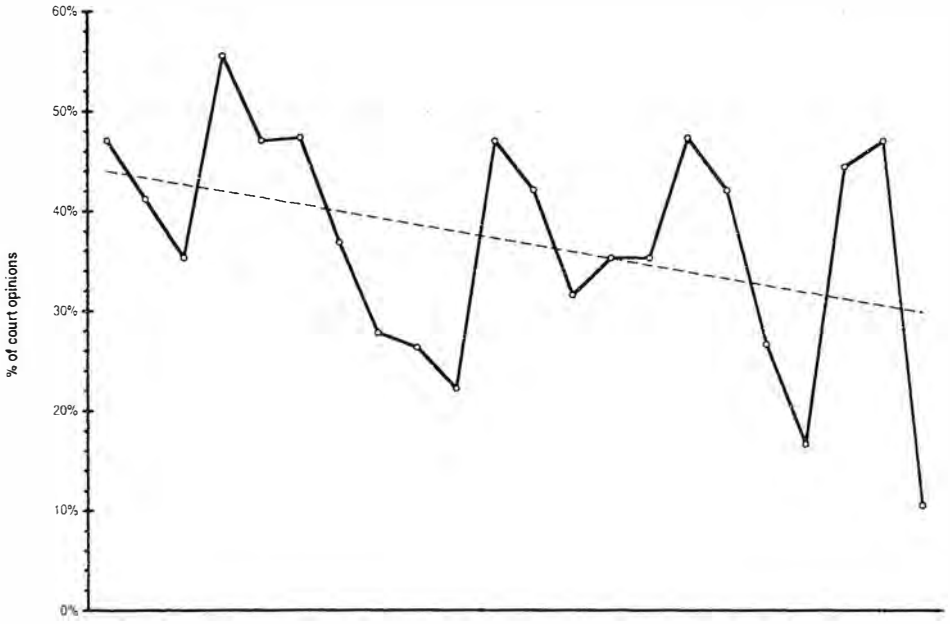
[8] *Id.* at 714.

III

The second major concern I have regarding the Burk/Lemley thesis is that their argument that technological-specificity is an emerging trend in the patent law appears directly counter to clear, verifiable jurisprudential trends at the Federal Circuit.

First, I have done a lot of work recently on claim construction.[9] In their earlier discussions, the judges alluded to some of that work. The trend that I find suggests clear movement towards rule-based uniformity, not standards-based disuniformity.

Figure 1



The Federal Circuit's Trend Towards Rules-Based Claim Construction[10]

In Figure 1, the y-axis represents the frequency of what I call the "holistic" methodological approach to claim construction. This is a largely standards-based (as opposed to rules-based) approach, whereas the alternative approach—"proceduralism"—is far more rules-oriented. Figure 1 shows a statistically significant trend over time of the Federal Circuit becoming more uniformly rules-based.

Second, I am involved in another ongoing project analyzing all of the Federal Circuit's en banc decisions. It is very interesting

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[9] *See* R. Polk Wagner & Lee Petherbridge, *Is the Federal Circuit Succeeding? An Empirical Assessment of Judicial Performance*, 152 U. PA. L. REV. 1105 (2004).

[10] This chart is simply one chart from a much larger project. *See generally id.*

to line up, as I did in Table 2, the last ten years of patent en banc decisions.

Table 2

Case	Year	Old Doctrine	New Doctrine	Change?	Uniformity Trend?
Johnson & Johnston	2002	Split: disclosed-but-unclaimed does/does not limit equivalents	Rule: disclosed-but-unclaimed does limit equivalents	Yes	✓
Rhone-Poulenc	2002	Case-specific		No	
Festo	2000	Case-by-case PHE surrender	Rule: complete surrender	Yes	✓
Midwest Industries	1999	Patent-state law conflicts analyzed under regional circuit law	Patent-state law conflicts analyzed under Federal Circuit law	Yes	✓
In re Zurko	1998	PTO fact-finding reviewed for clear error		No	
Cybor	1998	Split: limited deference to district courts	Rule: no deference, pure law issue	Yes	✓
Nobelpharma	1998	Patent-antitrust interface decided according to regional law	Patent-antitrust interface decided according to Federal Circuit law	Yes	✓
Hilton-Davis	1995	DOE issues		No	
Rite-Hite	1995	Patent damages issues		No	
Markman	1995	Split: claim construction as issue for judge/jury	Rule: claim construction as issue for jury	Yes	✓
In re Alappat	1994	PTO procedures/subject matter		No	
In re Donaldson	1994	PTO must use 112/6		No	

Federal Circuit En Banc Trends

Examination of the cases in which the Federal Circuit court has either clarified or changed the law reveals that the court is moving towards uniform rules. Table 2 lists the en banc decisions in which there is a change—a shift in the doctrinal orientation—and it demonstrates that the court is moving more towards rules. Any artifacts Professors Burk and Lemley pick up that suggest the court is moving away from uniformity would be counter to the actual evidence of a broader project going on at the Federal Circuit right now, both in the claim construction area and in a variety of other areas as seen through the en banc analysis.

This type of data-driven project on en banc procedures suggests that the written description requirement is being targeted. The best predictor, when considering all the patent cases going en banc, is denials of motions to rehear en banc prior to the case being taken en banc. Right now we have four judges on record to take the written description issue en banc. If you look at this, some of the recent major en banc cases suggest that at some point this issue is going to be taken en banc. The trend demonstrated in Table 2 suggests that the Federal Circuit is not heading in the direction that Professors Burk and Lemley want, but in precisely the opposite direction—towards a more rules-based, uniform approach.

IV

Finally, I want to take this opportunity to address some policy arguments. Professors Burk and Lemley make the basic point that exceptionalism allows for policy-based interventions to ameliorate (what they consider to be) industry problems in biotechnology—overlapping rights and transactions costs.[11] Their solution is to adjust the PHOSITA standard to allow for broader but fewer patents.[12]

As an initial matter, this argument raises a fatal indeterminacy problem similar to that which I noted above: Broader patents are going to spur more patents, not fewer patents. So it is not clear how anyone expects achieve the Burk/Lemley goal of fewer patents while simultaneously broadening their scope. This apparent logical disconnect alone raises troubling questions.

Second, there are other problems with exceptionalism that have already been noted to some degree by other commentators, namely the virtually intractable information and game-playing problems. We already see this, of course, in patent prosecutors. Whenever there is a line drawn, rational patent prosecutors want to straddle it; that strategy gives litigators the most flexibility in the future. So, because exceptionalism involves the ever more detailed drawing of fine lines, one has to expect an explosion in game playing.

Third, there are issues concerning the political economy of specialized patent law. One can imagine the special interest groups, the political economy issues that will arise once patent law begins to be disaggregated into all its component parts. Obviously, this will increase complexity and uncertainty enormously.

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[11] Burk & Lemley, *supra* note 4, at 722.

[12] This is the Burk/Lemley punch line for biotechnology. *Id.* at 737.

Claim construction, for example, is a hard issue. After twenty years, the Federal Circuit is finally trying to reach some sort of common set of rules for claim construction. The prospect of having to repeat this process for dozens of legal issues in dozens of different technological areas is a deeply troubling aspect of the Burk/Lemley proposal.

Finally, note that the Burk/Lemley scheme is a virtually perfect indictment of itself. Their argument is that the Federal Circuit, by creating an exceptionalist biotechnology jurisprudence, has it exactly backwards: narrow and numerous patents causing transaction costs. In response, they suggest we ask the Federal Circuit to engage in *even more* open-ended, policy-driven exceptionalism. Certainly the evidence to date suggests that this is not something the court is going to do well at all.

Finally, I note that the transaction costs of overlapping rights are potential problems not at all unique to biotechnology. One could adopt a different approach—clarify the rights—and go exactly the other direction. Instead of being disaggregated and complex, be simple and clear; the initial allocations matter less. People can, in individual industries, tailor their rights with each other to deal with these industry-specific issues. A big part of my proposal is the development of uniform, not disaggregated, rules. Some of the projects I am working on suggest this is what is going on at the Federal Circuit right now—though of course only in fits and starts. We are not there yet, and this obviously is not a complete solution. While it may not eliminate costs, it is far more attractive in a sort of second-best world than the exceptionalist approach. Perhaps most importantly, the suggested solution does not depend on the Federal Circuit's ability to develop policy, for which the court does not have a good record thus far.

It may be that the Federal Circuit's trend is in the right direction and biotechnology jurisprudence is the laggard, not the innovation. In that sense, I would suggest that it is not the Federal Circuit that has it exactly backwards.

Thank you.