



**JOHN F.  
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# REGULATORY STRUCTURE AND THE INTELLECTUAL PROPERTY SYSTEM

**I**n the field of intellectual property law, Professor John F. Duffy has been identified as one of the 25 most influential people in the nation and one of the 50 most influential people in the world by prominent legal news magazines. Duffy has published articles on intellectual property law in leading academic journals, such as the *Yale Law Journal*, the *Stanford Law Review*, the *University of Chicago Law Review*, the *New York University Law Review*, the *University of Texas Law Review*, and the *Supreme Court Review*. He has litigated major patent cases at the Supreme Court and at the Court of Appeals for the Federal Circuit, and articles describing his scholarly work and influence in the field have appeared in publications such as *Business Week* and *The New York Times*.

Yet Duffy began his academic career not as an intellectual property scholar, but as a professor of administrative law and regulation. In law school, he studied administrative law and regulatory industries, was an Olin Fellow in Law and Economics, and never took any intellectual property classes. Prior to entering academics, he clerked for former administrative law professors (Judge Stephen Williams of the D.C. Circuit and Supreme Court Justice Antonin Scalia), worked at the Department of Justice's Office of Legal Counsel (which advises the Attorney General and the President on issues of separation of powers and other structural constitutional is-

sues), and practiced appellate and administrative law at Covington & Burling in Washington, D.C. His first two articles as an academic addressed the relationship between statutory and judge-made law in the fields of communications regulation and in the law governing judicial review of administrative agencies.

Fundamentally, however, Duffy's intellectual property scholarship represents not a change but an extension of his interests in regulation, in law and economics, and in the legal institutions that produce good regulation. His scholarship has repeatedly applied general insights from regulatory law and theory, institutional design, and even constitutional law to the problems of intellectual property law.

His first two academic articles addressed classical problems of administrative and regulatory law—namely, the relationship between the courts and the legislature and the methods by which those institutions develop regulatory law. In the essay “Technological Change and Doctrinal Persistence: Telecommunications Reform in Congress and the Court,” 97 *Colum. L. Rev.* 976 (1997), Duffy and his co-author, the communications scholar Monroe Price, observed that both judges and legislators were frequently invoking technological change as a justification for the then-ongoing legislative and judicial efforts to reform telecommunication regulation. The article demonstrated that, although the advent of new technology is used as a justification for legal change in both the courts and the legislature, technological change may counterintuitively be more likely to lead to revolutionary changes in judicial doctrine than in legislation because technological advance provides an accepted ground for liberating courts from the constraints of *stare decisis*. By contrast, legislatures are likely to be lobbied by established industrial sectors seeking to have their existing interests protected. The authors noted that, although legislators had identified technological convergence as a prime justification for enacting the Telecommunications Act of 1996, the statute itself was littered with special-interest deals that tended to preserve pre-existing regulatory boxes that were highly technology-specific. In both the legislature and the judiciary,

technological changes appeared to be deployed as an excuse to pursue goals having little necessary connection to those changes.

Duffy's first solo-authored article, “Administrative Common Law in Judicial Review,” 77 *Tex. L. Rev.* 113 (1998), continued his exploration of how judges and legislators develop regulatory law, but this article sought to explain a concrete legal development spanning the better part of the twentieth century: the rise and demise of judge-made law governing judicial review of administrative action. The article explained why such judge-made law arose; why it continued to grow after the enactment of the federal Administrative Procedure Act, which Congress intended to be a comprehensive statute on the subject; why that common law began to meet its demise at the end of the twentieth century; and why that change was for the best in terms of the constitutional position of the courts. The ABA Section of Administrative Law and Regulatory Practice awarded the article the Section's prize for the best piece of administrative law scholarship of the year.

Just over a decade ago, Duffy turned his attention to the field of intellectual property, but he continued to focus on issues familiar to regulatory scholars. Several of his first contributions in the patent law field, for instance, explored the institutional relationships among legal actors and the means by which the law develops. In the symposium piece “The FCC and the Patent System: Progressive Ambitions, Jacksonian Realism, and the Technology of Regulation,” 71 *U. Colo. L. Rev.* 1071 (2000), Duffy compared the regulatory structure and processes of communications law with the patent system and found that the patent system, with an administrative agency having modest powers coupled with strong judicial oversight, had proven more enduring and more capable of accommodating technological change than many more modern administrative agencies that have been granted far more power. In 2002, Duffy became a co-author with Robert Merges of *Patent Law and Policy* (3rd ed. 2002), one of the leading casebooks in the field. Among the innovations Duffy introduced to the casebook was a chapter devoted to the “Legal Process of the Patent System,” which

was designed to introduce students to the institutional and structural issues associated with the patent system. Finally, in “*The Festo Decision and the Return of the Supreme Court to the Bar of Patents*,” 2002 *Sup. Ct. Rev.* 273 (2003), Duffy comprehensively examined the Supreme Court’s patent law jurisprudence and predicted that the then-recent patent cases at the Court should be viewed as signaling the beginning of “a return of the Supreme Court to the field of patent law.” That prediction, though controversial at the time, turned out to be accurate and the article’s discussion of the likely role of the Supreme Court in the modern patent system opened up a vein of subsequent scholarship on the topic.

Duffy soon began to analyze the law and economics of patent law, and he has made a wide variety of contributions to the field. In “*Rethinking the Prospect Theory of Patents*,” 71 *U. Chi. L. Rev.* 439 (2004), Duffy expanded on the ideas in University of Virginia law professor Ed Kitch’s famous article “*The Nature and Function of the Patent System*,” 20 *J.L. & Econ.* 265 (1977). Duffy pointed out that the patent system attempts not so much to limit but to channel competition—so as to generate long-term competition that promotes innovation rather than short-term competition that reduces prices. Duffy’s article was heavily influenced by regulatory scholarship. He relied on the comparison between the patent system and the franchise-auction mechanism proposed by Harold Demsetz in a classic article on the theoretical basis for regulating so-called natural monopoly industries.

In “*The Marginal Cost Controversy in Intellectual Property*,” 71 *U. Chi. L. Rev.* 37 (2004), Duffy critiqued a then-recent vein of intellectual property scholarship recommending significant public subsidies so that intellectual property could be made available at its marginal cost. A nearly identical “marginal cost” proposal had been made decades earlier in the field of regulated industries, Duffy observed, but that earlier proposal was subject to a withering rejoinder by the economist Ronald Coase (a former University of Virginia professor), who explained in the “*Marginal Cost Controversy*,” 13 *Economica* 169 (1946), that the governmental taxation and subsidy scheme necessary to achieve marginal-

cost pricing would entail at least as much inefficiency as the perceived problems with prices set above marginal cost. As Duffy explained, Coase’s critique was so successful that modern economics textbooks routinely accept that industries will price above marginal cost. Intellectual property scholars should not forget the important lessons from this historic debate and, in particular, Duffy argued, they should not be lured into believing that marginal-cost pricing is a necessary goal and social subsidies are a panacea toward achieving that goal. In “*Intellectual Property Isolationism and the Average Cost Thesis*,” 83 *Tex. L. Rev.* 1077 (2005), Duffy responded to other scholars who argued that intellectual property rights should be granted “only to the extent necessary to enable creators to cover their average fixed costs.” That rule, Duffy demonstrated, provides no policy guidance because, in a market economy with a free flow of capital, those who invest resources in creating intellectual property will, on average, always expect to recover the fixed costs of producing that property—no less and no more—without regard to the strength of intellectual property rights. If that were not true—if investors in intellectual property creation earned either above or below their average costs—new investors could be expected to enter or leave the market, respectively, until the returns on investment equaled the returns on investment in other areas of the economy. In “*Intellectual Property for Market Experimentation*,” 83 *N.Y.U. L. Rev.* 337 (2008), Duffy and his co-author, Professor Michael Abramowicz, showed that the market failures justifying the creation of intellectual property also extend to the production of information about markets. Thus, intellectual property may be socially valuable not only because it spurs the creation of books, songs, movies, and innovations, but also because it encourages entrepreneurs to take risks in developing information about new markets.

Duffy’s most recent work in the law and economics tradition, “*The Inducement Standard of Patentability*,” 120 *Yale L.J.* 1590 (2011), also written with Abramowicz, argues that the standard of patentability—the fundamental legal metric regulating whether a particular innovation merits patent protection—should be governed by a test discussed

in Supreme Court precedent, but which is strangely absent from subsequent administrative and lower court precedent: Patents should be awarded only to “those inventions which would not be disclosed or devised but for the inducement of a patent.” This “inducement” test of patentability is fundamentally an economic inquiry, but as Duffy and his co-author argue, that is one of its greatest strengths, for it grounds patentability decisions in a more rigorous economic framework and thereby brings patent law closer to the vast body of modern regulatory law that generally relies on economic analysis in deciding the proper scope of regulation.

Although he has devoted substantial scholarly effort to the economic analysis of intellectual property law, Duffy has continued to explore the institutions that create and shape regulatory law with an emphasis on the law regulating intellectual property. “Inventing Invention: A Case Study in Legal Innovation,” 86 *Tex. L. Rev.* 1 (2007), traced the rise of patent law’s obviousness doctrine in legislation and judicial decisions across multiple countries. The article showed that this doctrine was itself invented and refined by judges and legislators throughout the world, but the process of invention and refinement of the doctrine took about a century. That history—particularly the timescale necessary for the development of what is now viewed as a crucial piece of intellectual property law—provides a general lesson about regulatory law: There is a loose fit between the state of the law at any given time and the positive efficiency of that law, and thus policymakers should have a healthy skepticism that the law in any particular country at any particular time is optimal.

Similarly, in “Why Business Method Patents?,” 63 *Stan. L. Rev.* 1247 (2011), Duffy examined the reasons for the controversial rise of business method patents over the past two decades. Though many professors, lawyers and judges have blamed judicially active courts for changing the law to permit such patents, the article demonstrates that the growth of business method patents in the late twentieth century is best explained by developments that occurred outside of any legal institution. During the last quarter of the twentieth century, the fields of economics, business, finance and the like began

to develop into much more technological disciplines, and that transition was the catalyst for the burgeoning number of business method patents. Once again, this case study in an intellectual property area provides a more general lesson concerning the development of regulatory law: Convincing explanations for the general arc of the law’s development can often be found only by looking beyond legal doctrine to the full panorama of social, industrial, and technological developments that are driving the underlying needs of society.

Duffy has always been a scholar who writes for multiple audiences. His work is firmly rooted in the scholarly tradition, but he also has his eye on the development of patent law and policy in Congress and the courts. Duffy has litigated several important patent cases in the Supreme Court and the Federal Circuit. But few scholars have had the kind of real-world impact that he has had with a single piece of scholarship. In “Are Administrative Patent Judges Unconstitutional?,” 77 *Geo. Wash. L. Rev.* 904 (2009), which was initially published on the Internet, Duffy argued that the appointments of all administrative patent judges since 2000 were unconstitutional under the Appointments Clause. The article generated considerable press coverage. Adam Liptak of *The New York Times* described the work as a “short paper [that] seems poised to undo thousands of patent decisions concerning claims worth billions of dollars.” The Department of Justice declined to defend the constitutionality of the appointment process, and Congress ultimately enacted corrective legislation to change the method for appointing patent judges.

Duffy’s work demonstrates that those who study regulation and those who study intellectual property have something to teach each other. He believes that theories of intellectual property should be harmonized with more general theories of regulation and institutional design. Of equal importance, the particular experiences and problems of intellectual property law can shed new light and new perspectives on long-running debates about the optimal rules of regulation and institutional design in society. As the legal profession enters the second decade of the twenty-first century—a

time when the information revolution of the past half century continues unabated—Duffy’s work aims to make the law of intellectual property appreciated as an essential, and indeed central, component to effective industrial regulation of the modern world economy.

## EXCERPTS

### ADMINISTRATIVE COMMON LAW IN JUDICIAL REVIEW

77 TEX. L. REV. 113 (1998)

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*There is no such thing as a common law of judicial review in the federal courts.*

—Felix Frankfurter

Justice Frankfurter wrote those words in 1944. They were part of a dissenting view to the reality of judge-made or common law then governing judicial review of federal administrative agencies. Two years later, in 1946, Congress enacted the Administrative Procedure Act (APA), which was designed to govern both internal agency procedure and judicial review and was thought to be “complete enough to cover the whole field.” But the enactment of the APA did little to displace the domination of common law in the field. If anything, the growth of purely judge-made law accelerated. Decades after the enactment of the APA, Professor Kenneth Culp Davis could accurately note: “Perhaps about nine-tenths of American administrative law is judge-made law, and the other tenth is statutory ... Most of it is common law in every sense, that is, it is law made by judges in absence of relevant constitutional or statutory provision ...” This common-law tradition had a particularly strong hold on the doctrine governing judicial review of administrative action, an area that Professor Louis Jaffe described in 1965 (again, quite accurately) as encompassing “a whole congeries of judicial theories and practices”—a “body of power and doctrine that we would call ... the common law of review, and which is a significant part of the ‘administrative law’ of the jurisdiction.”

Now, finally, this administrative common law of judicial review is beginning to abate; it is being replaced, albeit slowly, by doctrine grounded in the judicial review provisions of the APA and other statutes. This Article explains why a common law of judicial review ever existed in the first place, why it continued to grow after the enactment of the APA, why much

of it is now meeting its demise, and why this change is for the best. It is a tale not only of the continuing development of administrative law doctrine, but also of the legacy of some of the oldest statutes in the Republic, of the crucible of New Deal politics that both gave birth to the APA and also nearly killed it in its infancy, and, perhaps most importantly, of the federal courts' conception of their own legitimate powers in the constitutional system.

Let us first set the stage. Justice Frankfurter's concern over "common law" in the federal courts touches upon a basic distinction in Anglo-American law generally, one that has special importance to federal courts. Anglo-American courts traditionally follow one of two methods to decide a case. Under the common-law method, a court decides a case without guidance from any textual codification of law and policy. As Judge Posner describes it, the "essence" of this method "is that the law itself is made by the judges. They are the legislators." A second method—one that has become increasingly important in this age of statutes—turns on the interpretation of an authoritative, extra-judicial text. In nonconstitutional cases, this method can be referred to as the statutory method. The "essence" of this method is that the legislators are the law-givers, for, at least under classical schools of interpretation, courts deciding statutory cases are bound to follow commands and policies embodied in the enacted text—commands and policies that the courts did not create and cannot change. And even today, while some modern theorists have sought to relax that traditional assumption, few would contend that statutory and common law are indistinguishable.

As a matter of doctrine and theory, the distinction between statutory and common law is crucial for federal courts. Well before the Court in *Erie Railroad v. Tompkins* declared that "there is no federal general common law," the concept of federal common law was recognized as theoretically and constitutionally troubling. As early as 1812, the Supreme Court in *United States v. Hudson* held that federal courts possess no common-law criminal jurisdiction, and by 1834, the Court found it "clear" that "there can be no common law of the

United States" because "there is no principle which pervades the union and has the authority of law, that is not embodied in the constitution or laws of the union." Even under *Swift v. Tyson*, the federal courts applied what they believed to be general, not federal, common law. Current Supreme Court doctrine teaches that the instances in which federal courts may legitimately fashion "federal common law" are "few and restricted." A consensus of modern scholars agrees that, to create judge-made law, a federal court "must point to a federal enactment, constitutional or statutory, that it interprets as authorizing the federal common law rule." This constraint on federal common law reflects the more general constraint familiar to courts reviewing administrative action—that institutions wielding governmental power must have authority in the law for their actions.

One might expect that administrative law would be a most unlikely place to find an enormous body of judicially developed common law. Administrative agencies, after all, blossomed in the late nineteenth and early twentieth centuries as an alternative to regulation by common-law courts; their creation signaled a "rejection of the common law system." Enthusiasm for new expert agencies was coupled with pessimism about the ability of generalist courts to develop law consonant with changing modern conditions. Moreover, the substantive law applied by federal agencies was—and still is—statutory law. And, of course, ever since 1946 there has been the APA. One might therefore expect that Justice Frankfurter's claim would be close to the truth or, at the very least, that courts engaging in judicial review—courts demanding executive branch agencies to identify the basis in law for their actions—would be careful to identify the statutory or constitutional basis for their power to fashion judge-made law. But that has not been the case.

Consistent with Professor Jaffe's description, judicial review of agency action remains dominated today by judge-made law—doctrines identified by case titles (e.g., *Chevron*, *Vermont Yankee*, and the *Greater Boston* "swerve" doctrine), or by names originating in judicial decisions and found nowhere in statutory law (e.g., ripeness and exhaustion). For

some of these doctrines, a moment's reflection reveals the underlying statutory basis for the apparent "common law." Thus, for example, the *Greater Boston* doctrine—which requires an agency that is "changing its course" of regulation to "supply a reasoned analysis" for the swerve—is simply an interpretation of Section 706(2)(A) of the APA, which authorizes reviewing courts to set aside "arbitrary" and "capricious" agency action. The doctrine is merely an example of statutorily-authorized common law—a rule based on an interpretation of a broad, vaguely worded statute. Such statutorily-based law presents no theoretical difficulties, for it conforms to the fundamental requirement that federal courts ground their decisional law in some constitutional or statutory text.

For many other standard administrative law doctrines, however, the textual home in statutory law either is nonexistent or has never been identified. In a few extreme examples, current law seems wholly at war with statutory language. Thus, the *Chevron* doctrine requiring deferential review of an agency's interpretation of a statute it administers seems to contradict the command in Section 706 of APA that reviewing courts "shall decide all relevant questions of law," a direction that Congress plainly thought "required courts to determine independently all relevant questions of law." This apparent conflict between the common-law doctrine and statutory law is noted, if at all, as nothing more than a curiosity, to be politely ignored by practitioners and courts.

Solving the puzzle presented by these common-law doctrines requires some history, which is provided in Section I of this Article. Judicial review in the early administrative era grew up in the federal equity jurisdiction, which was filled with judge-made law fashioned within the tradition of equity. The dominance of judge-made law there, however, is not troubling. It is merely another example of a statutorily-authorized common law, as the statutes conferring equity jurisdiction did vest the federal courts with a power to fashion and administer a judge-made law of equity. Things should have changed in 1946—not because the APA forces courts to reach dramatically different results, but because the courts'

method of analysis should have changed: Statutory law should have assumed the dominant position in cases covered by the APA (which means just about all cases reviewing federal administrative action).

Yet that did not happen, or rather, did not happen for decades. A confluence of forces helped to continue the common-law tradition. Partly it was the legacy of equity. Equity had been federal judge-made law since the founding of the Republic, and it is not surprising that judges would cling to their roles as law-givers in the doctrinal area that was one of waning equity's most significant contributions to the twentieth century—judicial review over the newly created administrative agencies. But other forces were also working against the ascendancy of statutory law. The influential Attorney General's Manual on the Administrative Procedure Act, a highly political document designed to minimize the impact of the new statute on executive agencies, shrewdly characterized the APA provisions governing judicial review as merely a "restatement" and thereby invited courts and the bar to treat the Act as something less than a statute, as subservient to judge-made doctrine. In addition, the preeminent commentators on administrative law in the quarter century following 1946, Professors Jaffe and Davis, both promoted the continued development of administrative common law and either largely ignored the APA (Jaffe) or encouraged courts to supplement its provisions with judicial innovations (Davis).

These forces alone probably could not account for the continuation of the common-law tradition were it not for a pervasive and overarching intellectual movement in federal law. For this was also, in the words of Judge [Henry] Friendly, the era of "The New Federal Common Law"—an era when leaders of the federal bar and bench were calling for an aggressive formulation of federal common law. For a time stretching from the 1950s into the 1970s, this view reigned. The federal judges of the time were, as Judge Friendly affirmed, "ready, even eager" to undertake a "law-making function," and the administrative common law governing judicial review was one result. But beginning at least with Justice Powell's influential dissent in *Cannon v. University of*

*Chicago*, the New Federal Common Law has been receding into history. Federal judges are becoming less “eager” to be federal law-givers, and they are devoting renewed attention to the traditional limits on their powers to act as common-law judges. The effects of this change are beginning to be felt in administrative common law.

This Article examines four doctrinal areas where the law is slowly evolving from a common-law method to a more rigorous statutory method based on the APA: exhaustion, ripeness, judicial control of agency procedures, and the standard of review for questions of law. The transformation is most nearly complete in the area of exhaustion, where the Supreme Court in 1993 finally afforded the proper respect to a provision of the APA that had been, to the Court’s surprise, “almost completely ignored” for forty-seven years. In each of the other areas, the evolution is not yet complete, and statutory law and judge-made doctrines continue an uneasy coexistence that cannot be reconciled with the theoretical limits on federal common law.

Still, change in the administrative common law is occurring, and it should be welcomed. Courts engaging in judicial review of administrative action should be particularly mindful of the constraints on federal court power to fashion judge-made law, for to disregard those constraints is inconsistent with the purposes of the judicial role in administrative law generally. Judicial oversight of administrative agencies is itself justified in terms of forcing governmental agencies to heed limitations on their authority. As Professor Jaffe put it:

From the point of view of an agency, the question of the legitimacy of its action is secondary to that of the positive solution of a problem. It is for this reason that we, in common with nearly all of the Western countries, have concluded that the maintenance of legitimacy requires a judicial body independent of the active administration.

Yet in fulfilling that important function—in forcing executive agencies to pay attention to the legitimacy of their action—federal courts seem to have fallen into the very trap

identified by Jaffe: They have treated the question of legitimacy of their own action as a secondary issue. It is time to end this error. It is time that the federal courts judicially review their own law of judicial view.

## THE MARGINAL COST CONTROVERSY IN INTELLECTUAL PROPERTY

71 U. CHI. L. REV. 37 (2004)

In 1938, Harold Hotelling formally advanced the position that “the optimum of the general welfare corresponds to the sale of everything at marginal cost.” To reach this optimum, Hotelling argued, general government revenues should “be applied to cover the fixed costs of electric power plants, waterworks, railroad, and other industries in which the fixed costs are large, so as to reduce to the level of marginal cost the prices charged for the services and products of these industries.” Other major economists of the day subsequently endorsed Hotelling’s view, and in the late 1930s and early 1940s, it “aroused considerable interest and had already found its way into some textbooks on public utility economics.”

In his 1946 article, *The Marginal Cost Controversy*, Ronald Coase set forth a detailed rejoinder to the Hotelling thesis, concluding that the social subsidies proposed by Hotelling “would bring about a maldistribution of the factors of production, a maldistribution of income and probably a loss similar to that which the scheme was designed to avoid.” The article, which Richard Posner would later hail as Coase’s “most important” contribution to the field of public utility pricing, was part of a wave of literature debating the merits of the Hotelling proposal. Yet the very success of the critique by Coase and others has led to the entire controversy being “largely forgotten today.” Modern regulatory policy generally accepts that a declining average cost industry—that is, a so-called “natural monopoly”—will not have its fixed costs subsidized from general government revenues and that therefore the industry must be allowed to price above marginal cost so



that it can cover its fixed costs. The rejection of the Hotelling thesis is so complete that reputable economics encompasses the very opposite of Hotelling's view—"that, generally, prices which deviate in a systematic manner from marginal costs will be required for an optimal allocation of resources, even in the absence of externalities." Indeed, in the parlance of public utility regulation, the very phrase "marginal cost pricing" now refers not to Hotelling's proposed marginal cost pricing and subsidy scheme, but rather to a pricing system akin to the "multi-part" pricing system that Coase advocated as the more efficient alternative to Hotelling's proposal. In short, modern public utility theorists generally do not recommend using pervasive public subsidies to chase the Holy Grail of global marginal cost pricing.

Yet despite this consensus, a recent vein of literature on the economics of intellectual property seems preoccupied with the perceived problem that prices for intellectual property may sometimes exceed marginal cost. This literature proposes the institution of significant public subsidies to resolve or at least to ameliorate the marginal cost pricing problem, and such proposals are already beginning to affect the course of policy debate in prominent public fora. This literature has developed thus far with little apparent recognition that it is a modern reprise of the marginal cost controversy of the mid-twentieth century. The literature treats the marginal cost pricing problem of intellectual property as a unique phenomenon, and it remains isolated from the more general literature on public utility regulation.

This Essay is a first step toward ending that isolation. Part I begins by establishing the parallels between the economic theory of public utility regulation and that of intellectual property law. Part II reviews the recent literature proposing public subsidies for intellectual property and shows that these proposals are subject to the same objections that Coase raised in the public utility context more than a half century ago. Furthermore, the recent subsidy literature has not examined the important question whether intellectual property possesses some distinguishing features that make it a more appropriate target for public subsidies than other industries

having natural monopoly characteristics. Part III addresses this question and finds that, while there are distinctions between intellectual property and traditional natural monopolies, these distinctions do not uniformly favor subsidizing intellectual property over other natural monopolies. Part IV concludes with the hope that, as the marginal cost controversy continues in the field of intellectual property, it will proceed with a more complete understanding of the earlier controversy, and that perhaps it can offer new insight into a very old and very fundamental debate.

## THE INDUCEMENT STANDARD OF PATENTABILITY

(WITH MICHAEL ABRAMOWICZ)

120 *YALE L.J.* 1590 (2011)

*The inherent problem was to develop some means of weeding out those inventions which would not be disclosed or devised but for the inducement of a patent.*

—A unanimous Supreme Court  
in *Graham v. John Deere Co.*

The quotation above is one of the most memorable and insightful lines from arguably the most important patent law case of the twentieth century: the Supreme Court's 1966 decision in *Graham v. John Deere Co.* *Graham's* preeminent place in the patent canon is well justified, for it is the Supreme Court's seminal opinion on a patent law doctrine—the "non-obviousness" requirement—that is typically introduced as "the most important of the basic patent requirements," "central to determining patentability," "the key to defining what is a patentable invention," or simply "the ultimate condition of patentability." The basic rule of nonobviousness is easy enough to recite: under 35 U.S.C. § 103, a patent may not be granted on an invention that "would have been obvious at the time the invention was made to a person having ordinary skill in the art." But the apparent simplicity of the require-

ment belies the complexities and difficulties that have historically bedeviled the doctrine. The inducement standard, as articulated in *Graham*, appears to be vitally important to understanding the statutory nonobviousness requirement, for it offers a simple explanation for why society should deny patents on some innovations: if the innovation would be created and disclosed even without patent protection, denying a patent on the innovation costs society nothing (because the innovation would be developed anyway) and saves society from needlessly suffering the well-known negative consequences of patents, including the restriction on output caused by a patentee's exclusive rights and the administrative and litigation costs associated with running a patent system.

Yet despite its apparent promise as the theoretical basis for the most important patentability doctrine, *Graham's* inducement standard has achieved only a modicum of influence. Though frequently cited, the inducement standard is often relegated to a passing mention or a footnote in introducing the patentability standard. Some articles have devoted more extended attention to the inducement standard, but these too have generally highlighted the difficulties in using the standard to decide cases or to shape legal doctrine. For example, Ed Kitch's classic verdict on *Graham's* inducement standard emphasized that the nonobviousness requirement, as articulated by the courts, provides only an "awkward" tool "to sort out those innovations that would not be developed absent a patent system," with the "focus" of the legal doctrine always being on other issues. Kitch's view has become the consensus. Thus, in a widely cited and influential 2003 report, the Federal Trade Commission summarized the testimony of numerous legal and economics scholars as demonstrating that, even though the inducement standard represents "the right way to assess whether to grant a patent" from a "theoretical perspective," the standard is not "administrable," so "the more manageable standards of the patent statute have evolved to serve as the means by which to measure when to grant a patent."

In some ways, we agree with these prior assessments of the inducement standard. There is a certain awkwardness in

the relationship between the inducement standard and the nonobviousness requirement, at least as that requirement has previously been articulated by the courts. Moreover, the Supreme Court in *Graham* did not provide a rigorous foundation for deriving the inducement standard from the statutory language. The absence of such a legal foundation may explain why courts and the Patent and Trademark Office (PTO) have typically avoided looking to the inducement standard for guidance in interpreting and applying the statutory nonobviousness requirement. The one exception, an insightful but ultimately flawed panel opinion by Judge [Richard] Posner, relied on the inducement standard to invalidate a patent but nevertheless failed to identify any administrable test or metrics for applying the inducement standard to the specific facts of that case or other cases. Posner's panel opinion was vacated en banc, and that history has perhaps cemented the notions that the inducement standard conflicts with the statutory obviousness standard, is anti-patent, or is simply too difficult to apply in actual cases.

This Article aspires to show those notions to be wrong and to revitalize the inducement standard as the touchstone for understanding and refining the obviousness doctrine. The result should be more coherent, defensible, and predictable decision making than is possible either under the current doctrine or under Judge Posner's treatment, which missed important implications of the inducement standard.

There are two motivations for undertaking this project. First, the time is right. In its 2007 decision, *KSR International Co. v. Teleflex, Inc.*, the Supreme Court overturned a quarter-century-old test for nonobviousness that the nation's expert appellate court for patent law, the Court of Appeals for the Federal Circuit, had meticulously constructed. The *KSR* decision has precipitated a vibrant debate among scholars seeking to help the courts rebuild a pragmatic obviousness doctrine that yields predictable answers and is more theoretically sound than the Federal Circuit doctrine rejected in *KSR*. That reconstruction project can have little hope of enduring success without reexamining and reevaluating the ultimate goal of the nonobviousness requirement.

A second and more important motivation is the promise of the inducement standard in providing significant insights into some of the most difficult theoretical and practical problems in the field. Economic analysis of patent law frequently begins with the assertion that patents present a social tradeoff between providing incentives for innovation at the expense of accepting the deadweight loss associated with monopoly-like exclusive rights. And even beyond the law-and-economics literature, legal scholars often frame intellectual property law generally and patent law in particular as presenting a conflict between the public and private domains—a choice between openness and exclusivity. If, however, the law follows *Graham's* inducement standard, such tradeoffs and conflicts do not necessarily exist.

Under a rigorously enforced inducement standard, patents would cover only those innovations that otherwise would not be created or disclosed—in other words, patents would cover only innovations that, without the patent system, would not have been in the public domain. The patent system would then have only positive effects on the public domain: patents would cover only inventions that would otherwise not be in the public domain and, when the patents expire, the inventions would enter into and enrich the public domain. Similarly, the apparent deadweight losses created by patent rights would be an illusion because, if patent rights had not been available, the invention would not have been available from competing firms but instead would have been either unavailable or covered by trade secrecy. As we will show in this Article, the optimal implementation of the inducement standard may not achieve such a Panglossian resolution because, at least in some circumstances, patents should be allowed even if they merely induce earlier innovation. Thus, the analysis suggested by the inducement standard helps to identify more clearly the precise economic tradeoff at issue: patents produce earlier innovation but at the cost of higher prices and associated deadweight loss in a later period (when the invention would have existed even without the inducement of the patent). This point highlights another deep theoretical strength of the inducement standard, for it

holds out the hope of grounding patentability decisions in a more rigorous economic framework and thereby bringing patent law closer to the vast body of modern regulatory law that commonly uses economic analysis in making specific decisions about the scope and extent of regulation.

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