

No. 04-1350

IN THE
Supreme Court of the United States

KSR INTERNATIONAL CO.,
Petitioner,

vs.

TELEFLEX, INC. and
TECHNOLOGY HOLDING CO.,
Respondents.

ON WRIT OF CERTIORARI TO THE
UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

**BRIEF OF FALLBROOK TECHNOLOGIES, INC.;
INTELLECTUAL VENTURES; ELLSWORTH
INTERNATIONAL, INC.; GE02 TECHNOLOGIES, INC.;
MOBILE PRODUCTIVITY, INC.; COMPOSITE
TECHNOLOGY INTERNATIONAL, INC.;
SKYLER TECHNOLOGY, INC.; PRIVATE
MANAGEMENT, INC.; TECHNOLOGY, PATENTS
& LICENSING, INC.; AND INTERMUNE, INC. AS
AMICI CURIAE IN SUPPORT OF RESPONDENTS**

JUSTIN A. NELSON
BROOKE A.M. TAYLOR
MATTHEW BERRY
SUSMAN GODFREY L.L.P.
1201 Third Avenue, Suite 3800
Seattle, Washington 98101-3000
(206) 516-3880
Counsel for Amicus Curiae
Intellectual Ventures

DON W. MARTENS
Counsel of Record
KNOBBE MARTENS
OLSON & BEAR LLP
2040 Main Street, 14th Floor
Irvine, California 92614-3641
(949) 760-0404
Counsel for Amici Curiae

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INTEREST OF THE AMICI

Amici are small companies that rely on the patent system to protect their innovations.¹ These companies believe that while it is important not to over-patent, it is just as important to properly motivate inventors and companies by ensuring that the patent system adequately protects innovation. A change to the obviousness standard – especially a change unbounded by objective criteria – will lead to fewer patents for deserving inventions. Small companies will be less willing to invest in research and development if the patent system does not adequately protect their inventions.

A full list of *amici* appears in the Appendix.

SUMMARY OF ARGUMENT

Virtually all inventions are combinations of old ideas. From the simple lever, wedge, and bearing that make up nearly all mechanical inventions to the four chemical sub-units that make up all DNA, pre-existing materials can be combined in new ways to form new products and innovations. Inventions happen when the inventor finally figures out how to put together the puzzle from existing pieces. The act of invention resides in selecting the known pieces that can form a solution to the problem presented.

Petitioner's proposed rule fails to recognize this fundamental fact. Petitioner proposes that all inventions

¹ No counsel for a party authored this brief in whole or in part, and no party made a monetary contribution to this brief other than *amici curiae* and their counsel. Both parties have filed blanket letters of consent with the Clerk.

that are “mere” combinations of old elements should be presumed invalid, with the burden on the patent owner to show that a component of the invention performs some new and synergistic result. Yet, the “mere” combinations that Petitioner criticizes constitute almost every invention. Thus, Petitioner’s proposed rule would create a presumption that nearly every issued patent is invalid. This is directly contrary to Section 282 of the Patent Act, which unambiguously declares that all patents are presumptively valid.

Petitioner also proposes that all inventions should be declared unpatentable unless they are “extraordinary” and “beyond the capabilities” of a person of ordinary skill in the art. This, too, is contrary to the Patent Act, which expressly allows for patents on inventions that are within the capabilities of a person of ordinary skill in the art, as long as they are not “obvious” to such a person. 35 U.S.C. § 103. Persons of ordinary skill are not disqualified from earning patents.

Petitioner’s proposed rule also would make it much more difficult to obtain and defend a patent because Patent Examiners, judges and juries would have very little basis upon which to judge whether an invention is “obvious.” Indeed, Petitioner candidly proposes replacing objective evidence of obviousness with the uninformed gut reaction of the finder of fact and unbridled subjectivity based upon hindsight reconstruction of the invention.

In contrast, the Federal Circuit’s rule and the decision below flow from the statute and from this Court’s decision in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). The Federal Circuit’s rule recognizes that, to invalidate a patent, a defendant must produce actual evidence of obviousness, not simply speculation and conjecture.

Congress' statutory presumption that issued patents are presumed valid, 35 U.S.C. § 282, demands no less.

A judicial change to the statutory obviousness standard would be especially harmful to small businesses and independent inventors. They rely on the patent system to protect their innovations. While large firms might possess market power or brand identification and may control the distribution channels or supply bases, small firms and independent inventors have only ideas and the protection for those ideas afforded by patents. The patent system should protect true invention, and its rules should be consistent with the inventive process and the mandate of Congress. Petitioner's proposed rule is contrary to these goals, whereas the Federal Circuit rule embraces them.

ARGUMENT

I. PETITIONER'S PROPOSED RULE IS INCONSISTENT WITH FUNDAMENTAL CONCEPTS OF INVENTION AND WITH THE PATENT ACT

Nearly all inventions combine old elements in new ways. As Judge Learned Hand observed, "substantially every invention" is a "combination[] of old elements." *Reiner v. I. Leon Co.*, 285 F.2d 501, 503 (2d Cir. 1960) (Hand, L.). "Only God works from nothing. Men must work with old elements." *Fromson v. Advance Offset Plate*, 755 F.2d 1549, 1556 n.3 (Fed. Cir. 1985) (quoting H. Markey, *Why Not the Statute?*, 65 J. Pat. Off. Soc'y 331, 333-34 (1983)). Inventions happen by seizing upon connections that others missed. Many times, all the pieces of the puzzle are staring at everyone of ordinary skill in the art. But nobody solves the problem, often despite remarkable efforts, until finally an inventor seizes upon the moment of clarity and realizes how the pieces should fit

together. As Nobel laureate Albert Szent-Gyorgyi famously observed, “[d]iscovery consists in seeing what everyone else has seen and thinking what no one else has thought.” *The Scientist Speculates: An Anthology of Partly-Baked Ideas* 15 (Irving John Good, Alan James Mayne, & John Maynard Smith, eds., Basic Books 1962).

This tenet that nearly everything new is a combination of something old is just as basic outside the context of inventions. The DNA of every human being is composed of various combinations of only four chemical sub-units. Indeed, all compositions of matter, and thus all patented chemical inventions, are necessarily a combination of old elements – all neatly listed on the Periodic Table of Elements. And all words in the English language, along with all resulting articles, briefs, and plays, are combinations of the same 26 letters.

Small businesses and independent inventors are especially attuned to, and positioned to take advantage of, the fact that all inventions build off each other and the tools that are currently available to them. The Eureka moment may occur at 2:00 a.m. when an inventor who has been grappling with potential solutions to a problem realizes the simple reconfiguration of known parts necessary to most elegantly overcome that problem. Other times, it may occur when the inventor is discussing the problem with colleagues. But in all cases, inventors rely on the ideas of others that exist at the time of their inventions, applying them and studying them to solve difficult problems.

The more elegant the invention, the more it may appear obvious in hindsight. Many times, the best inventions are the ones that are so simple that people of ordinary skill in the art ask themselves, “Why didn’t I think of that?” As this Court observed long ago:

The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to any one familiar with the subject; but the decisive answer is that, with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to any one before.

C&A Potts Co. v. Creager, 155 U.S. 597, 608 (1895). The stroke of genius comes from molding old parts in new ways.

To take an example from the 19th Century, the Patent and Trademark Office granted Elisha Otis U.S. Patent No. 31,128 for his invention of an elevator with a braking system that prevented an elevator from falling if the elevator cable broke. This invention revolutionized the elevator industry and has been credited with making modern cities possible. Otis' invention was basic, and in hindsight, perhaps obvious. He applied two simple known elements, an elevator and a brake, to create a new product. Yet the market recognized the importance of the invention and embraced the solution precisely because it was so simple and elegant. *See generally* J. Goodwin, Otis: *Giving Rise to the Modern City* (2001).

All inventors in all eras create something new by adding together existing parts and sculpting them in novel ways. In its obviousness standard, Congress has recognized this fact by focusing the question of obviousness on the person of ordinary skill in the art and by applying the standard of obviousness to all inventions without exception, including those that Petitioner derides as “mere” combinations. 35 U.S.C. § 103.

Petitioner and its supporters nevertheless propose that all patents directed to “mere combinations of old elements” should be presumed invalid in the absence of an extraordinary showing of synergistic new results by the patent owner. Pet. Br. at 21-24, 43. The United States even refers explicitly to a “presumption” of invalidity for combination patents.² Brief of U.S. at 28 n.14. However, the plain text of the Patent Act requires precisely the opposite presumption, expressly providing that “[a] patent shall be presumed valid.” 35 U.S.C. § 282. The statute creates no exception for combination patents or any other patents. The Court should reject Petitioner’s invitation to rewrite the statute – a rewrite so extreme that it would replace the statute with its own antithesis.

Petitioner seeks to depart from the statute in another way. Section 103 of the Patent Act states that an invention is not patentable “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been *obvious* at the time the invention was made *to a person having ordinary skill in the art.*” 35 U.S.C. § 103(a) (emphasis added). Petitioner and its *amici*, however, would discard this statutory language in favor of much more stringent language. Petitioner, for example, repeatedly urges this Court to hold that an invention is unpatentable if “a person having ordinary skill in an art would have been *capable* of adapting existing technology to achieve a desired result.” Pet. Br. at 25 (emphasis in original). *See also id.* at 16. The United States similarly argues that an invention should

² The United States’ endorsement of a categorical presumption of invalidity for all combination patents is somewhat surprising in light of the United States’ repeated recognition that this Court should not adopt a “rigid,” “inflexible,” or “categorical” test for patentability. *See* Brief of U.S. at 16, 17, 23.

not be patentable unless it “manifests the *extraordinary* level of innovation, *beyond the capabilities* of a person having ordinary skill in the art.” Brief of U.S. at 10 (emphasis added). *See also id.* at 15 (arguing an invention is unpatentable unless it is “beyond what a person of ordinary skill ... could have achieved at the time of the invention”).

The statute, however, does not in any way suggest that an invention is unpatentable unless it is “beyond the capabilities” of a person of ordinary skill in the art – and for good reason. Such a rule, if adopted, would call into question the validity of virtually every single patent. Every invention ever made by a person of ordinary skill in the art, by definition, is within the *capability* of a person of ordinary skill in the art. The question simply is not, as Petitioner would have it, one of *capacity*. It is whether a person of ordinary skill in the art, at the time of the invention, would have found the invention *obvious*. Moreover, Petitioner’s rule would make the validity inquiry turn on the credentials of the inventor, rather than the merits of the invention. This Court should not adopt the rule of Petitioner and its *amici*, as their solution directly contradicts the text of 35 U.S.C. § 103 and runs contrary to the process of invention.

II. INDEPENDENT INVENTORS AND SMALL BUSINESSES RELY HEAVILY ON A PREDICATABLE PATENT SYSTEM THAT ENCOURAGES INNOVATION

Unlike larger companies, which can rely primarily upon brand identification, market power, access to capital, and a host of other advantages, small companies and independent inventors depend upon the patent system for survival. Dean Kamen, inventor of the portable insulin

pump and the Segway scooter, recently testified before Congress on this very point:

My concern is when I walk into that big company they've got marketing, they've got distribution, they've got everything. If I show them what I have got, the only thing that I have on my side of the table is that patent; and the only way to convince them that they should commit the huge resources to turn that into a product is to be able to say that I can deliver this to you in return for supporting this product and you singularly are going to have to pay for the development and introduction. You singularly – you exclusively will have the right for some period of time to do this.³

Moreover, small firms contribute disproportionately to innovation and invention. “Small firm innovation is . . . substantially more high-tech or leading edge” than large firm innovation, and “[s]mall firms are more effective in producing high-value innovations.” Small Business Administration, Office of Advocacy, *The Small Business Economy* 187 (2005), available at http://www.sba.gov/advo/research/sb_econ2005.pdf. Indeed, “small businesses produced 13 to 14 times more patents per employee than large patenting companies.” Paul Rose, *Balancing Public Market Benefits And Burdens For Smaller Companies Post*

³ “Patent Trolls: Fact or Fiction?” Hearing before the Subcomm. on Courts, the Internet, and Intellectual Property of the H. Comm. on the Judiciary, 109th Cong., Second Session 12-13 (June 15, 2006) (Serial No. 109-104) (Testimony of Dean Kamen, President, DEKA Research & Development Corporation) available at <http://judiciary.house.gov/media/pdfs/printers/109th/28201.pdf>.

Sarbanes-Oxley, 41 Willamette L. Rev. 707, 736 (2005) (citing Small Business Administration, Office of Advocacy, Small Business by the Numbers, available at <http://www.sba.gov/advo/stats/sbfaq.pdf> (last modified June 2004)).

Small businesses and independent inventors need the patent system to raise the capital necessary to perfect and market their inventions. *See, e.g.*, Richard S. Gruner, *Corporate Patents: Optimizing Organizational Responses To Innovation Opportunities and Invention Discoveries*, 10 Marq. Intell. Prop. L. Rev. 1, 11 (2006); Mark A. Lemley, *Reconceiving Patents in the Age of Venture Capital*, 4 J. Small & Emerging Bus. L. 137, 143 (2000) (“Venture capitalists love patents . . .”); *see also id.* at 144. Venture capitalists and other investors would be unwilling to invest in a company whose ideas can be copied freely.

Petitioner’s proposed rule would make it much more difficult for small companies and independent inventors to obtain patents on their inventions. As Chief Judge Markey observed shortly after formation of the Federal Circuit: “Because virtually *all* inventions are ‘combinations,’ and because *every* invention is formed of ‘old elements,’” a rule against combination patents “would destroy the system.” H. Markey, *Why Not the Statute?*, 65 J. Pat. Off. Soc’y 331, 333-34 (1983) (emphasis in original).

Petitioner’s proposal would be particularly harmful to individual inventors and small businesses during the patent application process. Under Petitioner’s proposal, inventors would be required to present evidence of a synergistic new function, presumably through expert testimony. However, before receiving their patent, inventors and small businesses are unlikely to have the

resources needed to procure expert testimony. Similarly, most small inventors would be unable to present the PTO with affirmative evidence of patentability, such as the commercial success of the invention. *See Graham*, 383 U.S. at 17-18 (explaining that commercial success is evidence of non-obviousness). An invention cannot be a commercial success until it has actually been manufactured and marketed by the inventor. However, small businesses often lack the resources to market their product until they have received their patent and the investment funding that often follows.

Small businesses with issued patents would not be immune from the effects of Petitioner's proposal. Petitioner's proposed statutory departures would be both prospective and retroactive, thus subjecting all issued patents to new attacks under Petitioner's new standards. Indeed, if Petitioner were to prevail, the PTO likely would be overwhelmed with requests to re-examine issued patents based upon this more demanding judge-made obviousness standard. Small businesses and independent inventors would suffer disproportionately from such a rule, both because of their dependence on patents and their financial inability to defend their entire patent portfolio in costly re-examination proceedings.

In addition, the patent process needs certainty, especially from the perspective of a small business or independent inventor who is trying to convince an investor that the PTO will approve the patent application. Petitioner's proposed rule would destroy certainty for every patent which can be characterized as a combination of old elements – in other words, almost all patents. For this enormous class of patents, Petitioner candidly urges this Court to substitute judicial gut reaction for evidence. According to Petitioner, a judge or jury should simply look

