

No. 08-964

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IN THE  
**Supreme Court of the United States**

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BERNARD L. BILSKI AND RAND A. WARSAW,  
*Petitioners,*

v.

DAVID J. KAPPOS, UNDER SECRETARY OF COMMERCE  
FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND  
TRADEMARK OFFICE,  
*Respondent.*

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**On Writ of Certiorari to the  
United States Court of Appeals  
for the Federal Circuit**

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**REPLY BRIEF FOR PETITIONERS**

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The Federal Circuit’s decision has changed settled law by requiring that every process satisfy its new “machine-or-transformation” test to be eligible for patenting under 35 U.S.C. § 101. Respondent maintains that this mandatory machine-or-transformation test is necessary to confine process patents to the “industrial and technological” arts, a requirement with no basis in the statute or this Court’s precedent. The fact that manufacturing processes and machines may have dominated the U.S. patent system during the eighteenth and nineteenth centuries (and even

then not completely) is unsurprising and sheds little light on how patents promote progress in the information age of the twenty-first century. As this Court has repeatedly noted, the patent law fulfills its Constitutional mandate by promoting progress in fields yet undiscovered, pushing back the frontiers to reach unforeseen and unforeseeable innovations in all the useful arts.

While Respondent contends that the term “process” in § 101 should be construed by importing the neighboring words of the other statutory categories, it dismisses both the expansive modifier “any” in § 101 and the fact that the statute itself defines the term broadly: “process’ means process, art or method . . . .” 35 U.S.C. § 100(b). Relying instead on various interpretive canons and textual inferences to construe § 101, Respondent neglects to explain how its limited “technological arts” construction of “process” can be reconciled with the actual words of § 101 or the more recent § 273, which provides a defense to infringers of patented “method[s] of doing or conducting business.” 35 U.S.C. § 273(a)(3). Respondent discounts both the language of § 273, which explains that patented business methods may be used “in connection with an internal commercial use” or an “arm’s-length commercial transfer of a useful end result,” and the Congressional joint conference report that underscores Congress’s understanding of the types of business methods eligible for patenting under § 101 and subject to the prior user defense. 35 U.S.C. § 273(a)(1); *see* H.R. REP. NO. 106-464, at 122-23 (1999) (Conf. Rep.).

Respondent warns that a ruling for Petitioners would result in patenting of everything from marriage proposals to methods of defending lawsuits. To



prevent this onslaught of undesirable patents, Respondent insists that § 101 requires a “limiting principle,” namely the machine-or-transformation test for specific technology. On the contrary, eliminating the rigid machine-or-transformation test would rid the patent system of the form-over-substance debate that has dogged § 101 for years. Rather than struggling to determine whether a machine is “particular” enough or whether a claim falls within the ever-changing definition of “technology,” the question of patentability should instead focus on the underlying substance of an invention and whether it is novel, nonobvious, particularly described, and properly claimed.

Reversal would remove the pall cast by the decision below over tens of thousands of patents and restore the statute’s purposefully expansive framework for patent eligibility, a framework equally suited to promoting progress in the bygone industrial era, today’s information age, and the unknowable frontiers of the future. If an invention involves an abstract idea or natural law but the inventor claims its practical application, whether through implementation on a machine or in a transformative process, or by producing a useful result, he may then cross the threshold of § 101 and continue the journey of satisfying the other conditions and requirements of the Patent Act. The right to progress to the next stop along this path is all Petitioners seek.

**I. Nothing In The Statute Or This Court’s Precedent Requires Limiting Process Patents To Specific “Technology” Defined By The Machine-Or-Transformation Test**

To justify the Federal Circuit’s requirement that every process must satisfy the machine-or-trans-

formation test for patent eligibility, Respondent resurrects a “technological arts” requirement that has no basis in the statute or this Court’s precedent. As the Federal Circuit noted below, the “so-called ‘technological arts test’ . . . has [n]ever been explicitly adopted by the Supreme Court, this court, or our predecessor court . . . .” Pet. App. 24a. Indeed, the PTO Board of Appeals reversed the examiner’s rejection of Petitioners’ claims based on the “technological arts” requirement. *Id.* at 180a.<sup>1</sup>

Although the Federal Circuit refused to recognize a “technological arts” requirement in constructing its machine-or-transformation test, Pet. App. 24a-25a, Respondent now relies almost exclusively on it, arguing that process patents have been available only for “technological” processes since the inception of the Patent Act in 1790. Resp. Br. 16-19. A careful construction of the Patent Act, however, provides no support for Respondent’s attempt to read either a “technology” or a “machine-or-transformation” requirement into the statute. Instead, the plain language of § 101 merely leads back to the well-settled boundaries of patent eligibility established by this Court. If an invention involves an abstract idea, law of nature, or natural phenomenon, the inventor may patent only a practical application of the principle. That practical application may be shown through implementation on a machine or in a transformative process, or by producing a useful result. Pet. Br. 17, 42-52. But there is nothing in the statute—either then or now—that imposes an additional requirement

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<sup>1</sup> The PTO Board previously held in *Ex parte Lundgren*, 2004 WL 3561262, at \*5 (B.P.A.I. Apr. 20, 2004), that there is no separate “technological arts” requirement for patent-eligible processes.

that a process must fall within the arbitrary boundaries of the “technological arts” to be eligible for patenting.

**A. Respondent’s Attempt To Read “Technology” And “Machine-Or-Transformation” Into § 101 Contradicts The Language Of The Statute**

To support its construction of § 101, Respondent argues that the term “process” must be confined to the technological arts because the PTO Board of Appeals held that the other categories in § 101 “involve technology.” Resp. Br. 26. To buttress this conclusion, Respondent applies the interpretive canon that neighboring words can give more precise content to a statutory term that is “capable of many meanings.” *Id.* The statute here, however, specifically defines the term “process” in 35 U.S.C. § 100(b), so no interpretive canon is needed. *See Stenberg v. Carhart*, 530 U.S. 914, 942 (2000) (“When a statute includes an explicit definition, we must follow that definition . . .”).

There is no statutory basis for treating a “process” differently from the other categories of patentable subject matter. Nonetheless, the Federal Circuit and Respondent interpret the term “process” as requiring a machine-or-transformation tie to technology, disregarding the plain definition in § 100 and the broad modifier “any” in § 101. *See, e.g., Austin IP Law Ass’n Amicus Br. 5-11.* Respondent argues that reaffirming the Court’s broad framework for § 101 would “unmoor” processes from the other categories. Resp. Br. 27. But this Court has repeatedly held that a process is “as much the subject of a patent, as a machine, manufacture, or composition of matter. Of this there can be no doubt, and it is abundantly

supported by authority.” *The Telephone Cases*, 126 U.S. 1, 533 (1888).

Respondent criticizes Petitioners’ statutory construction for incorporating this Court’s interpretation of § 101 as extending patentable subject matter to include “anything under the sun that is made by man . . . .” Resp. Br. 28; *see also Diamond v. Chakrabarty*, 447 U.S. 303, 309 (1980); *Diamond v. Diehr*, 450 U.S. 175, 182 (1981). Respondent and its amici further contend that the Congressional reports quoted by this Court in *Chakrabarty* applied the phrase “anything under the sun” to only the “machine” and “manufacture” categories set forth in § 101. Resp. Br. 28. But nothing in the statute or this Court’s decisions dictates that only two of the categories of § 101 are to be construed broadly while the other two are not. *See* Pet. Br. 18-20.

Far from requiring a “technological” definition of the term “process,” the Patent Act states: “[t]he term ‘process’ means process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.” 35 U.S.C. § 100(b). “[T]he Patent Act from its inception focused patentability on the specific characteristics of the claimed invention—its novelty and utility—not on its particular subject matter category.” Pet. App. 135a (Rader, J., dissenting).

Respondent warns that Petitioners advocate a position that would extend patent eligibility to “any” process that is not a law of nature, natural phenomena, or mathematical formula. Resp. Br. 44. But that is precisely what the statute demands. “The language of § 101 conveys no implication that the Act extends patent protection to some subcategories of processes but not others. It does not mean ‘some’ or

even ‘most,’ but all.” Pet. App. 136a (Rader, J., dissenting). With respect to the subject-matter provisions of the patent law, such breadth is necessary and well accepted. “Broad general language is not necessarily ambiguous when congressional objectives require broad terms.” *Chakrabarty*, 447 U.S. at 315. As this Court has repeatedly noted, “Congress plainly contemplated that the patent laws would be given wide scope.” *Id.* at 308; *see also J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int’l, Inc.*, 534 U.S. 124, 130 (2001) (“As this Court recognized over 20 years ago in *Chakrabarty*, the language of § 101 is extremely broad.” (citation omitted)).

Respondent argues that Petitioners advance a “near-boundless” interpretation of the term “process.” Resp. Br. 15. To the contrary, Petitioners, numerous amici, and the dissenters below simply urge this Court to reaffirm the well-settled boundaries of § 101: abstract ideas, laws of nature, and natural phenomena are not patentable, but a practical application of one of these principles may well be eligible for patenting. *Diehr*, 450 U.S. at 187; *Funk Bros. Seed Co. v. Kalo Inoculant Co.*, 333 U.S. 127, 130 (1948). Such a practical application may be shown through implementation on a machine or in a transformative process, or in a process that produces a useful result. *See* Pet. Br. 42-47. In addition to these subject matter boundaries, § 101 also limits patent eligibility to only those inventions that are “new and useful” and that satisfy “the other conditions and requirements” of Title 35, including novelty (§ 102), non-obviousness (§ 103), and full and particular description (§ 112).

**B. The Constitutional Backdrop And Text  
Evidence A Broader Scope Of Patentability  
Than Put Forth By Respondent**

Respondent devotes twenty-five pages, or more than half of its argument, to cataloging the types of processes that were typically patented in the eighteenth and nineteenth centuries and tracing the meaning of the word “process” from its Constitutional origin in the phrase “useful arts” through the 1952 Patent Act. While this historical backdrop may support the unremarkable conclusion that manufacturing processes are “useful arts,” the opposite remains unproven. The “useful arts” were never limited to only manufacturing processes. History shows that, although patents in nonmanufacturing fields may have been less common, they have regularly issued since the creation of the American patent system.

In Respondent’s view of history, however, the term “process” in § 101 must be limited to the industrial and technological arts as defined by the machine-or-transformation test because that is what Thomas Jefferson and his contemporaries meant by the phrase “useful arts.” Resp. Br. 16-19.<sup>2</sup> Based on a dictionary from 1828 and some speeches from the

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<sup>2</sup> Respondent argues that Petitioners conceded below that “technological arts” and “useful arts” are synonymous. Resp. Br. 19. In fact, Petitioners argued against the Examiner’s “technological arts” rejection (which was later reversed by the Board), and in particular argued that “no special meaning need be given to the phrase ‘technological arts,’ a phrase that has been devised and defined by the courts, apart from the Constitutional requirement that an invention be in the ‘useful arts.’” Pet. App. 193a-194a. Petitioners went on to argue that a process executed by humans could still fall within the “useful arts.” *Id.*

early nineteenth century (well after the first Patent Act in 1790), Respondent argues that the phrase “useful arts” was understood only to refer to “manufacturing processes and other applied trades.” *Id.* at 16-17. Everyone agrees that manufacturing processes are within the useful arts, but the facts cannot sustain Respondent’s opposite contention, *i.e.*, that useful arts must be limited to manufacturing processes. *Id.*

Dictionaries more contemporaneous to the time of framing and the first Patent Act evidence a much broader understanding of the phrase “useful arts.” For example, the Johnson Dictionary in 1768 defined “art” as “the power of doing something not taught by nature and instinct”; ‘a science’; ‘a trade’; ‘artfulness’; ‘skill’; ‘dexterity.’” Pet. App. 82a (Newman, J., dissenting) (quoting SAMUEL JOHNSON’S DICTIONARY OF THE ENGLISH LANGUAGE (3d ed. 1768)); *see also* Accenture & Pitney Bowes Amicus Br. 9 n.4. Further disproving Respondent’s conclusion that the “useful arts” were limited to manufacturing processes and applied trades like making clothes and utensils, Resp. Br. 16, is the substantial evidence that the practice of medicine was considered a useful art, even by Thomas Jefferson. Univ. S. Fla. Amicus Br. 6-12. Furthermore, this Court has not interpreted the “useful arts” to exclude financial innovation. *See, e.g., Baker v. Selden*, 101 U.S. 99, 102 (1879) (ruling that copyright cannot protect bookkeeping forms because bookkeeping is a “useful art”).

Respondent contends that “pure finance and business” were considered fields of science at the time of framing and are therefore not within the useful arts subject to patenting. Resp. Br. 18. Similarly, Respondent argues that “useful or mechanic” arts were

separate from “liberal or polite” arts like poetry, music, and painting. *Id.* at 16-17. Petitioners do not dispute that any principle of “pure” science, such as a mathematical equation, one of the laws of thermodynamics, or a logical syllogism, are not patent eligible until reduced to some practical application. Pet. Br. 19-20, 51. Further, Petitioners do not suggest that patents protect artwork or music; these are the province of copyright protection. *See, e.g., Baker v. Selden*, 101 U.S. at 102-03. Instead, Petitioners submit that fields such as economics, business, information management, and finance are patentable useful arts when directed to specific, practical applications. *See, e.g., Accenture & Pitney Bowes Amicus Br.* 35-39; *Regulatory DataCorp Amicus Br.* 29-31.

Respondent quotes at length from the concurring opinion below for the proposition that the English Statute of Monopolies and early English patent practice “left no room” for patents on nonmanufacturing methods. *Resp. Br.* 19-24. But in fact, the monopolies forbidden under the English statute and abhorred by the framers were those granted for known products and activities that already existed. *Pet. App.* 83a-84a; *Regulatory DataCorp Amicus Br.* 27. Concerns over removing established activities from the public domain were addressed by limiting patents to *new* inventions, as the Patent Act has done since its inception. And in any case, the framers chose broader language when empowering Congress to grant patents for useful arts than did the English Statute of Monopolies, so the history of English patent law and practice is of limited use when interpreting our own statute. *See Pet. Br.* 47-52.



**C. Patents For Nonmanufacturing Methods May Have Been Less Common, But They Have Issued Throughout The History Of The American Patent System**

Respondent argues that § 101 should not be construed to encompass nonmanufacturing methods because historically these types of methods were not patented often. But history reveals that such patents have issued, establishing a long-settled broader understanding of the scope of patentable subject matter.

Respondent notes that process patents granted in eighteenth century England “overwhelmingly” involved manufacturing processes. Resp. Br. 19-20. Given that the purpose of granting monopolies in England was to establish a manufacturing industry in the formerly agrarian country, this is unsurprising. And by admitting that “essentially” no nonmanufacturing process patents issued, Respondent acknowledges that some did. *See* Pet. App. 85a-88a (Newman, J., dissenting). Respondent likewise argues that there was “no pattern” of granting patents for nonmanufacturing methods in eighteenth century America, but stops short of saying that patents could not or did not issue for nonmanufacturing processes in the Patent Act’s first decade. Resp. Br. 22-23. That is because such patents did issue. *See* Pet. Br. 50-52.

Similarly, Respondent argues that nonmanufacturing processes were “rarely” patented during the nineteenth century, Resp. Br. 23-24, but the fact remains that patents did issue for methods that were not tied to machines or physical transformations and other inventions in nonmanufacturing fields such as:

- Bookkeeping: Method of Indexing Books, U.S. Patent No. 404,294 (issued 1889);
- Preventing Counterfeiting: Method of Protecting Bank Checks and the Like from Being Raised, U.S. Patent No. 478,294 (issued 1892); and
- Teaching: Means for Teaching Fractions, U.S. Patent No. 151,971 (issued 1874); Method of Teaching Embroidery or Kindred Arts to the Blind, U.S. Patent No. 532,110 (issued 1895).

Even a cursory review of Patent Office records shows that such patenting continued through the twentieth century, when patents issued in a variety of non-manufacturing fields like:

- Finance: Method of Recording and Identifying Intelligence on Bank Checks by Category and of Indexing Cancelled Bank Checks by Category for Subsequent Use, U.S. Patent No. 3,980,323 (issued 1976); Means for Cashing Sales Accounts, U.S. Patent No. 704,168 (issued 1902);
- Recreation: Dancing Chart and Method of Self Instruction, U.S. Patent No. 900,105 (issued 1908); Seating Chart, U.S. Patent No. 1,739,988 (issued 1929); Elimination Draw Poker Game, U.S. Patent No. 4,648,604 (issued 1987); Method of Playing a Question and Answer Board Game, U.S. Patent No. 4,998,736 (issued 1991); Educational Word Rhyming Game, U.S. Patent No. 5,248,148 (issued 1993); Method of Playing a Board Game, U.S. Patent No. 5,441,277 (issued 1995);

- Insurance: Negotiable Instrument, U.S. Patent No. 1,089,113 (issued 1914); Device for Keeping Account of Industrial Life Insurance Premium Collections and the Like, U.S. Patent No. 1,486,378 (issued 1924);
- Teaching: Means for Teaching Speaking and Reading, U.S. Patent No. 660,255 (issued 1900); Means for Teaching Reading of the Facial Expressions Which Occur in Speaking, U.S. Patent No. 726,484 (issued 1903); Method of Instruction, U.S. Patent No. 812,197 (issued 1906); Means for Facilitating the Study of Languages, U.S. Patent No. 778,110 (issued 1904);
- Preventing Counterfeiting: Method of Detecting Counterfeit Articles, U.S. Patent No. 1,198,053 (issued 1916); and
- Advertising: Method of Combining Advertising with Amusement or Instruction, U.S. Patent No. 1,200,399 (issued 1916).

These examples demonstrate that patents have long issued for inventions that are independent of particular machines or industrial manufacturing. The property rights of patent owners and the expectations of the inventing public were settled on this long history of broad subject matter eligibility even before the *State Street Bank* decision. As the framers intended, the patent system has evolved to promote progress in an ever-changing economy, across all existing and new useful arts. Imposing a “technology” requirement based on the machine-or-transformation test would reverse much of this progress.

## **II. Limiting Process Patents To Specific “Technology” Defined By The Machine-Or-Transformation Test Would Frustrate The Purpose Of The Patent Act**

One need look no further than Respondent’s brief to see how reading a “technology” requirement into § 101 would diminish the ability of patents to promote progress in new fields of the useful arts. Respondent’s reliance on the meaning of “technology” as understood by the founding fathers and during the Industrial Revolution leads to the conclusion that only “industrial and technological methods . . . have historically been eligible for patent protection.” Resp. Br. 29. Because patents for nonmanufacturing methods “rarely” issued and were outside “the norm” during the eighteenth and nineteenth centuries, Respondent concludes that “subjects not related to any technological or industrial process were simply not considered the province of patent law.” *Id.* at 23-24 & n.8. Limiting patent protection to only those types of inventions that have historically been the subject of patents runs counter to the constitutional mandate to promote progress in the useful arts. Denying patent protection for “inventions in areas not contemplated by Congress when the patent laws were enacted . . . would frustrate the purposes of the patent law. This Court frequently has observed that a statute is not to be confined to the ‘particular [applications] . . . contemplated by the legislators.’” *Chakrabarty*, 447 U.S. at 315 (quoting *Barr v. United States*, 324 U.S. 83, 90 (1945)).

Progress in today’s information economy is measured in nanoseconds and gigabytes, in engineering new techniques to manage businesses that operate worldwide, and in creating new ways to harness the

power of the limitless information now available at the press of a button. Restricting the incentive of patents to only those processes that involve technology as measured by the machine-or-transformation test will not promote the progress of innovation in the twenty-first century. “The innovations of the ‘knowledge economy’—of ‘digital prosperity’—have been dominant contributors to today’s economic growth and societal change.” Pet. App. 60a (Newman, J., dissenting). The decision below, and Respondent’s defense of it, would remove the incentive of patenting for “many of the kinds of inventions that apply today’s electronic and photonic technologies, as well as other processes that handle data and information in novel ways.” *Id.*

Respondent claims that the machine-or-transformation test can be used to analyze patent claims in “every extant field of technology and industry.” Resp. Br. 29. This assertion is contradicted by the many amicus briefs pointing out the negative effect the test will have in their areas of practical development. *See, e.g.*, Biotechnology Indus. Org. Amicus Br. 14-27; Dolby Labs. Inc. et al. Amicus Br. 7-10; Accenture & Pitney Bowes Amicus Br. 35-39. Moreover, the patent laws were enacted to promote innovation in fields as yet unknown. In fact, “[a] rule that unanticipated inventions are without protection would conflict with the core concept of the patent law that anticipation undermines patentability.” *Chakrabarty*, 447 U.S. at 316.

#### **A. The Machine-Or-Transformation Test For Specific “Technology” Threatens Innovation In Many Existing Fields**

Though Respondent asserts that the machine-or-transformation test is “broad and technology-neu-

tral,” Resp. Br. 36, many existing fields would face uncertain patentability. For example, Respondent argues that its test would “readily encompass” software inventions, *id.* at 38, but the eligibility of software under Respondent’s rule would depend largely on “the form in which it is sought to be patented.” *Id.* Per Respondent, a claim that uses a computer for data storage or for communicating data over a network would not be patentable under the machine-or-transformation test because these activities would be dismissed as “insignificant extra-solution activity.” *Id.* at 39 n.18. On the other hand, Respondent notes that, if the claim described the computer as being programmed to perform the steps necessary to store data or process network communications, the machine-or-transformation test would be satisfied. *Id.* at 38-39. The mandatory machine-or-transformation test would therefore reduce the patent eligibility of computer-implemented inventions to a matter of claim drafting. In such circumstances, patent eligibility would be independent of the actual nature of the invention, which cannot be correct.

Although Respondent suggests that concern over software patent rights is “misplaced,” *id.* at 37, the decision below has left scores of patent owners doubting the validity of their patents for software and computer-related inventions. Amici estimate that more than 200,000 software patents have issued and that 20,000 new software patent applications are filed every year. Red Hat Amicus Br. 12; Bus. Software Alliance Amicus Br. 6. District courts continue to invalidate computer-related patents as being unpatentable after the mandatory machine-or-trans-

formation test.<sup>3</sup> Given Respondent's position that most software-related inventions are patentable if claimed using the right terminology, Resp. Br. 38-39 & n.18, it makes little sense to adopt a mandatory rule that would invalidate countless software patents because their claim format is now deemed unacceptable.

Innovations in biotechnology and medicine would likewise be threatened, despite Respondent's assurances to the contrary. *Id.* at 40. Confining patent protection to machine-or-transformation-tied technologies would jeopardize the most innovative segments of medical research. *See, e.g.*, Chakrabarty Amicus Br. 2-3; Biotechnology Indus. Org. Amicus Br. 14-27. The amicus briefs cite many examples of successful diagnostic and medical treatment advances that may now be excluded from patenting, such as a method for predicting prediabetic individuals who are most likely to develop diabetes based on multiple markers in the blood, Adamas Pharm. Amicus Br. 24-25, and a method for treating influenza using a unique combination of existing pharmaceuticals. Boston Patent Law Ass'n Amicus Br. 13-14.

Cutting edge innovations in other fields are similarly threatened by introducing the machine-or-transformation test as a "limiting principle" on patent eligibility under § 101. The "cloud of uncertainty" cast by the decision below extends to audio-visual compression and analytics, noise reduction, seismic analysis, and other fields that involve the

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<sup>3</sup> *See, e.g., DealerTrack, Inc. v. Huber*, No. CV 06-2335, 2009 WL 2020761, at \*2-4 (C.D. Cal. July 7, 2009); *AwakenIP Amicus Br. 20-21*; *Entrepreneurial Software Cos. Amicus Br. 16-22*.

manipulation of digital signals. Dolby Labs. Inc. et al. Amicus Br. 9. Also in jeopardy are information-age innovations that derive their value from being machine independent, such as the MP3 data format used in digital music players and the UNIX computer operating system. Eagle Forum Amicus Br. 9; Yahoo! Inc. Amicus Br. 8. The fields of applied finance and industrial engineering would likewise be excluded from “technology” as defined by the machine-or-transformation test, despite the useful innovations in these fields that drive commerce today. *See, e.g.*, Accenture & Pitney Bowes Amicus Br. 36-39; Regulatory DataCorp Amicus Br. 29-32.

**B. The Mandatory Machine-Or-Transformation Test Would Not Achieve Respondent’s Promise Of Eliminating “Non-Technological” Patents**

Respondent argues that the machine-or-transformation test is necessary to exclude “out-of-left-field” patents. Resp. Br. 46 n.25. Even if the purpose of construing § 101 was to eliminate questionable patents, Respondent’s proposed test would fall short. The machine-or-transformation test is both over-inclusive and under-inclusive in limiting patentable inventions to Respondent’s arbitrary definition of technology. For example, the much-maligned patent for exercising a cat<sup>4</sup> claims an apparatus with a pedestal and a laser mounted on a motor shaft that could qualify as a particular machine. As Petitioners have noted, many of the patents condemned in Circuit Judge Mayer’s dissent below would likely satisfy the machine-or-transformation test because they claim machines like databases and controller

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<sup>4</sup> U.S. Patent No. 6,701,872 (issued 2004).



units, point-of-sale terminals, and data processing systems and public communication networks. Pet. Br. 40-41.

The machine-or-transformation test would also be under-inclusive, eliminating patent protection for inventions that almost all would agree should be patent eligible, such as advances in solar and geothermal energy production and laser and sonar innovations. Nev. State Bar Amicus Br. 25-26; Am. Bar Ass'n Amicus Br. 6-7. The test would likewise have prohibited the patenting of foundational inventions in FM radio, cellular phone technology, linear programming, and data compression. Boston Patent Law Ass'n Amicus Br. 9-13; Houston IP Law Ass'n Amicus Br. 14-22.

Affirming the decision below and construing § 101 to require “technology” as defined by the machine-or-transformation test would exalt form over substance, threaten innovation at the frontiers of knowledge, and disrupt patent protection in even well-settled arts. “[T]he statute does not mention ‘transformations’ or any of the other Industrial Age descriptions of subject matter categories” embraced by the majority below and advanced by Respondent. Pet. App. 142a-143a (Rader, J., dissenting). This Court should therefore reverse the Federal Circuit’s decision and reject Respondent’s attempt to insert a nonstatutory “technology” limitation into § 101.

### **III. While § 273 Did Not Broaden The Scope Of § 101, Congress Recognized That Patents May Properly Issue For Business Methods Without Regard To A Machine Or Transformation**

#### **A. Section 273 Represents An Equitable Balance Struck By Congress**

Despite Respondent's suggestion to the contrary, Resp. Br. 48, Petitioners do not contend that Congress broadened the scope of § 101 when it amended the Patent Act to add a prior user defense for infringers of business method patents. Rather, § 273 represents the "equitable balance" that Congress struck between inventors who patented their business methods under an appropriate interpretation of § 101 and those who chose to keep business practices as trade secrets, perhaps mistakenly believing they were unpatentable. *See* H.R. REP. NO. 106-464, at 122 (1999) (Conf. Rep.); *see also* Pet. Br. 30-34. Because § 273 recognizes patent protection for business methods in commercial use, however, § 101 cannot be construed to exclude them from patent protection. Pet. Br. 29. Respondent's limited "technological arts" construction of process, as implemented by the machine-or-transformation test, would improperly exclude "method[s] of doing or conducting business" and therefore cannot be reconciled with § 273.

More than once, Congress has addressed concerns about particular subject matter through counter-balances in the Patent Act while leaving § 101 unchanged. *See, e.g.*, 35 U.S.C. §§ 181-188 (restricting patents for inventions that may be detrimental to national security); *id.* at § 287(c) (restricting remedies recoverable for a "medical practitioner's performance")

of patented “medical activity”).<sup>5</sup> As this Court has held, where Congress has acted to implement a policy within its Article I powers, the courts should not disrupt that balance. *See, e.g., Eldred v. Ashcroft*, 537 U.S. 186, 212-13, 222 (2003) (“As we read the Framers’ instruction, [Art. 1, § 8, Cl. 8] empowers Congress to determine the intellectual property regimes that, overall, in that body’s judgment, will serve the ends of the Clause. . . . The wisdom of Congress’ action, however, is not within our province to second-guess.”); *Graham v. John Deere Co.*, 383 U.S. 1, 6 (1966). Congress’s policy decision in enacting § 273 is within its powers under the Patents and Copyrights Clause because business methods are useful arts. *See* Section I(B), *supra* at 9-10. That balance struck by Congress should not be upset.

**B. The Plain Text Of §273 And Its  
Legislative History Show Congress’s  
Understanding That Business Method  
Patents Are Not Restricted To Specific  
Technology Defined By The Machine-  
Or-Transformation Test**

Respondent argues that Congress did not consider “non-technological processes” to be within the scope

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<sup>5</sup> In the years since § 273 was enacted, Congress has considered further counterbalances for business method patents, but has not proposed restricting § 101’s scope to exclude their patent eligibility. *See* Pet. Br. 36. For example, bills that would have created a presumption of obviousness under 35 U.S.C. § 103 for certain types of business method claims would have left the broad statutory categories of § 101 intact. *See, e.g.,* H.R. 5364, 106th Cong. § 4 (2000). The current Congress is considering amending § 101 to exclude certain types of tax planning methods, but again, that unenacted proposal would leave the broad statutory categories of § 101 intact. *See* H.R. 2584, 111th Cong. § 1 (2009).

of business method patents subject to the prior user defense of § 273. Resp. Br. 48. The statutory text contains nothing to suggest a “technology” requirement; rather, § 273 broadly defines the term “method” as “a method of doing or conducting business.” 35 U.S.C. § 273(a)(3); Pet. Br. 31-32. The Congressional joint conference report is in accord. “[T]his subtitle focuses on methods for doing and conducting business . . . whether in the form of physical products, or in the form of services, or in the form of some other useful results; for example, results produced through the manipulation of data or other inputs to produce a useful result.” H.R. REP. NO. 106-464, at 122 (1999) (Conf. Rep.); *see also id.* at 123 (recognizing that the defense would apply to infringement of a patent for an “internal method for doing business, such as an internal human resources management process”).

While noting that “floor statements of individual Members of Congress are entitled to little weight,” Respondent nevertheless quotes sections of a statement by Senator Schumer to imply that Congress understood business method patents to be limited to methods tied to machines. Resp. Br. 48 n.26. Sen. Schumer’s full statement, however, reveals an understanding that business method patents subject to the § 273 defense may involve machines or they may not. 145 CONG. REC. 30634 (1999) (statement of Sen. Schumer) (“The defense will be applicable against method claims, as well as the claims involving machines or articles the manufacturer used to practice such methods (*i.e.*, apparatus claims).”). Sen. Schumer went on to give examples of non-machine-implemented business practices that fall within the defense. “When viewed specifically from the standpoint of the financial services industry, the

term ‘method’ includes financial instruments, financial products, financial transactions, the ordering of financial information, and any system or process that transmits or transforms information with respect to investments or other types of financial transactions.” *Id.* Thus, Respondent’s position is not supported by the statutory text, the joint conference report, or individual floor statements.<sup>6</sup>

### **C. Respondent’s Rule Would Reduce Patent Eligibility For Business Methods To A Matter Of Form Over Substance**

Legislative history and statutory text notwithstanding, Respondent attempts to reconcile § 273 with its view of § 101 by arguing that § 273 applies only to processes that satisfy the machine-or-transformation test. Resp. Br. 50-51. Even if the mandatory machine-or-transformation test may not exclude all business methods from patenting, its application would elevate form over substance. Under Respondent’s rule, a business method implemented on a particular machine might be patent eligible, though the same business method claimed without a machine would not be. Thus, the patent eligibility of the underlying subject matter would depend on the creativity of the claim drafter.

When enacting § 273, Congress eschewed such constraints, instructing that “[f]orm should not rule

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<sup>6</sup> Petitioners’ arguments, in contrast, respect the proper relative weight of these sources, relying first on the statutory text, then on the joint conference report, and finally on the congruent floor statements of both House and Senate Members, which themselves mirror the conference report. *See Garcia v. United States*, 469 U.S. 70, 76 (1984).

substance.” H.R. REP. NO. 106-464, at 123 (1999) (Conf. Rep.). Congress explained that “a method for doing or conducting business that has been claimed in a patent as a programmed machine, as in the State Street case, is a method for purposes of section 273 if the invention could have as easily been claimed as a method.” *Id.* In other words, “[t]he issue of whether an invention is a method is to be determined based on its underlying nature and not on the technicality of the form of the claims in the patent.” *Id.* Congress fully understood the folly of trying to distinguish a “business method” claim from one drawn to “software,” for example. H.R. REP. NO. 106-287, pt. 1, at 46 (1999) (“A software-related invention, for example, that was claimed by the patent draftsman as a programmed machine when the same invention could have been protected with process or method patent claims is a process or method for purposes of § 273.”). Rather than haggling over whether a claim recites a “particular” enough machine or a “significant” enough activity to satisfy the machine-or-transformation test, patent eligibility of a business method, as with any other process, should depend on the underlying subject matter and whether the invention falls with the statutory classes of invention for which an inventor “may obtain a patent” pursuant to § 101.

#### **IV. The “Practical Application” Framework And Other Boundaries Of The Patent Act, Properly Applied, Are Well-Suited To Eliminate Trivial Patents**

Respondent argues that reaffirming this Court’s broad, flexible framework for patent-eligible subject matter will unleash a parade of horrors. Citing vague concepts like “pitching baseballs, singing arias, delivering lectures, [and] running election cam-

paigns,” seemingly intended to provoke a negative reaction to such trivial patents, Respondent then proclaims entire categories of subject matter unpatentable. Resp. Br. 45. This practice poses several problems.

First, Respondent cites no legal precedent to justify excluding entire categories of subject matter as unpatentable, instead simply stating that none “embodies the sort of invention that the patent laws were designed to protect.” *Id.* A fundamental strength of the U.S. patent system is its lack of subject matter exclusions, leaving the door open for emerging technologies. By design, “Congress employed broad general language in drafting § 101 precisely because such inventions are often unforeseeable.” *Chakrabarty*, 447 U.S. at 316.

Respondent’s proposal to make categorical exclusions from patent eligibility also runs counter to the foundation of U.S. patent law. “Unlike the laws of other nations that include broad exclusions to eligible subject matter . . . U.S. law and policy have embraced advances without regard to their subject matter. That promise of protection, in turn, fuels the research that, at least for now, makes this nation the world’s innovation leader.” Pet. App. 136a-137a (Rader, J., dissenting). Several amici note that subject matter exclusions like those in Respondent’s brief, or the de facto exclusions caused by the machine-or-transformation test, would severely hamper innovation in fields such as medicine and biotechnology, computer software, and industrial engineering. *See, e.g.*, Biotechnology Indus. Org. Amicus Br. 14-27; Boston Patent Law Ass’n Amicus Br. 13; Dolby Labs. Inc. et al. Amicus Br. 7-10; Accenture & Pitney Bowes Amicus Br. 35-39.

Second, Respondent offers only perfunctory descriptions of subject matter it deems categorically unpatentable, without including any particular claims it contends were improperly allowed. Referring generally to “sports moves, marketing techniques, and estate planning strategies” without citing specific claim language seems calculated to provoke the reaction that innovations in these areas could not possibly deserve patents, no matter how novel, useful, and practically implemented. Resp. Br. 26-27. It is dangerous to trivialize broad classes of subject matter based on such cursory examples, however, without any substantive analysis. For example, Respondent argues that risk management and legal methods, including those employing software, ought to be ineligible for patenting regardless of the particular form of the claims. *Id.* at 40-41. This not only restricts patentability solely based on broad subject matter categories, but also prevents analysis of whether such matter would meet any particular test of patentability, even the machine-or-transformation test. Without a more thorough analysis or justification of why Respondent’s examples inherently fail any and all tests of patentability, they offer little insight.

Respondent also argues that the “practical application” framework would lead to patents on “vast swaths of American economic and social life.” *Id.* at 44. While this argument paints a dire picture, it ignores the many other obstacles such patent applications would face.<sup>7</sup> Once an invention is deemed to

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<sup>7</sup> Indeed, one particularly dramatic example cited by Respondent, a “multi-step method for proposing marriage,” Resp. Br. 36 n.14, actually demonstrates that the practical application framework eliminates undesirable patents. Before the machine-



fall within one of the four categories of patentable subject matter, § 101 further requires the invention to be “new and useful.” 35 U.S.C. § 101. Furthermore, § 101 conditions patentability on satisfying “the conditions and requirements of this title.” *Id.* These include novelty, 35 U.S.C. § 102, and nonobvious subject matter, 35 U.S.C. § 103. Particularly since this Court’s decision in *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398 (2007), these requirements provide the Patent Office with powerful tools to combat trivial patent applications. For example, it is now clear that § 103 bars patents for improvements that result from mere “common sense” or “ordinary creativity.” *Id.* at 420-21.

**V. The Shortcomings Of The Machine-Or-Transformation Test For Technology Are Demonstrated By Respondent’s Assessment Of Petitioners’ Claims**

Respondent contends that adding a computer or telephone to Petitioners’ claims would not make them patentable because they would constitute only insignificant extra-solution activity. Resp. Br. 52-53. On the other hand, if Petitioners claimed that their hedging process was conducted online, using a computer network and a microprocessor to calculate the fixed purchase price, then apparently it could be patent eligible under the machine-or-transformation test. *Id.* at 53 n.30. Conditioning patent eligibility on implementation formalities, however, underscores

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or-transformation test, one such application was rejected by the Patent Office as being an abstract idea without practical application. U.S. Patent Application 10/378,423, PTO Office Action, 10/17/2006, pp. 2-13. The application was also rejected for obviousness and inadequate description, *id.* 13-15, evidence that the other conditions for patenting also block bad patents.

the arbitrary nature of Respondent's test. This is particularly true where, as here, the distinction between a valid patent and nonstatutory subject matter seems to be no more than skillful claim drafting.

Respondent also argues that Petitioners' claims would preempt the very idea of hedging. Resp. Br. 53. This assertion is incorrect because, as discussed in Petitioners' opening brief, the claimed hedging method is limited to a series of specific steps involving purchase and sale of commodities, with an intermediary commodity provider managing consumption risk costs. Pet. Br. 57-58. Respondent simply dismisses the practical application recited in the claims as "unremarkable post-solution steps," Resp. Br. 54, underscoring the uncertain and subjective nature of the machine-or-transformation test.<sup>8</sup>

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<sup>8</sup> Respondent argues that Petitioners waived any separate argument for the patentability of claim 4 below. Resp. Br. 54 n.32. On the contrary, claims 1 and 4 were grouped and argued separately in Petitioners' appeal brief before the PTO Board of Appeals. (Applicants' PTO Appeal Br., at 4-7, 11-12, 5/23/00). Furthermore, the Board separately reviewed the patentability of claims 1 and 4 and did not base its decision on any single representative claim. Pet. App. 181a-187a.

**CONCLUSION**

For the reasons set forth above and in Petitioners' opening brief, the decision of the court of appeals should be reversed.

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