

Supreme Court of the United States  
Bernard L. BILSKI and Rand A. Warsaw, Petitioners,  
v.  
David J. KAPPOS, Under Secretary of Commerce for  
Intellectual Property and Director, Patent and Trade-  
mark Office.

No. 08–964.  
Argued Nov. 9, 2009.  
Decided June 28, 2010.

**Justice KENNEDY delivered the opinion of the  
Court, except as to Parts II–B–2 and II–C–2.**

The question in this case turns on whether a patent can be issued for a claimed invention designed for the business world. The patent application claims a procedure for instructing buyers and sellers how to protect against the risk of price fluctuations in a discrete section of the economy. Three arguments are advanced for the proposition that the claimed invention is outside the scope of patent law: (1) it is not tied to a machine and does not transform an article; (2) it involves a method of conducting business; and (3) it is merely an abstract idea. The Court of Appeals ruled that the first mentioned of these, the so-called machine-or-transformation test, was the sole test to be used for determining the patentability of a “process” under the Patent Act, 35 U.S.C. § 101.

I

Petitioners' application seeks patent protection for a claimed invention that explains how buyers and sellers of commodities in the energy market can protect, or hedge, against the risk of price changes. Claim 1 describes a series of steps instructing how to hedge risk. Claim 4 puts the concept articulated in claim 1 into a simple mathematical formula. Claim 1 consists of the following steps:

“(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumers;

“(b) identifying market participants for said commodity having a counter-risk position to said consumers; and

“(c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk position of said series of consumer transactions.”

The remaining claims explain how claims 1 and 4 can be applied to allow energy suppliers and consumers to minimize the risks resulting from fluctuations in market demand for energy. For example, claim 2 claims “[t]he method of claim 1 wherein said commodity is energy and said market participants are transmission distributors.” Some of these claims also suggest familiar statistical approaches to determine the inputs to use in claim 4's equation. For example, claim 7 advises using well-known random analysis techniques to determine how much a seller will gain “from each transaction under each historical weather pattern.”

The patent examiner rejected petitioners' application, explaining that it “ ‘is not implemented on a specific apparatus and merely manipulates [an] abstract idea and solves a purely mathematical problem without any limitation to a practical application, therefore, the invention is not directed to the technological arts.’ ” The Board of Patent Appeals and Interferences affirmed, concluding that the application involved only mental steps that do not transform physical matter and was directed to an abstract idea.

The United States Court of Appeals for the Federal Circuit heard the case en banc and affirmed. The case produced five different opinions. Students of patent law would be well advised to study these scholarly opinions.

Chief Judge Michel wrote the opinion of the court. The court rejected its prior test for determining whether a claimed invention was a patentable “process” under § 101—whether it produces a “useful, concrete, and tangible result.” The court held that

“[a] claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” The court concluded this “machine-or-transformation test” is “the sole test governing § 101 analyses,” and thus the “test for determining patent eligibility of a process under § 101.” Applying the machine-or-transformation test, the court held that petitioners' application was not patent eligible.

Three judges wrote dissenting opinions. Judge Mayer argued that petitioners' application was “not eligible for patent protection because it is directed to a method of conducting business.” He urged the adoption of a “technological standard for patentability.” Judge Rader would have found petitioners' claims were an unpatentable abstract idea. Only Judge Newman disagreed with the court's conclusion that petitioners' application was outside of the reach of § 101. She did not say that the application should have been granted but only that the issue should be remanded for further proceedings to determine whether the application qualified as patentable under other provisions.

## II A

Section 101 defines the subject matter that may be patented under the Patent Act:

“Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.”

Section 101 thus specifies four independent categories of inventions or discoveries that are eligible for protection: processes, machines, manufactures, and compositions of matter. “In choosing such expansive terms ... modified by the comprehensive ‘any,’ Congress plainly contemplated that the patent laws would be given wide scope.” Congress took this permissive approach to patent eligibility to ensure that “‘ingenuity should receive a liberal encouragement.’”

The Court's precedents provide three specific exceptions to § 101's broad patent-eligibility principles: “laws of nature, physical phenomena, and abstract ideas.” While these exceptions are not required by the statutory text, they are consistent with the no-

tion that a patentable process must be “new and useful.” And, in any case, these exceptions have defined the reach of the statute as a matter of statutory *stare decisis* going back 150 years. The concepts covered by these exceptions are “part of the storehouse of knowledge of all men ... free to all men and reserved exclusively to none.”

The § 101 patent-eligibility inquiry is only a threshold test. Even if an invention qualifies as a process, machine, manufacture, or composition of matter, in order to receive the Patent Act's protection the claimed invention must also satisfy “the conditions and requirements of this title.” Those requirements include that the invention be novel, § 102, nonobvious, § 103, and fully and particularly described, § 112.

The present case involves an invention that is claimed to be a “process” under § 101.

Section 100(b) defines “process” as:

“process, art or method, and includes a new use of a known process, machine, manufacture, composition of matter, or material.”

The Court first considers two proposed categorical limitations on “process” patents under § 101 that would, if adopted, bar petitioners' application in the present case: the machine-or-transformation test and the categorical exclusion of business method patents.

## B 1

Under the Court of Appeals' formulation, an invention is a “process” only if: “(1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” This Court has “more than once cautioned that courts ‘should not read into the patent laws limitations and conditions which the legislature has not expressed.’” In patent law, as in all statutory construction, “[u]nless otherwise defined, ‘words will be interpreted as taking their ordinary, contemporary, common meaning.’” The Court has read the § 101 term “manufacture” in accordance with dictionary definitions, and approved a construction of the term “composition of matter” consistent with common usage.

Any suggestion in this Court's case law that the Patent Act's terms deviate from their ordinary mean-

ing has only been an explanation for the exceptions for laws of nature, physical phenomena, and abstract ideas. This Court has not indicated that the existence of these well-established exceptions gives the Judiciary *carte blanche* to impose other limitations that are inconsistent with the text and the statute's purpose and design. Concerns about attempts to call any form of human activity a “process” can be met by making sure the claim meets the requirements of § 101.

Adopting the machine-or-transformation test as the sole test for what constitutes a “process” (as opposed to just an important and useful clue) violates these statutory interpretation principles. Section 100(b) provides that “[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.” The Court is unaware of any “ordinary, contemporary, common meaning,” of the definitional terms “process, art or method” that would require these terms to be tied to a machine or to transform an article. Respondent urges the Court to look to the other patentable categories in § 101—machines, manufactures, and compositions of matter—to confine the meaning of “process” to a machine or transformation, under the doctrine of *noscitur a sociis*. Under this canon, “an ambiguous term may be given more precise content by the neighboring words with which it is associated.” This canon is inapplicable here, for § 100(b) already explicitly defines the term “process.”

The Court of Appeals incorrectly concluded that this Court has endorsed the machine-or-transformation test as the exclusive test. It is true that *Cochrane v. Deener*, (1877), explained that a “process” is “an act, or a series of acts, performed upon the subject-matter to be transformed and reduced to a different state or thing.” More recent cases, however, have rejected the broad implications of this dictum; and, in all events, later authority shows that it was not intended to be an exhaustive or exclusive test. *Gottschalk v. Benson*, 409 U.S. 63 (1972), noted that “[t]ransformation and reduction of an article ‘to a different state or thing’ is the clue to the patentability of a process claim that does not include particular machines.” At the same time, it explicitly declined to “hold that no process patent could ever qualify if it did not meet [machine or transformation] requirements.” *Flook* took a similar approach, “assum[ing] that a valid process patent may issue even if it does not meet [the machine-or-transformation test].”

This Court's precedents establish that the machine-or-transformation test is a useful and important clue, an investigative tool, for determining whether some claimed inventions are processes under § 101. The machine-or-transformation test is not the sole test for deciding whether an invention is a patent-eligible “process.”

## 2

It is true that patents for inventions that did not satisfy the machine-or-transformation test were rarely granted in earlier eras, especially in the Industrial Age. But times change. Technology and other innovations progress in unexpected ways. For example, it was once forcefully argued that until recent times, “well-established principles of patent law probably would have prevented the issuance of a valid patent on almost any conceivable computer program.” *Diehr*. But this fact does not mean that unforeseen innovations such as computer programs are always unpatentable. . A categorical rule denying patent protection for “inventions in areas not contemplated by Congress ... would frustrate the purposes of the patent law.” *Chakrabarty*, 447 U.S. at 315.

The machine-or-transformation test may well provide a sufficient basis for evaluating processes similar to those in the Industrial Age—for example, inventions grounded in a physical or other tangible form. But there are reasons to doubt whether the test should be the sole criterion for determining the patentability of inventions in the Information Age. As numerous *amicus* briefs argue, the machine-or-transformation test would create uncertainty as to the patentability of software, advanced diagnostic medicine techniques, and inventions based on linear programming, data compression, and the manipulation of digital signals. See, *e.g.*, Brief for Business Software Alliance 24–25; Brief for Biotechnology Industry Organization et al. 14–27; Brief for Boston Patent Law Association 8–15; Brief for Houston Intellectual Property Law Association 17–22; Brief for Dolby Labs., Inc., et al.

In the course of applying the machine-or-transformation test to emerging technologies, courts may pose questions of such intricacy and refinement that they risk obscuring the larger object of securing patents for valuable inventions without transgressing the public domain. As a result, in de-

cluding whether previously unforeseen inventions qualify as patentable “process[es],” it may not make sense to require courts to confine themselves to asking the questions posed by the machine-or-transformation test. Section 101’s terms suggest that new technologies may call for new inquiries.

It is important to emphasize that the Court today is not commenting on the patentability of any particular invention, let alone holding that any of the above-mentioned technologies from the Information Age should or should not receive patent protection. This Age puts the possibility of innovation in the hands of more people and raises new difficulties for the patent law. With ever more people trying to innovate and thus seeking patent protections for their inventions, the patent law faces a great challenge in striking the balance between protecting inventors and not granting monopolies over procedures that others would discover by independent, creative application of general principles. Nothing in this opinion should be read to take a position on where that balance ought to be struck.

C  
1

Section 101 similarly precludes the broad contention that the term “process” categorically excludes business methods. The term “method,” which is within § 100(b)’s definition of “process,” at least as a textual matter and before consulting other limitations in the Patent Act and this Court’s precedents, may include at least some methods of doing business. See, *e.g.*, Webster’s New International Dictionary 1548 (2d ed.1954) (defining “method” as “[a]n orderly procedure or process ... regular way or manner of doing anything; hence, a set form of procedure adopted in investigation or instruction”). The Court is unaware of any argument that the “ordinary, contemporary, common meaning,” of “method” excludes business methods. Nor is it clear how far a prohibition on business method patents would reach, and whether it would exclude technologies for conducting a business more efficiently.

2

Interpreting § 101 to exclude all business methods simply because business method patents were rarely issued until modern times revives many of the previously discussed difficulties. At the same time, some business method patents raise special problems in

terms of vagueness and suspect validity. The Information Age empowers people with new capacities to perform statistical analyses and mathematical calculations with a speed and sophistication that enable the design of protocols for more efficient performance of a vast number of business tasks. If a high enough bar is not set when considering patent applications of this sort, patent examiners and courts could be flooded with claims that would put a chill on creative endeavor and dynamic change.

In searching for a limiting principle, this Court’s precedents on the unpatentability of abstract ideas provide useful tools. Indeed, if the Court of Appeals were to succeed in defining a narrower category or class of patent applications that claim to instruct how business should be conducted, and then rule that the category is unpatentable because, for instance, it represents an attempt to patent abstract ideas, this conclusion might well be in accord with controlling precedent. But beyond this or some other limitation consistent with the statutory text, the Patent Act leaves open the possibility that there are at least some processes that can be fairly described as business methods that are within patentable subject matter under § 101.

Finally, even if a particular business method fits into the statutory definition of a “process,” that does not mean that the application claiming that method should be granted. In order to receive patent protection, any claimed invention must be novel, § 102, nonobvious, § 103, and fully and particularly described, § 112. These limitations serve a critical role in adjusting the tension, ever present in patent law, between stimulating innovation by protecting inventors and impeding progress by granting patents when not justified by the statutory design.

III

Even though petitioners’ application is not categorically outside of § 101 under the two broad and atextual approaches the Court rejects today, that does not mean it is a “process” under § 101. Petitioners seek to patent both the concept of hedging risk and the application of that concept to energy markets. Rather than adopting categorical rules that might have wide-ranging and unforeseen impacts, the Court resolves this case narrowly on the basis that petitioners’ claims are not patentable processes because they are attempts to patent abstract ideas. Indeed, all members of the Court agree that the patent application at issue

here falls outside of § 101 because it claims an abstract idea.

In *Benson*, the Court considered whether a patent application for an algorithm to convert binary-coded decimal numerals into pure binary code was a “process” under § 101. The Court first explained that “[a] principle, in the abstract, is a fundamental truth; an original cause; a motive; these cannot be patented, as no one can claim in either of them an exclusive right.” The Court then held the application at issue was not a “process,” but an unpatentable abstract idea. “It is conceded that one may not patent an idea. But in practical effect that would be the result if the formula for converting ... numerals to pure binary numerals were patented in this case.” A contrary holding “would wholly pre-empt the mathematical formula and in practical effect would be a patent on the algorithm itself.”

In *Flook*, the Court considered the next logical step after *Benson*. The applicant there attempted to patent a procedure for monitoring the conditions during the catalytic conversion process in the petrochemical and oil-refining industries. The application's only innovation was reliance on a mathematical algorithm. *Flook* held the invention was not a patentable “process.” The Court conceded the invention at issue, unlike the algorithm in *Benson*, had been limited so that it could still be freely used outside the petrochemical and oil-refining industries. . Nevertheless, *Flook* rejected “[t]he notion that post-solution activity, no matter how conventional or obvious in itself, can transform an unpatentable principle into a patentable process.” The Court concluded that the process at issue there was “unpatentable under § 101, not because it contain[ed] a mathematical algorithm as one component, but because once that algorithm [wa]s assumed to be within the prior art, the application, considered as a whole, contain[ed] no patentable invention.” As the Court later explained, *Flook* stands for the proposition that the prohibition against patenting abstract ideas “cannot be circumvented by attempting to limit the use of the formula to a particular technological environment” or adding “insignificant postsolution activity.”

Finally, in *Diehr*, the Court established a limitation on the principles articulated in *Benson* and *Flook*. The application in *Diehr* claimed a previously unknown method for “molding raw, uncured synthetic

rubber into cured precision products,” using a mathematical formula to complete some of its several steps by way of a computer. *Diehr* explained that while an abstract idea, law of nature, or mathematical formula could not be patented, “an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.” *Diehr* emphasized the need to consider the invention as a whole, rather than “dissect[ing] the claims into old and new elements and then ... ignor[ing] the presence of the old elements in the analysis.” Finally, the Court concluded that because the claim was not “an attempt to patent a mathematical formula, but rather [was] an industrial process for the molding of rubber products,” it fell within § 101's patentable subject matter.

In light of these precedents, it is clear that petitioners' application is not a patentable “process.” Claims 1 and 4 in petitioners' application explain the basic concept of hedging, or protecting against risk: “Hedging is a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class.” The concept of hedging, described in claim 1 and reduced to a mathematical formula in claim 4, is an unpatentable abstract idea, just like the algorithms at issue in *Benson* and *Flook*. Allowing petitioners to patent risk hedging would pre-empt use of this approach in all fields, and would effectively grant a monopoly over an abstract idea.

\* \* \*

Today, the Court once again declines to impose limitations on the Patent Act that are inconsistent with the Act's text. The patent application here can be rejected under our precedents on the unpatentability of abstract ideas. The Court, therefore, need not define further what constitutes a patentable “process,” beyond pointing to the definition of that term provided in § 100(b) and looking to the guideposts in *Benson*, *Flook*, and *Diehr*.

And nothing in today's opinion should be read as endorsing interpretations of § 101 that the Court of Appeals for the Federal Circuit has used in the past. See, e.g., *State Street*, 149 F.3d, at 1373; *AT & T Corp.*, 172 F.3d, at 1357. It may be that the Court of Appeals thought it needed to make the machine-or-transformation test exclusive precisely because its case law had not adequately identified less extreme means of restricting business method patents,

including (but not limited to) application of our opinions in *Benson*, *Flook*, and *Diehr*. In disapproving an exclusive machine-or-transformation test, we by no means foreclose the Federal Circuit's development of other limiting criteria that further the purposes of the Patent Act and are not inconsistent with its text.

The judgment of the Court of Appeals is affirmed.

*It is so ordered.*

**Justice STEVENS, with whom Justice GINSBURG, Justice BREYER, and Justice SOTOMAYOR join, concurring in the judgment.**

In the area of patents, it is especially important that the law remain stable and clear. The only question presented in this case is whether the so-called machine-or-transformation test is the exclusive test for what constitutes a patentable “process” under 35 U.S.C. § 101. It would be possible to answer that question simply by holding, as the entire Court agrees, that although the machine-or-transformation test is reliable in most cases, it is not the *exclusive* test.

I agree with the Court that, in light of the uncertainty that currently pervades this field, it is prudent to provide further guidance. But I would take a different approach. Rather than making any broad statements about how to define the term “process” in § 101 or tinkering with the bounds of the category of unpatentable, abstract ideas, I would restore patent law to its historical and constitutional moorings.

For centuries, it was considered well established that a series of steps for conducting business was not, in itself, patentable. In the late 1990's, the Federal Circuit and others called this proposition into question. Congress quickly responded to a Federal Circuit decision with a stopgap measure designed to limit a potentially significant new problem for the business community. It passed the First Inventors Defense Act of 1999 (1999 Act), 113 Stat. 1501A–555 (codified at 35 U.S.C. § 273), which provides a limited defense to claims of patent infringement, see § 273(b), for “method[s] of doing or conducting business,” § 273(a)(3). Following several more years of confusion, the Federal Circuit changed course, overruling recent decisions and holding that a series of steps may constitute a patentable process only if it is tied to a machine or transforms an article into a different state or

thing. This “machine-or-transformation test” excluded general methods of doing business as well as, potentially, a variety of other subjects that could be called processes.

The Court correctly holds that the machine-or-transformation test is not the sole test for what constitutes a patentable process; rather, it is a critical clue. But the Court is quite wrong, in my view, to suggest that any series of steps that is not itself an abstract idea or law of nature may constitute a “process” within the meaning of § 101. The language in the Court's opinion to this effect can only cause mischief. The wiser course would have been to hold that petitioners' method is not a “process” because it describes only a general method of engaging in business transactions—and business methods are not patentable. More precisely, although a process is not patent-ineligible simply because it is useful for conducting business, a claim that merely describes a method of doing business does not qualify as a “process” under § 101.

## I

Although the Court provides a brief statement of facts, a more complete explication may be useful for those unfamiliar with petitioners' patent application and this case's procedural history.

Petitioners' patent application describes a series of steps for managing risk amongst buyers and sellers of commodities. The general method, described in Claim 1, entails “managing the consumption risk costs of a commodity sold by a commodity provider at a fixed price,” and consists of the following steps:

“(a) initiating a series of transactions between said commodity provider and consumers of said commodity wherein said consumers purchase said commodity at a fixed rate based upon historical averages, said fixed rate corresponding to a risk position of said consumers;

“(b) identifying market participants for said commodity having a counter-risk position to said consumers; and

“(c) initiating a series of transactions between said commodity provider and said market participants at a second fixed rate such that said series of market participant transactions balances the risk

position of said series of consumer transactions.”

Although the patent application makes clear that the “method can be used for any commodity to manage consumption risk in a fixed bill price product,” *id.*, at 11, it includes specific applications of the method, particularly in the field of energy, as a means of enabling suppliers and consumers to minimize the risks resulting from fluctuations in demand during specified time periods. See *id.*, at 20–22. Energy suppliers and consumers may use that method to hedge their risks by agreeing upon a fixed series of payments at regular intervals throughout the year instead of charging or paying prices that fluctuate in response to changing weather conditions. The patent application describes a series of steps, including the evaluation of historical costs and weather variables and the use of economic and statistical formulas, to analyze these data and to estimate the likelihood of certain outcomes. See *id.*, at 12–19.

The en banc Court of Appeals affirmed the [rejection of the patent]. Eleven of the twelve judges agreed that petitioners' claims do not describe a patentable “process,” § 101. Chief Judge Michel's opinion, joined by eight other judges, rejected several possible tests for what is a patent-eligible process, including whether the patent produces a “‘useful, concrete and tangible result,’ ” whether the process relates to “technological arts,” and “categorical exclusions” for certain processes such as business methods. . Relying on several of our cases in which we explained how to differentiate a claim on a “fundamental principle” from a claim on a “process,” the court concluded that a “claimed process is surely patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus, or (2) it transforms a particular article into a different state or thing.” The court further concluded that this “machine-or-transformation test” is “the *sole* test governing § 101 analyses,” and therefore the “test for determining patent eligibility of a process under § 101,” Applying that test, the court held that petitioners' claim is not a patent-eligible process.

In a separate opinion reaching the same conclusion, Judge Dyk carefully reviewed the history of American patent law and English precedents upon which our law is based, and found that “the unpatentability of processes not involving manufactures, machines, or compositions of matter has been firmly

embedded ... since the time of the Patent Act of 1793.” Judge Dyk observed, moreover, that “[t]here is no suggestion in any of this early consideration of process patents that processes for organizing human activity were or ever had been patentable.”

Three judges wrote dissenting opinions, although two of those judges agreed that petitioners' claim is not patent eligible. Judge Mayer would have held that petitioners' claim “is not eligible for patent protection because it is directed to a method of conducting business.” He submitted that “[t]he patent system is intended to protect and promote advances in science and technology, not ideas about how to structure commercial transactions.” Affording patent protection to business methods lacks constitutional and statutory support, serves to hinder rather than promote innovation[,] and usurps that which rightfully belongs in the public domain.”

Judge Rader would have rejected petitioners' claim on the ground that it seeks to patent merely an abstract idea.

Only Judge Newman disagreed with the court's conclusion that petitioners' claim seeks a patent on ineligible subject matter. Judge Newman urged that the en banc court's machine-or-transformation test ignores the text and history of § 101, is in tension with several of decisions by this Court, and the Federal Circuit, and will invalidate thousands of patents that were issued in reliance on those decisions,

## II

Before explaining in more detail how I would decide this case, I will comment briefly on the Court's opinion. The opinion is less than pellucid in more than one respect, and, if misunderstood, could result in confusion or upset settled areas of the law. Three preliminary observations may be clarifying.

First, the Court suggests that the terms in the Patent Act must be read as lay speakers use those terms, and not as they have traditionally been understood in the context of patent law. As I will explain at more length in Part III, , if this portion of the Court's opinion were taken literally, the results would be absurd: Anything that constitutes a series of steps would be patentable so long as it is novel, nonobvious, and described with specificity. But the opinion cannot be taken literally on this point. The Court makes this

clear when it accepts that the “atextual” machine-or-transformation test, is “useful and important,” even though it “violates” the stated “statutory interpretation principles,” and when the Court excludes processes that tend to pre-empt commonly used ideas.

Second, in the process of addressing the sole issue presented to us, the opinion uses some language that seems inconsistent with our centuries-old reliance on the machine-or-transformation criteria as clues to patentability. Most notably, the opinion for a plurality suggests that these criteria may operate differently when addressing technologies of a recent vintage. In moments of caution, however, the opinion for the Court explains—correctly—that the Court is merely restoring the law to its historical state of rest. Notwithstanding this internal tension, I understand the Court’s opinion to hold only that the machine-or-transformation test remains an important test for patentability. Few, if any, processes cannot effectively be evaluated using these criteria.

Third, in its discussion of an issue not contained in the questions presented—whether the particular series of steps in petitioners’ application is an abstract idea—the Court uses language that could suggest a shift in our approach to that issue. Although I happen to agree that petitioners seek to patent an abstract idea, the Court does not show how this conclusion follows “clear[ly],” from our case law. The patent now before us is not for “[a] principle, in the abstract,” or a “fundamental truth.” Nor does it claim the sort of phenomenon of nature or abstract idea that was embodied by the mathematical formula at issue in *Gottschalk*, and in *Flook*.

The Court construes petitioners’ claims on processes for pricing as claims on “the basic concept of hedging, or protecting against risk,” and thus discounts the application’s discussion of what sorts of data to use, and how to analyze those data, as mere “token postsolution components.” In other words, the Court artificially limits petitioners’ claims to hedging, and then concludes that hedging is an abstract idea rather than a term that describes a category of processes including petitioners’ claims. Why the Court does this is never made clear. One might think that the Court’s analysis means that any process that utilizes an abstract idea is *itself* an unpatentable, abstract idea. But we have never suggested any such rule, which

would undermine a host of patentable processes. It is true, as the Court observes, that petitioners’ application is phrased broadly. But claim specification is covered by § 112, not § 101; and if a series of steps constituted an unpatentable idea merely because it was described without sufficient specificity, the Court could be calling into question some of our own prior decisions. For example, a rule that broadly-phrased claims cannot constitute patentable processes could call into question our approval of Alexander Graham Bell’s famous fifth claim on “ ‘[t]he method of, and apparatus for, transmitting vocal or other sounds telegraphically, as herein described, by causing electrical undulations, similar in form to the vibrations of the air accompanying the said vocal or other sounds, substantially as set forth,’ ” *The Telephone Cases*, 126 U.S. 1, 531, 8 S.Ct. 778, 31 L.Ed. 863 (1888).

At points, the opinion suggests that novelty is the clue. But the fact that hedging is “‘long prevalent in our system of commerce,’” cannot justify the Court’s conclusion, as “the proper construction of § 101 ... does not involve the familiar issu[e] of novelty” that arises under § 102. At other points, the opinion for a plurality suggests that the analysis turns on the category of patent involved. But we have never in the past suggested that the inquiry varies by subject matter.

The Court, in sum, never provides a satisfying account of what constitutes an unpatentable abstract idea. Indeed, the Court does not even explain if it is using the machine-or-transformation criteria. The Court essentially asserts its conclusion that petitioners’ application claims an abstract idea. This mode of analysis (or lack thereof) may have led to the correct outcome in this case, but it also means that the Court’s musings on this issue stand for very little.

### III

I agree with the Court that the text of § 101 must be the starting point of our analysis. As I shall explain, however, the text must not be the end point as well.

Pursuant to its power “[t]o promote the Progress of ... useful Arts, by securing for limited Times to ... Inventors the exclusive Right to their ... Discoveries,” U.S. Const., Art. I, § 8, cl. 8, Congress has passed a series of patent laws that grant certain exclusive rights over certain inventions and discoveries as a means of encouraging innovation. In the latest iteration, the Patent Act of 1952 (1952 Act), Congress has provided

that “[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title,” 35 U.S.C. § 101, which include that the patent also be novel, § 102, and non-obvious, § 103. The statute thus authorizes four categories of subject matter that may be patented: processes, machines, manufactures, and compositions of matter. Section 101 imposes a threshold condition. “[N]o patent is available for a discovery, however useful, novel, and nonobvious, unless it falls within one of the express categories of patentable subject matter.”

Section 101 undoubtedly defines in “expansive terms” the subject matter eligible for patent protection, as the statute was meant to ensure that “ingenuit[ies] receive a liberal encouragement.” Nonetheless, not every new invention or discovery may be patented. Certain things are “free for all to use.”

The text of the Patent Act does not on its face give much guidance about what constitutes a patentable process. The statute defines the term “process” as a “process, art or method [that] includes a new use of a known process, machine, manufacture, composition of matter, or material.” § 100(b). But, this definition is not especially helpful, given that it also uses the term “process” and is therefore somewhat circular.

As lay speakers use the word “process,” it constitutes any series of steps. But it has always been clear that, as used in § 101, the term does not refer to a “‘process’ in the ordinary sense of the word.” “[T]he term process is often used in a more vague sense, in which it cannot be the subject of a patent.” Rather, the term “process” (along with the definitions given to that term) has long accumulated a distinctive meaning in patent law. When the term was used in the 1952 Patent Act, it was neither intended nor understood to encompass *any* series of steps or any *way* to do any *thing*.

With that understanding in mind, the Government has argued that because “a word” in a statute “is given more precise content by the neighboring words with which it” associates, we may draw inferences from the fact that “[t]he other three statutory categories of patent-eligible subject matter identified in Section 101—‘machine, manufacture, or composition of

matter’—all ‘are things made by man, and involve technology.’” Specifically, the Government submits, we may infer “that the term ‘process’ is limited to technological and industrial methods.” The Court rejects this submission categorically, on the ground that “§ 100(b) already explicitly defines the term ‘process.’” But § 100(b) defines the term “process” by using the term “process,” as well as several other general terms. This is not a case, then, in which we must *either* “follow” a definition, *or* rely on neighboring words to understand the scope of an ambiguous term. The definition itself contains the very ambiguous term that we must define.

In my view, the answer lies in between the Government’s and the Court’s positions: The terms adjacent to “process” in § 101 provide a clue as to its meaning, although not a very strong clue. Section 101’s list of categories of patentable subject matter is phrased in the disjunctive, suggesting that the term “process” has content distinct from the other items in the list. It would therefore be illogical to “rob” the word “process” of all independent meaning. Moreover, to the extent we can draw inferences about what is a “process” from common attributes in § 101, it is a dangerous endeavor to do so on the basis of a perceived overarching theme. Given the many moving parts at work in the Patent Act, there is a risk of merely confirming our preconceived notions of what should be patentable or of seeing common attributes that track “the familiar issues of novelty and obviousness” that arise under other sections of the statute but are not relevant to § 101. The placement of “process” next to other items thus cannot prove that the term is limited to any particular categories; it does, however, give reason to be skeptical that the scope of a patentable “process” extends to cover any series of steps at all.

The Court makes a more serious interpretive error. The Court at points appears to reject the well-settled proposition that the term “process” in § 101 is not a “‘process’ in the ordinary sense of the word.” Instead, the Court posits that the word “process” must be understood in light of its “ordinary, contemporary, common meaning.” Although this is a fine approach to statutory interpretation in general, it is a deeply flawed approach to a statute that relies on complex terms of art developed against a particular historical background. Indeed, the approach would render § 101 almost comical. A process for training a dog, a series of dance steps, a method of shooting a basketball,

maybe even words, stories, or songs if framed as the steps of typing letters or uttering sounds—all would be patent-eligible. I am confident that the term “process” in § 101 is not nearly so capacious.

The Court attempts to avoid such absurd results by stating that these “[c]oncerns” “can be met by making sure that the claim meets the requirements of § 101.” Because the only limitation on the plain meaning of “process” that the Court acknowledges explicitly is the bar on abstract ideas, laws of nature, and the like, it is presumably this limitation that is left to stand between all conceivable human activity and patent monopolies. But many processes that would make for absurd patents are not abstract ideas. Nor can the requirements of novelty, nonobviousness, and particular description pick up the slack. A great deal of human activity was at some time novel and nonobvious.

What is particularly incredible about the Court's stated method of interpreting § 101 (other than that the method itself may be patent-eligible under the Court's theory of § 101) is that the Court deviates from its own professed commitment to “ordinary, contemporary, common meaning.” As noted earlier, the Court accepts a role for the “atextual” machine-or-transformation “clue.” The Court also accepts that we have “foreclose[d] a purely literal reading of § 101,” by holding that claims that are close to “laws of nature, natural phenomena, and abstract ideas,” do not count as “processes” under § 101, even if they can be colloquially described as such. Curiously, the Court concedes that “these exceptions are not required by the statutory text,” but urges that “they are *consistent* with the notion that a patentable process must be ‘new and useful.’” I do not see how these exceptions find a textual home in the term “new and useful.” The exceptions may be consistent with those words, but they are sometimes inconsistent with the “ordinary, contemporary, common meaning,” of the words “process” and “method.”

#### IV

Because the text of § 101 does not on its face convey the scope of patentable processes, it is necessary, in my view, to review the history of our patent law in some detail. This approach yields a much more straightforward answer to this case than the Court's. As I read the history, it strongly supports the conclusion that a method of doing business is not a “process”

under § 101.

I am, of course, mindful of the fact that § 101 “is a dynamic provision designed to encompass new and unforeseen inventions,” and that one must therefore view historical conceptions of patent-eligible subject matter at an appropriately high level of generality. But it is nonetheless significant that while people have long innovated in fields of business, methods of doing business fall outside of the subject matter that has “historically been eligible to receive the protection of our patent laws,” and likely go beyond what the modern patent “statute was enacted to protect.” It is also significant that when Congress enacted the latest Patent Act, it did so against the background of a well-settled understanding that a series of steps for conducting business cannot be patented. These considerations ought to guide our analysis. As Justice Holmes noted long ago, sometimes, “a page of history is worth a volume of logic.”

#### *English Backdrop*

The Constitution's Patent Clause was written against the “backdrop” of English patent practices, and early American patent law was “largely based on and incorporated” features of the English patent system. The governing English law, the Statute of Monopolies, responded to abuses whereby the Crown would issue letters patent, “granting monopolies to court favorites in goods or businesses which had long before been enjoyed by the public.” The statute generally prohibited the Crown from granting such exclusive rights, but it contained exceptions that, *inter alia*, permitted grants of exclusive rights to the “working or making of any manner of new Manufacture.”

Pursuant to that provision, patents issued for the “mode, method, or way of manufacturing,” and English courts construed the phrase “working or making of any manner of new manufactures” to encompass manufacturing processes. Thus, English courts upheld James Watt's famous patent on a method for reducing the consumption of fuel in steam engines, as well as a variety of patents issued for methods of synthesizing substances or building mechanical devices.

Although it is difficult to derive a precise understanding of what sorts of methods were patentable under English law, there is no basis in the text of the Statute of Monopolies, nor in pre-1790 English

precedent, to infer that business methods could qualify. There was some debate throughout the relevant time period about what processes could be patented. But it does not appear that anyone seriously believed that one could patent “a method for organizing human activity.”

There were a small number of patents issued between 1623 and 1790 relating to banking or lotteries and one for a method of life insurance, but these did not constitute the “prevail[ing]” “principles and practice” in England on which our patent law was based. Such patents were exceedingly rare, and some of them probably were viewed not as inventions or discoveries but rather as special state privileges that until the mid-1800’s were recorded alongside inventions in the patent records. It appears that the only English patent of the time that can fairly be described as a business method patent was one issued in 1778 on a “Plan for assurances on lives of persons from 10 to 80 years of Age.” And “[t]here is no indication” that this patent “was ever enforced or its validity tested;” the patent may thus have represented little more than the whim—or error—of a single patent clerk.

In any event, these patents (or patent) were probably not known to the Framers of early patent law. In an era before computerized databases, organized case law, and treatises, the American drafters probably would have known about particular patents only if they were well publicized or subject to reported litigation. So far as I am aware, no published cases pertained to patents on business methods.

Also noteworthy is what was *not* patented under the English system. During the 17th and 18th centuries, Great Britain saw innovations in business organization, business models, management techniques, and novel solutions to the challenges of operating global firms in which subordinate managers could be reached only by a long sea voyage. Few if any of these methods of conducting business were patented.

#### *Early American Patent Law*

At the Constitutional Convention, the Founders decided to give Congress a patent power so that it might “promote the Progress of ... useful Arts.” Art. I, § 8, cl. 8. There is little known history of that Clause. We do know that the Clause passed without objection or debate. This is striking because other proposed

powers, such as a power to grant charters of incorporation, generated discussion about the fear that they might breed “monopolies.” Indeed, at the ratification conventions, some States recommended amendments that would have prohibited Congress from granting “exclusive advantages of commerce.” If the original understanding of the Patent Clause included the authority to patent methods of doing business, it might not have passed so quietly.

In 1790, Congress passed the first Patent Act, an “Act to promote the progress of useful Arts” that authorized patents for persons who had “invented or discovered any useful art, manufacture, engine, machine, or device, or any improvement therein not before known or used,” if “the invention or discovery [was] sufficiently useful and important.” Three years later, Congress passed the Patent Act of 1793 and slightly modified the language to cover “any new and useful art, machine, manufacture or composition of matter, or any new and useful improvement on any art, machine, manufacture or composition of matter.”

The object of the constitutional patent power and the statutory authorization for process patents in the early patent Acts was the term “useful art.” It is not evident from the face of the statutes or the Constitution whether the objects of the patent system were “arts” that are also useful, or rather a more specific category, the class of arts known as “useful arts.” However, we have generally assumed that “useful art,” at least as it is used in the Patent Act, is itself a term of art.

The word “art” and the phrase “useful arts” are subject to many meanings. There is room on the margins to debate exactly what qualifies as either. There is room, moreover, to debate at what level of generality we should understand these broad and historical terms, given that “[a] rule that unanticipated inventions are without protection would conflict with the core concept of the patent law.” It appears, however, that regardless of how one construes the term “useful arts,” business methods are not included.

Noah Webster’s first American dictionary defined the term “art” as the “disposition or modification of *things* by human skill, to answer the purpose intended,” and differentiated between “useful or mechanic” arts, on the one hand, and “liberal or polite” arts, on the other. (1828). Although other dictionaries defined

the word “art” more broadly, Webster’s definition likely conveyed a message similar to the meaning of the word “manufactures” in the earlier English statute. And we know that the term “useful arts” was used in the founding era to refer to manufacturing and similar applied trades. Indeed, just days before the Constitutional Convention, one delegate listed examples of American progress in “manufactures and the useful arts,” all of which involved the creation or transformation of physical substances. Numerous scholars have suggested that the term “useful arts” was widely understood to encompass the fields that we would now describe as relating to technology or “technological arts.”

Thus, fields such as business and finance were not generally considered part of the “useful arts” in the founding Era. See, e.g., *The Federalist* No. 8, p. 69 (C. Rossiter ed. 1961) (A. Hamilton) (distinguishing between “the arts of industry, and the science of finance”); 30 *The Writings of George Washington 1745–1799*, p. 186 (J. Fitzpatrick ed. 1939) (writing in a letter that “our commerce has been considerably curtailed,” but “the useful arts have been almost imperceptible pushed to a considerable degree of perfection”). Indeed, the same delegate to the Constitutional Convention who gave an address in which he listed triumphs in the useful arts distinguished between those arts and the conduct of business. He explained that investors were now attracted to the “manufactures and the useful arts,” much as they had long invested in “commerce, navigation, stocks, banks, and insurance companies.”

#### *Development of American Patent Law*

During the first years of the patent system, no patents were issued on methods of doing business. Indeed, for some time, there were serious doubts as to “the patentability of processes per se,” as distinct from the physical end product or the tools used to perform a process.

Thomas Jefferson was the “‘first administrator of our patent system’ ” and “the author of the 1793 Patent Act.” We have said that his “conclusions as to conditions of patentability ... are worthy of note.” During his time administering the system, Jefferson “saw clearly the difficulty” of deciding what should be patentable. A skeptic of patents, Jefferson described the problem as “drawing a line between things which are worth to the public the embarrassment of a patent,

and those which are not.” 13 *Writings of Thomas Jefferson* 335 (Memorial ed. 1904).

He drafted the 1793 Act, and, years later, explained that in that Act “the whole was turned over to the judiciary, to be matured into a system, under which every one might know when his actions were safe and lawful.” As the Court has explained, “Congress agreed with Jefferson ... that the courts should develop additional conditions for patentability.” Thus “[a]lthough the Patent Act was amended, revised or codified some 50 times between 1790 and 1950, Congress steered clear” of adding statutory requirements of patentability. For nearly 160 years, Congress retained the term “useful arts,” leaving “wide latitude for judicial construction ... to keep pace with industrial development,”

Although courts occasionally struggled with defining what was a patentable “art” during those 160 years, they consistently rejected patents on methods of doing business. The rationales for those decisions sometimes varied. But there was an overarching theme, at least in dicta: Business methods are not patentable arts. (“method of insuring against loss by bad debts” could not be patented “as an art”); (“A system of transacting business disconnected from the means for carrying out the system is not, within the most liberal interpretation of the term, an art”); (method of abbreviating rail tariff schedules, “if it be novel, is not the kind of art protected by the patent acts”); (holding that novel “‘interstate and national fire-fighting system’ ” was not patentable because, “a system of transacting business, apart from the means for carrying out such system is not” an art within the meaning of the patent law, “nor is an abstract idea or theory, regardless of its importance or ... ingenuity”); (“[A] system for the transaction of business, such, for example, as the cafeteria system for transacting the restaurant business ... however novel, useful, or commercially successful is not patentable apart from the means for making the system practically useful, or carrying it out”); (method of focus-group testing for beverages is not patentable subject matter). Between 1790 and 1952, this Court never addressed the patentability of business methods. But we consistently focused the inquiry on whether an “art” was connected to a machine or physical transformation, an inquiry that would have excluded methods of doing business.

#### *Modern American Patent Law*

By the mid-1900’s, many courts were construing

the term “art” by using words such as “method, process, system, or like terms.” (“The word ‘process’ has been brought into the decisions because it is supposedly an equivalent form of expression or included in the statutory designation of a new and useful art”). Thus in 1952, when Congress updated the patent laws as part of its ongoing project to revise the United States Code, it changed the operative language in § 101, replacing the term “art” with “process” and adding a definition of “process” as a “process, art or method,” § 100(b).

That change was made for clarity and did not alter the scope of a patentable “process.” The new terminology was added only in recognition of the fact that courts had been interpreting the category “art” by using the terms “process or method”; Congress thus wanted to avoid “the necessity of explanation that the word ‘art’ as used in this place means ‘process or method.’”

It appears that when Congress changed the language in § 101 to incorporate the prevailing judicial terminology, it merely codified the prevailing judicial interpretation of that category of subject matter. “While it is true that statutory language should be interpreted whenever possible according to common usage, some terms acquire a special technical meaning by a process of judicial construction.”

*“Anything Under the Sun”*

Despite strong evidence that Congress has consistently authorized patents for a limited class of subject matter and that the 1952 Act did not alter the nature of the then-existing limits, petitioners emphasize a single phrase in the Act’s legislative history, which suggests that the statutory subject matter “include[s] anything under the sun that is made by man.”

This reliance is misplaced. We have never understood that piece of legislative history to mean that any series of steps is a patentable process. Indeed, if that were so, then our many opinions analyzing what is a patentable process were simply wastes of pages in the U.S. Reports. And to accept that errant piece of legislative history as widening the scope of the patent law would contradict other evidence in the congressional record, as well as our presumption that the 1952 Act merely codified the meaning of “process” and did not expand it.

Taken in context, it is apparent that the quoted language has a far less expansive meaning. The full sentence in the Committee Reports reads: “A person may have ‘invented’ a machine or a manufacture, which may include anything under the sun that is made by man, but it is not necessarily patentable under section 101 unless the conditions of [this] title are fulfilled.” Viewed as a whole, it seems clear that this language does not purport to explain that “anything under the sun” is patentable. Indeed, the language may be understood to state the exact opposite: that “[a] person may have ‘invented’ ... anything under the sun,” but that thing “is not necessarily patentable under section 101.”

Moreover, even if the language in the Committee Reports was meant to flesh out the meaning of any portion of § 101, it did not purport to define the term “process.” The language refers only to “manufacture[s]” and “machine[s],” tangible objects “made by man.” It does not reference the “process” category of subject matter (nor could a process be comfortably described as something “made by man”). The language may also be understood merely as defining the term “invents” in § 101. As Judge Dyk explained in his opinion below, the phrase “made by man” “is reminiscent” of a 1790’s description of the limits of English patent law, that an “invention must be ‘made by man’ ” and cannot be “‘a philosophical principle only, neither organized or capable of being organized’ from a patentable manufacture.”

The 1952 Act, in short, cannot be understood as expanding the scope of patentable subject matter by suggesting that any series of steps may be patented as a “process” under § 101. If anything, the Act appears to have codified the conclusion that subject matter which was understood not to be patentable in 1952 was to remain unpatentable.

\* \* \*

Since at least the days of Assyrian merchants, people have devised better and better ways to conduct business. Yet it appears that neither the Patent Clause, nor early patent law, nor the current § 101 contemplated or was publicly understood to mean that such innovations are patentable. Although it may be difficult to define with precision what is a patentable “process” under § 101, the historical clues converge on one conclusion: A business method is not a “pro-

cess.” And to the extent that there is ambiguity, we should be mindful of our judicial role. “[W]e must proceed cautiously when we are asked to extend patent rights” into an area that the Patent Act likely was not “enacted to protect,” lest we create a legal regime that Congress never would have endorsed, and that can be repaired only by disturbing settled property rights.

## VI

The constitutionally mandated purpose and function of the patent laws bolster the conclusion that methods of doing business are not “processes” under § 101.

The Constitution allows Congress to issue patents “[t]o promote the Progress of ... useful Arts,” Art. I, § 8, cl. 8. This clause “is both a grant of power and a limitation.” It “reflects a balance between the need to encourage innovation and the avoidance of monopolies which stifle competition without any concomitant advance in the ‘Progress of Science and useful Arts.’” “This is the standard expressed in the Constitution and it may not be ignored. And it is in this light that patent validity ‘requires reference to [the] standard written into the Constitution.’”

Thus, although it is for Congress to “implement the stated purpose of the Framers by selecting the policy which in its judgment best effectuates the constitutional aim,” we interpret ambiguous patent laws as a set of rules that “wee[d] out those inventions which would not be disclosed or devised but for the inducement of a patent,” and that “embod[y]” the “careful balance between the need to promote innovation and the recognition that imitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.” And absent a discernible signal from Congress, we proceed cautiously when dealing with patents that press on the limits of the “‘standard written into the constitution,’” for at the “fringes of congressional power,” “more is required of legislatures than a vague delegation to be filled in later.” We should not casually risk exceeding the constitutional limitation on Congress’ behalf.

The Court has kept this “constitutional standard” in mind when deciding what is patentable subject matter under § 101. For example, we have held that no one can patent “laws of nature, natural phenomena, and abstract ideas.” These “are the basic tools of

scientific and technological work,” and therefore, if patented, would stifle the very progress that Congress is authorized to promote.

Without any legislative guidance to the contrary, there is a real concern that patents on business methods would press on the limits of the “standard expressed in the Constitution,” more likely stifling progress than “promot[ing]” it. I recognize that not all methods of doing business are the same, and that therefore the constitutional “balance,” may vary within this category. Nevertheless, I think that this balance generally supports the historic understanding of the term “process” as excluding business methods. And a categorical analysis fits with the purpose, as Thomas Jefferson explained, of ensuring that “every one might know when his actions were safe and lawful.”

On one side of the balance is whether a patent monopoly is necessary to “motivate the innovation,” *Pfaff v. Wells Electronics, Inc.*, 525 U.S. 55, 63, 119 S.Ct. 304, 142 L.Ed.2d 261 (1998). Although there is certainly disagreement about the need for patents, scholars generally agree that when innovation is expensive, risky, and easily copied, inventors are less likely to undertake the guaranteed costs of innovation in order to obtain the mere possibility of an invention that others can copy. Both common sense and recent economic scholarship suggest that these dynamics of cost, risk, and reward vary by the type of thing being patented. And the functional case that patents promote progress generally is stronger for subject matter that has “historically been eligible to receive the protection of our patent laws,”

Many have expressed serious doubts about whether patents are necessary to encourage business innovation. Despite the fact that we have long assumed business methods could not be patented, it has been remarked that “the chief business of the American people, is business.” Federal Express developed an overnight delivery service and a variety of specific methods (including shipping through a central hub and online package tracking) without a patent. Although counterfactuals are a dubious form of analysis, I find it hard to believe that many of our entrepreneurs forwent business innovation because they could not claim a patent on their new methods.

“[C]ompanies have ample incentives to develop

business methods even without patent protection, because the competitive marketplace rewards companies that use more efficient business methods.” Burk & Lemley 1618. Innovators often capture advantages from new business methods notwithstanding the risk of others copying their innovation. Some business methods occur in secret and therefore can be protected with trade secrecy. And for those methods that occur in public, firms that innovate often capture long-term benefits from doing so, thanks to various first mover advantages, including lockins, branding, and networking effects. Business innovation, moreover, generally does not entail the same kinds of risk as does more traditional, technological innovation. It generally does not require the same “enormous costs in terms of time, research, and development,” and thus does not require the same kind of “compensation to [innovators] for their labor, toil, and expense.”

Nor, in many cases, would patents on business methods promote progress by encouraging “public disclosure.” Many business methods are practiced in public, and therefore a patent does not necessarily encourage the dissemination of anything not already known. And for the methods practiced in private, the benefits of disclosure may be small: Many such methods are distributive, not productive—that is, they do not generate any efficiency but only provide a means for competitors to one-up each other in a battle for pieces of the pie. And as the Court has explained, “it is hard to see how the public would be benefited by disclosure” of certain business tools, since the non-disclosure of these tools “encourages businesses to initiate new and individualized plans of operation,” which “in turn, leads to a greater variety of business methods.”

In any event, even if patents on business methods were useful for encouraging innovation and disclosure, it would still be questionable whether they would, on balance, facilitate or impede the progress of American business. For even when patents encourage innovation and disclosure, “*too much* patent protection can impede rather than ‘promote the Progress of ... useful Arts.’ ” Patents “can discourage research by impeding the free exchange of information,” for example, by forcing people to “avoid the use of potentially patented ideas, by leading them to conduct costly and time-consuming searches of existing or pending patents, by requiring complex licensing arrangements, and by raising the costs of using the patented” meth-

ods. Although “[e]very patent is the grant of a privilege of exacting tolls from the public,” the tolls of patents on business methods may be especially high.

The primary concern is that patents on business methods may prohibit a wide swath of legitimate competition and innovation. As one scholar explains, “it is useful to conceptualize knowledge as a pyramid: the big ideas are on top; specific applications are at the bottom.” The higher up a patent is on the pyramid, the greater the social cost and the greater the hindrance to further innovation. Thus, this Court stated that “[p]henomena of nature ..., mental processes, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work.” Business methods are similarly often closer to “big ideas,” as they are the basic tools of *commercial* work. They are also, in many cases, the basic tools of further business innovation: Innovation in business methods is often a sequential and complementary process in which imitation may be a “*spur* to innovation” and patents may “become an *impediment*.” “Think how the airline industry might now be structured if the first company to offer frequent flyer miles had enjoyed the sole right to award them.” “[I]mitation and refinement through imitation are both necessary to invention itself and the very lifeblood of a competitive economy.”

If business methods could be patented, then many business decisions, no matter how small, could be *potential* patent violations. Businesses would either live in constant fear of litigation or would need to undertake the costs of searching through patents that describe methods of doing business, attempting to decide whether their innovation is one that remains in the public domain. But as we have long explained, patents should not “embaras[s] the honest pursuit of business with fears and apprehensions of concealed liens and unknown liabilities to lawsuits and vexatious accountings for profits made in good faith.”

These effects are magnified by the “potential vagueness” of business method patents.” When it comes to patents, “clarity is essential to promote progress.” Yet patents on methods of conducting business generally are composed largely or entirely of intangible steps. Compared to “the kinds of goods ... around which patent rules historically developed,” it thus tends to be more costly and time consuming to search through, and to negotiate licenses for, patents on

business methods. See Long 539, 470. [Document1zzB058562022394590](#)

The breadth of business methods, their omnipresence in our society, and their potential vagueness also invite a particularly pernicious use of patents that we have long criticized. As early as the 19th century, we explained that the patent laws are not intended to “creat[e] a class of speculative schemers who make it their business to watch the advancing wave of improvement, and gather its foam in the form of patented monopolies, which enable them to lay a heavy tax upon the industry of the country, without contributing anything to the real advancement of the arts.” Yet business method patents may have begun to do exactly that.

These many costs of business method patents not only may stifle innovation, but they are also likely to “stifle competition.” Even if a business method patent is ultimately held invalid, patent holders may be able to use it to threaten litigation and to bully competitors, especially those that cannot bear the costs of a drawn out, fact-intensive patent litigation. That can take a particular toll on small and upstart businesses. [Document1zzB060582022394590](#) Of course, patents always serve as a barrier to competition for the type of subject matter that is patented. But patents on business methods are patents on business itself. Therefore, unlike virtually every other category of patents, they are by their very nature likely to depress the dynamism of the marketplace. [Document1zzB061592022394590](#)

## VII

The Constitution grants to Congress an important power to promote innovation. In its exercise of that power, Congress has established an intricate system of intellectual property. The scope of patentable subject matter under that system is broad. But it is not endless. In the absence of any clear guidance from Congress, we have only limited textual, historical, and functional clues on which to rely. Those clues all point toward the same conclusion: that petitioners' claim is not a “process” within the meaning of § 101 because methods of doing business are not, in themselves, covered by the statute. In my view, acknowledging as much would be a far more sensible and restrained way to resolve this case. Accordingly, while I concur in the judgment, I strongly disagree with the Court's disposition of this case.

## Justice BREYER, with whom Justice SCALIA joins as to Part II, concurring in the judgment.

### I

I agree with Justice STEVENS that a “general method of engaging in business transactions” is not a patentable “process” within the meaning of 35 U.S.C. § 101. This Court has never before held that so-called “business methods” are patentable, and, in my view, the text, history, and purposes of the Patent Act make clear that they are not. I would therefore decide this case on that ground, and I join Justice STEVENS' opinion in full.

I write separately, however, in order to highlight the substantial *agreement* among many Members of the Court on many of the fundamental issues of patent law raised by this case. In light of the need for clarity and settled law in this highly technical area, I think it appropriate to do so.

### II

In addition to the Court's unanimous agreement that the claims at issue here are unpatentable abstract ideas, it is my view that the following four points are consistent with both the opinion of the Court and Justice STEVENS' opinion concurring in the judgment:

*First*, although the text of § 101 is broad, it is not without limit. “[T]he underlying policy of the patent system [is] that ‘the things which are worth to the public the embarrassment of an exclusive patent,’ ... must outweigh the restrictive effect of the limited patent monopoly.” The Court has thus been careful in interpreting the Patent Act to “determine not only what is protected, but also what is free for all to use.” In particular, the Court has long held that “[p]henomena of nature, though just discovered, mental processes, and abstract intellectual concepts are not patentable” under § 101, since allowing individuals to patent these fundamental principles would “wholly pre-empt” the public's access to the “basic tools of scientific and technological work.”

*Second*, in a series of cases that extend back over a century, the Court has stated that “[t]ransformation

and reduction of an article to a different state or thing is *the clue* to the patentability of a process claim that does not include particular machines.” Application of this test, the so-called “machine-or-transformation test,” has thus repeatedly helped the Court to determine what is “a patentable ‘process.’”

*Third*, while the machine-or-transformation test has always been a “useful and important clue,” it has never been the “sole test” for determining patentability. Rather, the Court has emphasized that a process claim meets the requirements of § 101 when, “considered as a whole,” it “is performing a function which the patent laws were designed to protect (*e.g.*, transforming or reducing an article to a different state or thing).” The machine-or-transformation test is thus an *important example* of how a court can determine patentability under § 101, but the Federal Circuit erred in this case by treating it as the *exclusive test*.

*Fourth*, although the machine-or-transformation test is not the only test for patentability, this by no means indicates that anything which produces a “useful, concrete, and tangible result,” is patentable. “[T]his Court has never made such a statement and, if taken literally, the statement would cover instances where this Court has held the contrary.” Indeed, the introduction of the “useful, concrete, and tangible result” approach to patentability, associated with the Federal Circuit’s *State Street* decision, preceded the granting of patents that “ranged from the somewhat ridiculous to the truly absurd.” To the extent that the Federal Circuit’s decision in this case rejected that approach, nothing in today’s decision should be taken as disapproving of that determination.

In sum, it is my view that, in reemphasizing that the “machine-or-transformation” test is not necessarily the *sole* test of patentability, the Court intends neither to de-emphasize the test’s usefulness nor to suggest that many patentable processes lie beyond its reach.

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