



Phoenix Issue IV. Section 101 –Will Congress find a politically viable legislative fix to address its Mayo/Alice jurisprudence?

**CONSTITUTIONAL CONFINES OF OUR PATENT SYSTEM AND SUBJECT MATTER ELIGIBILITY:
NINE ANSWERS TO TEN QUESTIONS THAT NEED ADDRESSING**

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The U.S. Constitution authorizes Congress to accord exclusive rights to inventors for their respective discoveries, but offers as predicate language for this authority *that such rights are to exist to promote progress in useful arts*.¹ The Supreme Court is aware of what the Constitution states in confining the ability of Congress to make laws that afford exclusive rights to inventors. The Supreme Court, however, calls “balls and strikes.”² Until the pitch is made, there is nothing to call. So exactly what the Supreme Court might someday say about any constitutional confines for the U.S. patent system, including subject matter eligibility confines, is entirely dependent the pitcher—those pitching questions in their petitions for certiorari.

For this reason, it could be useful to anticipate, in the current deliberations on how the law on patent eligibility might be reformed by statute, a few possible future pitches to the Supreme Court and how those pitches might be called. For a nice warm up to § 101 patent eligibility issues, it is useful to look at some possible “balls and strikes” issues that have might have arisen with respect to other areas of patent law in which constitutional constraints would likely be unavoidable from the Supreme Court’s behind-the-plate perch.

For the first pitch, it is worthwhile to consider a pair of disclosure and claim breadth issues:

1. Does the Constitution permit Congress to accord exclusive rights to inventors for their respective discoveries in a manner in which the grant of rights affords the public—and especially skilled mechanic in the useful art to which the invention pertains—*no reasonable certainty as to what subject matter is or is not subject to such rights*? Would such grants of rights be so indefinite, so vague, and so arbitrary as to fail to comply with fundamental notions of fairness to the public that underlie basic concepts of due process?³

¹ Article I, Section 8, Clause 8, of the Constitution provides only that Congress shall have power “To promote the progress of ... useful arts, by securing for limited times to ... inventors the exclusive right to their respective ... discoveries.”

² Opening Statement of Chief Justice Roberts before the Committee on the Judiciary of the U.S. Senate (Sept. 29, 2005) at <https://www.uscourts.gov/educational-resources/educational-activities/chief-justice-roberts-statement-nomination-process>.

³ The Court has addressed this constitutionality issue in other contexts. “We conclude that the statute as it has been construed is unconstitutionally vague within the meaning of the Due Process Clause of the Fourteenth Amendment

2. Does the Constitution permit Congress to accord exclusive rights over *all means that might be discovered* to carry out the objective or purpose the invention is to accomplish, rather than limit the inventor's exclusive rights to the novel means the inventor's patent specification describes as the practical applications of such objective or purpose?

For these two questions, it is clear that the Supreme Court has in the past looked to the patent statute and found statutory requirements, now ensconced in 35 U.S.C. § 112(b)⁴ and 35 U.S.C. § 112(a),⁵ that clearly address any possible constitutional issues. As a result, there is no extra-statutory law that the Supreme Court has ever applied to confine the availability of patents based entirely on what is disclosed and what has been claimed in the patent specification. As long as claims are reasonably definite⁶ and an adequate written description⁷ is provided, the Supreme Court has simply applied the statute and left the Constitution out of the equation.

The Court's history has been quite different when looking at the issue of how claimed inventions differ from prior art. Imagine it is 70 years ago. Imagine that the Supreme Court has been pitched, in the pre-1952 world of patents, the following questions

3. Does the Constitution permit Congress to accord exclusive rights to an individual making a discovery that that would have been merely obvious to any skilled mechanic working in the useful art to which the discovery relates?
4. If a discovery would not have been obvious to a skilled mechanic working in the useful art to which the invention pertains, is the manner in which such non-obvious subject matter was discovered of any relevance under the Constitution to the ability of Congress to afford exclusive rights to such individual for the non-obvious discovery?

As to the first question, the Supreme Court's precedents indicate that the constitutional answer would be resounding "no." The Court would most certainly hold that Congress has no such constitutional remit to authorize the grant of exclusive rights to individuals who do not qualify as "inventors," *i.e.*, have not made any inventive contributions. The Court would also likely hold that the absence of any statutory requirement for inventiveness was of no relevance to the Court's exercise of its constitutional obligation *to imply the existence of limitations in the patent act where Congress had failed to expressly state them*.⁸

As to the latter question, the Supreme Court would have needed to explicitly consider whether there was a constitutional dictate for its "flash of genius" test for "invention"⁹ that the Court had

by failing to clarify what is contemplated...." *Kolender v. Lawson*, 461 US 352, 353-354 (1983). "A vague law impermissibly delegates basic policy matters to ... judges, and juries for resolution on an *ad hoc* and subjective basis, with the attendant dangers of arbitrary and discriminatory applications." *Grayned v. City of Rockford*, 408 US 104, 108-109 (1972).

⁴ "The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention."

⁵ "The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same... ."

⁶ *Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120 (2014).

⁷ *O'Reilly v. Morse*, 56 U.S. 62 (1854) and *Halliburton Oil Well Cementing Co. v. Walker*, 329 U.S. 1, 13 (1946).

⁸ *Hotchkiss v. Greenwood*, 52 U.S. 248, 267 (1851).

⁹ *Cuno Engineering v. Automatic Devices*, 314 U.S. 84, 19 (1941).

set out a decade earlier. Fortunately, perhaps, the Supreme Court was not faced with addressing this fourth question before the enactment of 35 U.S.C. § 103 as part of the 1952 Patent Act.

With § 103, Congress attempted to replace any constitutionally driven limitations on non-obviousness with a statutory requirement and at the same time abrogate the Supreme Court's 1941 "flash of genius" jurisprudence. Today, any constitutional constraints on patenting merely obvious subject matter appear fully codified within the confines of the patent statute.¹⁰

Abrogation of the "flash of genius" test appears to be implicitly accepted by the Supreme Court.

This brings us to the final set of pitched balls. They address, the question of constitutional confines on the subject matter to which exclusive rights might be directed:

5. If a category of subject matter is, by its very nature, incapable of promoting progress in any useful art, does the Constitution nonetheless permit Congress to afford exclusive rights over such subject matter notwithstanding its incapacity to, in any manner, contribute to any useful art?
6. If subject matter—so long as expressed in terms of and confined to a new and non-obvious process, machine, manufacture, or composition of matter—affords a *practical contribution to a useful art*, does the Constitution contain any limitation on the ability of Congress to afford exclusive rights to *any* such subject matter, based solely upon the categorization or classification of that subject matter otherwise?

As to the first question, if squarely pitched to the Supreme Court, it is difficult to see how even a single Justice might find the Constitution was simply *carte blanche* to Congress to protect subject matter with no capacity to contribute in any manner to a useful art. Indeed, the best that can be said of the Supreme Court's views of questions of subject matter eligibility is that the Court is not only acutely *constitutionally aware*, but has been willing to categorically chuck certain types of inventions from the constitutional ambit of the patent system.¹¹ If the Court is prepared to bar patents on progress-stifling grounds, it would presumably be equally aghast at permitting exclusive rights to exist under the Constitution's patent clause *where no prospect whatsoever of promoting progress would exist*.

The last question with respect to 35 U.S.C. § 101's requirement for subject matter eligibility is the analog to the question above with respect to § 103's second sentence and its abrogation of the "flash of genius" test.¹² If the Supreme Court were faced with an explicit statutory provision that assured that subject matter could not be patented without making a *practical*¹³ contribution to a useful art, this limitation should allow Congress to successfully undertake a *Cuno Engineering-*

¹⁰ *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 36 (1966) and *KSR v. Teleflex*, 550 U.S. 398 (2007)

¹¹ "The Court has kept [a] '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" *Bilski v. Kappos*, 130 S.Ct 3218, 3253, J. Stevens, concurring.

¹² "Patentability shall not be negated by the manner in which the invention was made."

¹³ Judicial holdings, including at the Supreme Court, have laid out the parameters of the *practicality* requirement for determining if a claimed invention is "useful." See the holdings in *Brenner v. Manson*, 383 US 519 (1966) and *In re Fisher*, 421 F. 3d 1365 (2005) providing that a practical usefulness is one affording a specific and substantial usefulness.

like abrogation by statute of the *Mayo/Alice* two-part test implementing the Supreme Court’s “implicit exception” to subject matter eligible for patenting.¹⁴

Assuming that some reasonable prospect exists that the Supreme Court’s constitutionally aware analysis of subject matter eligibility would allow the Court to accept a legislative abrogation of any “implicit exception” in favor of an explicit *practical contribution* test, then the next question becomes whether a *technological arts* limitation rather than a limitation focused on the Constitution’s use of the term *useful arts* would represent a better path forward given the use of the term *technology* and its variants outside the United States in patent-eligibility contexts.

To address this issue, consider that the Supreme Court might someday be pitched the following:

7. Had Congress confined subject matter eligibility to that affording a *practical contribution to a technological art*, rather than to a *useful art*, should *technological arts* be construed as being synonymous with the *useful arts*—or construed to reflect that patent-eligible subject matter is not to be coextensive with Congress’s constitutional authority to afford inventors exclusive rights to their discoveries promoting progress in *useful arts*?
8. As between the terms *useful arts* and *technological arts* (or *technology*), if such terminology is not entirely fungible, in what respects does this terminology not represent overlapping subject matter? As to the non-overlapping subject matter, for subject matter that might be within useful arts but not technological arts, did Congress intend that practical contributions to such arts be statutorily ineligible for patenting? For subject matter that might be within the technology arts but not useful arts, on what constitutional authority is Congress basing a statutory grant of exclusive rights to inventors?

As to the first question, it is difficult to formulate a crisp answer. Little extant jurisprudence exists defining what is and is not with useful arts, although the Supreme Court has been presented with limited commentary on this topic.¹⁵ For the “technological arts,” at least one Federal Circuit Judge sees the a *technological arts* limitation coming from—and presumably coextensive with—a constitutional limitation on patent eligibility.¹⁶

¹⁴ See *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S.Ct. 1289 (2012) and *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347 (2014). Claims directed to an abstract idea must offer significantly more in the way of an “inventive concept” in order to qualify as patent-eligible subject matter.

¹⁵ “[W]ith regard to patentability specifically, the importance of the [constitutional] word ‘useful’ is to enable patentability for processes and methods, as systems of rules, but only with respect to their contribution to a patentable ‘trade.’ A ‘new and useful art’ should then be read to mean either (a) an invented system of new rules applying to an existing trade, or (b) a system of rules specifying a new trade. ... [A] ‘trade’ [can be defined] as being ‘distinguished from the liberal arts and learned professions, and from agriculture.’” Brief of Amicus Tony Dutra in Support of Respondents (Feb. 27, 2014), *Alice Corp. v. CLS Bank* (App. No. 13-298) at p. 8 at http://www.americanbar.org/content/dam/aba/publications/supreme_court_preview/briefs-v3/13-298_resp_amcu_td.authcheckdam.pdf.

¹⁶ *Alice Corporation v. CLS Bank International*, 134 S.Ct. 2347, 2356-59 (2014), for all intents and purposes, set out a technological arts test for patent eligibility. Because the purported inventive concept in [the adjudicated] asserted claims is an entrepreneurial rather than a technological one, they fall outside section 101.” Judge Mayer, concurring, *Ultramercial, Inc. v. HULU, LLC*, 772 F. 3d 709, 717 (Fed. Cir. 2014). “*Alice* articulated a technological arts test for patent eligibility. 134 S.Ct. at 2359 (explaining that the claimed method fell outside section 101 because it did not ‘improve the functioning of the computer itself’ or ‘effect an improvement in any other technology or technical field’).” Judge Mayer, dissenting, *DdR Holdings, LLC v. Hotels. Com, LP, supra*, at 773 F. 3d 1265.

The second question addresses what happens if a *Cuno Engineering*-like abrogating statute elects to add a *technological art* rather than a *useful art* limitation. The only plausible outcome would dictate is that the *technological arts* would be construed as less than coextensive with the authority of Congress to afford exclusive rights to inventors for their discoveries. Anything in the term “technological arts” that would fall outside the “useful arts” would be a tough sell to a Supreme Court so consistently constitutionally aware in its interpretation of the patent statutes.

This leads to another question:

9. If Congress in an *Cuno Engineering*-like abrogation of “implicit exceptions to subject matter eligibility under 35 U.S.C. § 101 imposes a *practical contribution to a useful art* requirement in its place, is there a need for any itemized listing of other types of processes, machines, manufactures, or compositions of matter that are to be rendered ineligible for patenting? In brief, can the *practical contribution* test be a superseding test mooted any need to call out in the statute ineligibility for a mathematical formula, social or mental activity, or an economic or commercial principle or relationship or method?

The simple answer is “yes.” A somewhat longer answer is “of course.” Moreover, the advantage of a superseding test is that it would avoid the unimaginably tortuous political controversy over the full content of an enumerated listing of exceptions, in order to assure all relevant constituencies impacted by the patent system that such a listing was complete.

Any ten-question listing merits a fitting last question:

10. Why have the proponents of legislative reform to 35 U.S.C. § 101 in the almost ten years since the Supreme Court’s *Bilski v. Kappos* decision not coalesced around support for a single legislative alternative to the “implicit exception” and its *Mayo/Alice* two-implementing test that—
 - (1) would abrogate that Supreme Court jurisprudence in a *Cuno Engineering*-like manner in favor of a new statutory standard and
 - (2) would (like 35 U.S.C. § 103 under the 1952 Patent Act) be designed so that the new statute could be coextensive with the authority of Congress under the Constitution to afford exclusive rights to inventors for their respective discoveries that make a *practical contribution to a useful art*?

It turns out that this last question is a really good one.¹⁷ Inventors deserve a really good answer to it.

¹⁷ “Given ... the practical realities of the difficulty of passing legislation, absent stakeholder consensus I don’t see a path forward for producing a [§ 101] bill—much less steering it to passage—in this Congress.” Chairman Tillis, Subcommittee on IP, Senate Judiciary Committee at <https://ipo.org/index.php/exclusive-qa-with-sen-thom-tillis/>.