Is There Any Need to Resort to a § 101 Exception for Prior Art Ideas?¹

by Jeremy C. Doerre²

In the wake of Alice,³ many observers have suggested that the implicit judicial exception to 35 U.S.C. § 101 for abstract ideas is now sometimes being used as a judicial or administrative shortcut to invalidate or reject claims that should properly be addressed under 35 U.S.C. § 103. This article notes that “the concern that drives this exclusionary principle [is] one of pre-emption,”⁴ and queries whether, given the Supreme Court’s “standard approach of construing a statutory exception narrowly to preserve the primary operation of the general rule,”⁵ the implicit statutory exception to 35 U.S.C. § 101 for abstract ideas should be narrowly construed to not apply for prior art ideas because 35 U.S.C. § 103 already ensures that claims do not “disproportionately tie up the use of [] underlying’ [prior art] ideas.”⁶

Introduction

The Supreme Court has "long held that [35 U.S.C. § 101] contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable."⁷ In Mayo Collaborative Servs. v. Prometheus Labs., Inc.,⁸ the United States filing as Amicus Curiae urged an exceedingly narrow construction of this exception,⁹

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² Jeremy C. Doerre is a patent attorney with the law firm of Tillman Wright, PLLC. He can be reached at jdoerre@ti-law.com.


⁴ Alice, 134 S. Ct. at 2354.


⁶ Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc., 566 U.S. 66, 73 (2012)).


⁹ See, e.g., Mayo, 566 U.S. at 89 (“the Government argues that virtually any step beyond a statement of a law of nature itself should transform an unpatentable law of nature into a potentially patentable application sufficient to satisfy § 101’s demands.” (citing Brief for United States as Amicus Curiae)).
arguing that "other statutory provisions—those that insist that a claimed process be novel, 35 U.S.C. § 102, that it not be 'obvious in light of prior art,' § 103, and that it be 'full[ly], clear[ly], concise[ly], and exact[ly]' described, § 112—can perform this screening function." The Court did not appear to take issue with the government’s premise that "other statutory provisions...can perform this screening function," but reasonably declined to adopt the government’s specific proposed approach because it would "would make the 'law of nature' exception to § 101 patentability a dead letter" and "is therefore not consistent with prior law."

Subsequently, in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, the Supreme Court applied the implicit judicial exception for abstract ideas to hold ineligible claims that many observers felt could easily have been found unpatentable as obvious under 35 U.S.C. § 103. In the wake of *Alice*, many commentators have suggested that the implicit judicial exception to 35 U.S.C. § 101 for abstract ideas is now sometimes being used as a judicial or administrative shortcut to invalidate or reject claims that should properly be addressed under 35 U.S.C. § 103. However, these decision makers are likely just following the Court’s lead in *Mayo* by applying the implicit judicial exception to 35 U.S.C. § 101 for abstract ideas to claims irrespective of whether they would also be screened out under 35 U.S.C. § 103 as obvious.

Notably, though, “appellate courts do not sit as self-directed boards of legal inquiry and research, but essentially as arbiters of legal questions presented and argued by the parties before them.” While the Court in *Mayo* reasonably declined to adopt an approach which “would make the ... exception to § 101 patentability a dead letter,” there are other potential legal implications stemming from the premise that “other statutory provisions...can perform this screening function” which the Court has not yet had occasion to address.

This article highlights that the implicit judicial exception to 35 U.S.C. § 101 for abstract ideas is driven by pre-emption concerns and suggests that, given the Supreme Court’s “standard approach of construing a statutory exception narrowly to preserve the primary operation of the general rule,” the implicit statutory exception to 35 U.S.C. § 101 could reasonably be narrowly construed to not apply for prior art ideas because 35 U.S.C. § 103 already ensures that claims do not “disproportionately tie up the

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10 *Mayo*, 566 U.S. at 89.
11 *Mayo*, 566 U.S. at 89.
12 *Mayo*, 566 U.S. at 89.
15 *Mayo*, 566 U.S. at 89.
16 *Mayo*, 566 U.S. at 89.
use of [] underlying’ [prior art] ideas.”18 This approach, unlike the approach proposed by the United States in Mayo, would not render the implicit exception to 35 U.S.C. § 101 a dead letter, as the exception would still operate to prevent claims from pre-empting newly discovered or newly articulated ideas.

The implicit statutory exception to 35 U.S.C. § 101 for abstract ideas is driven by pre-emption concerns.

As noted above, the Supreme Court has “long held that [35 U.S.C. § 101] contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.”19 The Court has “described the concern that drives this exclusionary principle as one of pre-emption.”20

While the Federal Circuit has suggested that “[w]here a patent’s claims are deemed only to disclose patent ineligible subject matter under the Mayo framework... preemption concerns are fully addressed and made moot,”21 this suggestion was based on a rationale that “questions on preemption are inherent in and resolved by the § 101 analysis,”22 and does not call into question the reality that pre-emption concerns undergird the implicit judicial exception to 35 U.S.C. § 101. Rather, the Federal Circuit in that same opinion explicitly acknowledged that “[t]he Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability.”23

Indeed, the Supreme Court indicated in Alice that in contrast to claims that “would risk disproportionately tying up the use of the underlying’ ideas, ... and are therefore ineligible for patent protection,” claims that “pose no comparable risk of pre-emption... remain eligible for the monopoly granted under our patent laws.”24

Overall, then, the Supreme Court has articulated an implicit judicial exception to 35 U.S.C. § 101 for abstract ideas driven by pre-emption concerns which exists to ensure that claims do not “disproportionately tie up the use of the underlying’ ideas.”25

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18 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
19 Alice, 134 S. Ct. at 2354.
20 Alice, 134 S. Ct. at 2354.
22 Ariosa, 788 F.3d at 1379. Notably, the Federal Circuit’s suggestion was reinforced by the cogent point that “[w]hile preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” Ariosa, 788 F.3d at 1379.
23 Ariosa, 788 F.3d at 1379.
24 Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
25 Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
Other statutory sections already ensure that claims do not “disproportionately tie up the use of [] underlying [prior art] ideas.”

In the context of a newly discovered law of nature or natural phenomenon, or a newly articulated abstract idea, it makes sense that pre-emption concerns might necessitate resort to an implicit exception to 35 U.S.C. § 101 in order to ensure that claims do not “disproportionately tie up the use of [] underlying ideas.” Notably, however, there is no similar need to resort to use of an implicit exception to prevent undue pre-emption of known prior art abstract ideas, as 35 U.S.C. § 102 and 35 U.S.C. § 103 already ensure that claims do not “disproportionately tie up the use of [] underlying’ [prior art] ideas.” This can be seen in that, under 35 U.S.C. § 103, a claim must be inventive over all known prior art ideas, and cannot simply be an obvious application of a prior art abstract idea, or an obvious combination of several prior art abstract ideas.

In Mayo, the Supreme Court “set forth a framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” This framework involves “[f]irst, [] determin[ing] whether the claims at issue are directed to one of those patent-ineligible concepts.” If so, the analysis proceeds to “consider[ing] the elements of each claim both individually and ‘as an ordered combination’” in a “search for an ‘inventive concept’”—i.e., an element or combination of elements that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.”

The author would suggest that, in the context of a claim that is alleged to be directed to a known prior art abstract idea, any nonobvious element or combination of elements that is sufficient to render the claim patentable over the prior art abstract idea would also be “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” This conclusion is reinforced by the Supreme Court’s characterization of this portion of the analysis as a “search for an ‘inventive concept’,” as the Supreme Court has previously suggested with respect to “a judicial test[ of] ‘invention’ — i.e., ‘an exercise of the

26 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
27 Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
28 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
29 Alice, 134 S. Ct. at 2355 (citing Mayo, 566 U.S. 66).
30 Alice, 134 S. Ct. at 2355 (citing Mayo, 566 U.S. at 77).
31 Alice, 134 S. Ct. at 2355 (quoting Mayo, 566 U.S. at 79).
32 Alice, 134 S. Ct. at 2355 (quoting Mayo, 566 U.S. at 72-73).
33 Alice, 134 S. Ct. at 2355 (quoting Mayo, 566 U.S. at 72-73).
34 Alice, 134 S. Ct. at 2355 (quoting Mayo, 566 U.S. at 72-73).
inventive faculty,”” that “Congress... articulated th[is] requirement in a statute, framing it as a requirement of ‘nonobviousness.”” The author would suggest that this characterization equating nonobviousness with “invention” reinforces the proposition that any element or combination of elements that is sufficient to render a claim nonobvious over a particular prior art abstract idea would also represent “an ‘inventive concept’ ... that is ‘sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [ineligible concept] itself.””

If this is the case, then any pre-emption concerns that a claim might “disproportionately [tie] up the use of [] underlying’ [prior art] ideas” are already addressed by 35 U.S.C. § 103, with no need to resort to use of an implicit exception to 35 U.S.C. § 101 for claims allegedly directed to prior art ideas. That is, there is no need to resort to use of an implicit judicial exception to 35 U.S.C. § 101 for abstract ideas in order to prevent pre-emption of prior art ideas because 35 U.S.C. § 103 already ensures that claims do not “disproportionately [tie] up the use of [] underlying’ [prior art] ideas.”

The implicit statutory exception to 35 U.S.C. § 101 for abstract ideas, like other statutory exceptions, should be narrowly construed.

The Supreme Court has made clear that statutory exceptions generally should be narrowly construed. For example, in Commissioner v. Clark the Court referenced its

36 Dann, 425 U.S. at 225-226.
37 Alice, 134 S. Ct. at 2355 (quoting Mayo, 566 U.S. at 72-73).
38 It is also worth noting that this reasoning is supported by the tautological proposition that an inventive step is sufficient to ensure the existence of an inventive concept, which proposition is relevant because “the term[ ] ‘inventive step’ ... may be deemed ... to be synonymous with the term[ ] ‘non-obvious’. Agreement Establishing the World Trade Organization, Annex 1C - Agreement on Trade-Related Aspects of Intellectual Property Rights, Section 5, note 5.
39 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
40 It is still further worth noting that if an element or combination of elements that might otherwise qualify as an inventive concept is itself alleged to represent or be part of an ineligible abstract idea, e.g. a new mathematical formula, then the claim could simply be alleged to be ineligible as directed to that abstract idea. The author would suggest that identification and emphasis of this abstract idea at risk of being pre-empted, as contrasted with a blanket allegation of a claim as directed to a prior art idea coupled with dismissal of elements or a combination of elements as also abstract, has the advantage of requiring more explicit logical analysis, thus minimizing the likelihood of an error in application.
41 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
"standard approach of construing a statutory exception narrowly to preserve the primary operation of the general rule,"\textsuperscript{43} and noted that "[i]n construing provisions ... in which a general statement of policy is qualified by an exception, we usually read the exception narrowly in order to preserve the primary operation of the provision."\textsuperscript{44}

The Court has even made clear why statutory exceptions should be narrowly construed, articulating in \textit{Phillips, Inc. v. Walling}\textsuperscript{45} that: "[t]o extend an exemption to other than those plainly and unmistakably within its terms and spirit is to abuse the interpretative process and to frustrate the announced will of the people."\textsuperscript{46}

If this is true for explicit statutory exceptions enacted as part of a statute by legislative representatives of the people, it is even more true for implicit statutory exceptions inferred by the judicial branch. The exception to 35 U.S.C. § 101 for abstract ideas is such an implicit statutory exception, as the Supreme Court made clear in noting that it has "long held that th[e] provision of [35 U.S.C. § 101] contains an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable."\textsuperscript{47}

In accordance with Supreme Court guidance regarding construction of statutory exceptions, the implicit statutory exception to 35 U.S.C. § 101 should be construed "narrowly in order to preserve the primary operation of the provision [of 35 U.S.C. § 101]."\textsuperscript{48} To do otherwise would risk "frustrat[ing] the announced will of the people."\textsuperscript{49}

This is especially true with respect to the implicit exception to 35 U.S.C. § 101 for abstract ideas, as the Supreme Court itself has declined to "labor to delimit the precise contours of the ‘abstract ideas’ category,"\textsuperscript{50} but has cautioned that one must "tread carefully in construing this exclusionary principle lest it swallow all of patent law."\textsuperscript{51}

\textsuperscript{43} \textit{Clark}, 489 U.S. at 727.
\textsuperscript{44} \textit{Clark}, 489 U.S. at 739 (citing \textit{Phillips, Inc. v. Walling}, 324 U.S. 490, 493 (1945)).
\textsuperscript{45} \textit{Phillips, Inc. v. Walling}, 324 U.S. 490 (1945)
\textsuperscript{46} \textit{Phillips}, 324 U.S. at 493.
\textsuperscript{47} \textit{Alice}, 134 S. Ct. at 2354.
\textsuperscript{48} \textit{Clark}, 489 U.S. at 739 (citing \textit{Phillips}, 324 U.S. at 493).
\textsuperscript{49} \textit{Phillips}, 324 U.S. at 493.
\textsuperscript{50} \textit{Alice}, 134 S. Ct. at 2357. While the Court’s choice was eminently reasonable, it has left decision makers uncertain as to when to apply the implicit exception to 35 U.S.C. § 101 for abstract ideas.
\textsuperscript{51} \textit{Alice}, 134 S. Ct. at 2354.
The implicit statutory exception to 35 U.S.C. § 101 for abstract ideas could reasonably be narrowly construed to not apply for prior art ideas.

Overall, although the Supreme Court has articulated an implicit statutory exception to 35 U.S.C. § 101 for abstract ideas driven by pre-emption concerns which exists to ensure that claims do not “disproportionately tie up the use of the underlying ideas,” there is no need to resort to this implicit statutory exception for prior art ideas because 35 U.S.C. § 103 already ensures that claims do not “disproportionately tie up the use of [ ] underlying [prior art] ideas.”

Like other statutory exceptions, this implicit statutory exception for abstract ideas should be construed “narrowly in order to preserve the primary operation of the provision [of 35 U.S.C. § 101],” as to do otherwise would risk “frustrat[ing] the announced will of the people.” Accordingly, the implicit statutory exception to 35 U.S.C. § 101 for abstract ideas could reasonably be narrowly construed to not apply for prior art ideas because 35 U.S.C. § 103 already ensures that claims do not “disproportionately tie up the use of [ ] underlying [prior art] ideas.”

Notably, this approach would not disrupt Supreme Court precedent applying the implicit exception to 35 U.S.C. § 101 to guard against pre-emption of newly discovered or novel laws of nature, natural phenomena, and abstract ideas.

For example, in Parker v. Flook, the Court addressed a question regarding eligibility of a novel formula, considering whether, if a “formula is the only novel feature of [a] method[,] ... the discovery of this feature makes an otherwise conventional method eligible for patent protection.” Construing the implicit exception to 35 U.S.C. § 101 narrowly to not apply for prior art ideas would not prevent application, as in Flook, of this implicit exception for a novel formula.

Similarly, in Mayo, the Court addressed claims involving newly discovered natural correlations, where “those in the field did not know the precise correlations between

52 Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
53 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
54 Clark, 489 U.S. at 739 (citing Phillips, 324 U.S. at 493).
55 Phillips, 324 U.S. at 493.
56 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
58 Flook, 437 U.S. at 588 (“For the purpose of our analysis, we assume that respondent’s formula is novel and useful, and that he discovered it. We also assume, since respondent does not challenge the examiner’s finding, that the formula is the only novel feature of respondent’s method. The question is whether the discovery of this feature makes an otherwise conventional method eligible for patent protection.”)
metabolite levels and likely harm or ineffectiveness,”59 and “[t]he patent claims ... set forth processes embodying researchers’ findings that identified these correlations with some precision.”60 Construing the implicit exception to 35 U.S.C. § 101 narrowly to not apply for prior art ideas would not prevent application, as in Mayo, of this implicit exception for newly discovered natural laws.

In contrast, this approach would admittedly be in some tension with prior Supreme Court precedent applying the implicit judicial exception to 35 U.S.C. § 101 to find claims ineligible as directed to abstract ideas which clearly represent prior art ideas. In particular, in Bilski v. Kappos61 the Court found claims ineligible as directed to “[t]he concept of hedging,”62 which it found to be “a fundamental economic practice long prevalent in our system of commerce and taught in any introductory finance class,”63 and in Alice the Court similarly found claims ineligible as directed to “the concept of intermediated settlement,” which it likewise found to be “a fundamental economic practice long prevalent in our system of commerce.”64 Thus, in each of these cases the Court applied the implicit judicial exception to 35 U.S.C. § 101 for a concept that was “long prevalent,” and thus clearly a prior art idea.

However, as noted above, “appellate courts do not sit as self-directed boards of legal inquiry and research, but essentially as arbiters of legal questions presented and argued by the parties before them,”65 and in neither of these cases, nor in any other case, so far as the author is aware, was the Court asked to consider whether the implicit statutory exception to 35 U.S.C. § 101 for abstract ideas should be narrowly construed to not apply for prior art ideas because 35 U.S.C. § 103 already ensures that claims do not “disproportionately tie] up the use of [] underlying’ [prior art] ideas.”66

Perhaps the closest the Court has come in its recent opinions to addressing this issue was in Mayo, where, as noted above, the Court addressed a brief by the United States filing as Amicus Curiae which urged an exceedingly narrow construction of the

59 Mayo, 566 U.S. at 74.
60 Mayo, 566 U.S. at 74.
62 Bilski, 561 U.S. at 611.
64 Alice, 134 S. Ct. at 2356 (quoting Bilski, 561 U.S. at 611) (citing Emery, Speculation on the Stock and Produce Exchanges of the United States, in 7 Studies in History, Economics and Public Law 283, 346-356 (1896)).
66 Quoting Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).
implicit exception to 35 U.S.C. § 101 and argued that “other statutory provisions—those that insist that a claimed process be novel, 35 U.S.C. § 102, that it not be ‘obvious in light of prior art’ § 103, and that it be ‘full[y], clear[ly], concise[ly], and exact[ly]’ described, § 112—can perform this screening function.”

In responding to this argument, the Court “recognize[d] that, in evaluating the significance of additional steps, the § 101 patent-eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap,” but noted that such overlap with another statutory section “need not always be so.” Importantly, because Mayo dealt with newly discovered laws of nature, it did not offer the Court a chance to consider a situation where such overlap with another statutory section will always be present: when considering prior art laws of nature, natural phenomena, and abstract ideas.

Indeed, although the Court explicitly highlighted the category of “newly discovered (and ‘novel’) laws of nature,” and seemed to recognize that such newly discovered laws of nature, natural phenomena, and abstract ideas might sometimes have different implications than prior art laws of nature, natural phenomena, and abstract ideas, the government’s proposed approach did not differentiate between the two, and instead “suggest[ed] in effect that the novelty of a component law of nature may be disregarded when evaluating the novelty of the whole.” The Court noted with respect to the government’s proposed approach that “§§ 102 and 103 say nothing about treating laws of nature as if they were part of the prior art when applying those sections,” and that “patent claims ‘must be considered as a whole’.”

The Court reasonably declined to adopt the government’s proposed approach which attempted to shift the role of screening out newly discovered or novel ideas from the implicit judicial exception to 35 U.S.C. § 101 to other statutory sections, thus rendering the “exception to § 101 patentability a dead letter.” In contrast, narrowly construing the implicit judicial exception to 35 U.S.C. § 101 to not apply for prior art

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67 See, e.g., Mayo, 566 U.S. at 89 (“the Government argues that virtually any step beyond a statement of a law of nature itself should transform an unpatentable law of nature into a potentially patentable application sufficient to satisfy § 101’s demands.” (citing Brief for United States as Amicus Curiae)).

68 Mayo, 566 U.S. at 89.

69 Mayo, 566 U.S. at 90.

70 Mayo, 566 U.S. at 90.

71 See Mayo, 566 U.S. at 90 (“What role would laws of nature, including newly discovered (and ‘novel’) laws of nature, play in the Government’s suggested ‘novelty’ inquiry?”)

72 Mayo, 566 U.S. at 90.

73 Mayo, 566 U.S. at 90.

74 Mayo, 566 U.S. at 90 (quoting Diamond v. Diehr, 450 U.S. 175, 188 (1981)).

75 Mayo, 566 U.S. at 89.
ideas would merely shift the role of screening out prior art ideas back to the other statutory sections where Congress intended it to lie: 35 U.S.C. § 102 and 35 U.S.C. § 103.\textsuperscript{76} Further, unlike the approach proposed by the government in Mayo, narrowly construing the implicit judicial exception to not apply for prior art ideas would not render the exception a dead letter, as the exception would still operate to prevent claims from pre-empting newly discovered or novel ideas.

This approach offers a number of efficiency and consistency advantages which other commentators can likely articulate much more eloquently and completely than the author, but perhaps most importantly this approach would help to guard against “this exclusionary principle ... swallow[ing] all of patent law,”\textsuperscript{77} while still allowing the implicit exception to continue to prevent claims from “‘disproportionately tying up the use of [] underlying’ ideas”\textsuperscript{78} where needed.

\textsuperscript{76} To be clear, the author believes that 35 U.S.C. § 103 should be applied more frequently in accord with KSR Int‘l Co. v. Teleflex Inc., 550 U.S. 398 (2007) to reject and invalidate obvious claims, e.g. claims which merely represent obvious computer implementations of prior art ideas using routine and conventional computer components and functionality.

\textsuperscript{77} Alice, 134 S. Ct. at 2354.

\textsuperscript{78} Alice, 134 S. Ct. at 2354-2355 (quoting Mayo, 566 U.S. at 73).