

No. 17-645

In the
Supreme Court of the United States

RECOGNICORP, LLC
Plaintiff-Petitioner,

v.

NINTENDO CO., LTD AND NINTENDO OF AMERICA,
INC.,
Defendants-Respondents.

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

**Amicus Brief of Twenty-Five Inventor Organizations
In Support of RecogniCorp, LLC**

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Questions before This Court

This case raises a fundamental issue concerning patent eligibility under Section 101 of the Patent Act given that preemption has been the *only* recognized basis for an exception to patent eligibility for over two-hundred years. The issue before the Court in this case is:

Whether a categorical rule having *no* basis in the doctrine of preemption may provide the foundation for a holding of patent ineligibility under 35 U.S.C. § 101?

In addition, *Amici Curiae* ask an additional question of this Court:

Did the Federal Circuit's piecemeal analysis under the first step of the *Alice/Mayo* test violate the established principle that, when making a determination of patent eligibility under 35 U.S.C. § 101, each and every claim limitation must be analyzed as an ordered combination?

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Title 35 U.S.C. §101 passim

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2394, 23996

I. Identity and Interests of *Amici Curiae*, and Motion for Leave to File

The *Amici Curiae* comprise twenty-five separate nationally-recognized inventor associations joined by individual inventors and businessmen. *Amici Curiae* include tens of thousands of members. On behalf of all members, *Amici Curiae* promote policies that foster innovation, growth and a competitive marketplace for innovation, such as protection of software and other related technologies. *Amici Curiae* members have a strong stake in the proper functioning of a predictable U.S. patent system. *Amici Curiae's* members also have a particularly strong interest in the development of appropriate standards for evaluating the patent-eligibility standards for patents pursuant to 35 U.S.C. § 101. Accordingly, *Amici Curiae* respectfully urge the Court to grant leave to file the present Brief, to grant RecogniCorp's Petition and to reverse the decision below. *Amici Curiae* have no stake in the parties or in the outcome of the case beyond the deleterious effects of the instant Decision.¹

The names and affiliations of the *Amici Curiae* are set forth in the Appendix.

¹ No party's counsel authored this brief in whole or part; no party or party's counsel contributed money intended to fund preparing or submitting the brief. No person other than the *Amici Curiae* or its counsel made a monetary contribution to its preparation or submission.

Amici Curiae provided notice to both parties on November 9, 2017, of intent to file on behalf of Petitioner RecogniCorp, and requested consent to file. Both Petitioner and Respondent have since provided express permission to file this Amicus Brief.

II. Summary of Argument / Reasons to Grant Certiorari

The patent eligibility standards used by the Federal Circuit against RecogniCorp are irreconcilable with Supreme Court precedent. There is no claim in any patent based on any technology that can withstand 35 U.S.C. § 101 if treated under the standards used in the present case.

The first fundamental problem with the Federal Circuit's Decision is that it capriciously declares that any process that starts with data, adds an algorithm, and ends with a new form of data must be abstract. See *Recognicorp*, slip op at p. 9, ll. 2-4. Indeed, the Federal Circuit described the present claims as merely "a method whereby a user starts with data, codes the data using 'at least one multiplication,' and ends with different data." *Recognicorp*, slip op at p. 9, ll. 4-7.

As with the machine-or-transformation test and Freeman-Walter-Abele test, the Federal circuit has created yet another categorical rule to determine patent eligibility.

However, unlike any patent-eligibility test previously fashioned by the Federal Circuit, the Federal Circuit's new test is naught but a categorical rule completely divorced from the preemption policy - preemption being the *only* recognized basis for denying patent eligibility under § 101.

The idea that "encoding and decoding" must be abstract under step 1 of the *Alice Corp.*² test regardless of the specific requirements of a claim should be set aside for failure to comply with established preemption policies.

The instant Decision is not just problematic, but a great danger to various modern industries. By way of example, in RecogniCorp's Petition, RecogniCorp (page 2) aptly describes a large variety of at-risk technologies that give rise to multi-billion dollar industries such as "MP3 players, DVD and Blu-ray players, digital cameras, cell phones, videoconferencing

² *Alice Corp. PTY, Ltd v. CLS Bank Int'l*, 134 S.Ct. 2347 (2014).

systems, voiceover-IP telephone systems, and online video services.”

RecogniCorp does not overstate the problem, and indeed understates the problem. Under the erroneous legal analysis and holding of the present decision, any television or computer display designed and produced in the last decade that relies on digital data conversion, data manipulation and data filtering, *which is all of them*, is at risk of losing patent protection. Similarly, any communication or data storage device designed and produced in the last decade that relies on any form of digital data modulation and error correction, *which is all of them*, is at risk of losing patent protection.

The tens of thousands of inventors represented by present Counsel do not advocate that RecogniCorp’s claims must be patent eligible. *Amici Curiae* merely assert that the evidentiary and analytical shortcuts by the Federal Circuit are a capricious departure from established precedent that, if allowed to continue, will negatively affect whole classes of patents and patent applications.

III. The Patent Community Needs Clarification from This Court

On pages 19 et seq. of the Petition for Certiorari, RecogniCorp cites another recent case that provides evidence of the growing problem created by the lower courts. See *Smart Sys. Innovations, LLC v. Chicago Transit Auth.*, ___ F.3d ___, 2017 U.S. App. LEXIS 20333, *25 (Fed. Cir. Oct. 18, 2017) (Linn, J., dissenting in part).

In his dissent, Judge Linn observes that the Federal Circuit is instructed to examine a claim’s “character as a whole” (*Smart Sys. Innovations*, dissent - slip op. at p. 4 (bottom)), admits to confusion as to which limitations can be ignored (*Smart Sys. Innovations*, dissent - slip op. at p. 5 (bottom)), then (correctly) concluded that the majority erred

in ignoring what the claims actually recited. Dissent - slip op. at pp. 8-10. Indeed, the *Smart Sys. Innovations* majority reduced the claims to “the collection, storage, and recognition of data.” *Smart Sys. Innovations*, majority - slip op. at p. 14, ll. 17-19. Judge Linn describes the majority’s decision as a “categorical exclusion.” *Smart Sys. Innovations*, dissent - slip op. at p. 16 (bottom).

Judge Linn’s observations are key to understanding why different individuals can use the same test to come to radically different conclusions. Particularly, when applying the *Alice Corp.* patent-eligibility test, the outcome is determined not by what a claim actually recites, but by the level of abstraction a particular judge views the claim as a function of the particular limitation(s) the judge capriciously chooses to ignore. The outcome is also determined not by virtue of the relative advantages that can be rightfully attributed to an invention, but by which advantages a judge subjectively believes is “something more.”

Amici Curiae assert that the frustrations and concerns of Judge Linn are shared by the rest of the patent community. As an experienced patent prosecution attorney, present Counsel respectfully asserts that the inconsistent treatment by the Federal Circuit outlined by the Honorable Judge Linn has caused chaos at the U. S. Patent and Trademark Office (USPTO). Patent prosecution professionals and examiners alike are frustrated by an inability to reconcile the various published decisions from *DDR Holdings*³ to the present case.

In addition to Judge Linn’s observations, there is an issue that *Amici Curiae* believe is not adequately addressed by Judge Linn’s dissent. That is, there is a relatively recent phenomena by the Federal Circuit where, when confronted with evidence and/or argument that a particular claim does not preempt a natural phenomena or abstract idea, the Federal Circuit side-steps the issue by declaring: “when a

³ *DDR Holdings, LLC v. Hotels.com*, 773 F.3d 1245 (Fed. Cir. 2014).

patent’s claims ‘disclose patent[-]ineligible subject matter[,] . . . preemption concerns are fully addressed and made moot” citing *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). *Smart Sys. Innovations*, majority slip op at p. 20.⁴

That is, the majority in *Smart Sys. Innovations* merely assumed that something somewhere is unduly preempted by virtue of some passing incantation of *Ariosa Diagnostics*. However, asserting that questions of preemption are inherently resolved by a § 101 analysis regardless of the specifics of the § 101 analysis should *not* be tolerated. Reality should not be trumped by an erroneous application of legal theory. If anything, it is the lack of preemption, as there is in the present case, that inherently resolves the erroneous nature of the Federal Circuit’s § 101 rejection.

One example of the deleterious effects of the Federal Circuit’s various decisions is illustrated in *In re Villena*, Appeal No. 2017-2069 (presently before the Federal Circuit), where the USPTO’s first mentioned grounds of rejection under §101 is that the claims include a mathematical algorithm.⁵ ECF Doc. #30, p. 33, ll. 3-6. When Villena pointed out that there was no evidence or cognizable argument that anything was preempted, the USPTO cited the Federal Circuit’s decision in *Ariosa Diagnostics*, and declared the preemption issue “fully addressed” and “moot.” ECF Doc. #30, p. 33, ll. 11-14.

⁴ The Federal Circuit has also avoided addressing the preemption issue by citing *Ariosa Diagnostics* in other cases. See, e.g., *Intellectual Ventures v. Erie Indemnity Co.*, Appeal 2017-1147, slip op at p. 16, n.4 (Fed. Cir. Nov. 3, 2017); *Two-Way Media Ltd. v. Comcast*, Appeal 2016-2531, slip op at p. 14 (Fed. Cir. Nov. 1, 2017); *The Cleveland Clinic v. True Health Diagnostics*, Appeal No. 2016-1766, slip op. at pp. 17-18 (Fed. Cir. June 16, 2017).

⁵ The mere inclusion of a mathematical algorithm in a claim has never been grounds to deny patent eligibility. See *Diehr*, 450 U.S. at p. 177; *Alice Corp.*, 134 S.Ct at p. 2358.

Despite the profound flaws in the USPTO's theory of rejection, the USPTO's Chief Patent Judge refused to allow an *en banc* rehearing on the issue (ECF Doc. #30, p. 10, ll. 1-2), and the USPTO's Solicitor called such theory of rejection "sound." ECF Doc. #10, p. 2 (bottom).

Obviously, observing that a claim includes a mathematical equation does not leave the preemption issue "fully addressed" and "moot." Unfortunately, following Federal Circuit precedent, the USPTO has *de facto* and *de jure* divorced patent eligibility from preemption by virtue of passing incantations of *Ariosa Diagnostics*.

Guidance is desperately needed.

IV. Argument

A. Preemption Is the Only Recognized Basis for Denying Patent Eligibility

The expressly-stated constitutional basis for granting patents is to promote the progress of the useful arts. U.S. Const., Art. I, Sec. 8. Section 101 of the Patent Act defines patent eligible subject matter, providing 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. Section 101's description of patent eligible subject matter is broad. Indeed, § 101 was expressly intended by Congress to "include anything under the sun that is made by man." S. Rep. No. 82-1979 (1952), *reprinted in* 1952 U.S.C.C.A.N. 2394, 2399.

In this modern era, often referred to as "the information age," it is unquestionable that machines and processes directed to data manipulation that either change the form of data (e.g., data compression/coding) or generate new data or

types of data structures are useful arts intended for patent protection.

Despite the broad range of patent eligibility, § 101 is not without boundaries. Specifically, as a fundamental principle, patent eligible subject matter excludes “laws of nature, physical phenomena, and abstract ideas.” As early as *Le Roy v. Tatham*, 55 U.S. 156 (1852), this Court 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.” *Id.* at 175. The purpose of the exclusionary principle is to protect the “basic tools of scientific and technological work.” *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1293 (2012). However, the Supreme Court cautioned the lower courts to “tread carefully in construing this exclusionary principle lest it swallow all of patent law.” *Alice*, 134 S. Ct. at 2354.

The “exclusionary principle” is, and always has been, limited to preemption. “We have described the concern that drives this exclusionary principle as one of pre-emption.” *Id.* For over two-hundred years, the Supreme Court held fast to the standard that *the preemption concern is only the basis for the creation of exceptions to statutory patent eligibility.* *Alice*, 134 S. Ct. at 2354–55. Additionally, the Federal Circuit made clear that “assessing the preemptive effect of a claim helps to inform the *Mayo/Alice* two-step analysis[.]” *Vehicle Intelligence & Safety LLC v. Mercedes-Benz USA LLC*, 635 F. App’x 914, 918 (Fed. Cir. 2015). A lack of preemption is therefore evidence that a particular claim is not abstract. If there is no preemption, the exclusionary principle is being applied too broadly. *Mayo*, 132 S. Ct. at 1293.

Amici Curiae do not propose altering the established principle of preemption being the only basis for patent exclusion. To the contrary, *Amici Curiae* file on behalf of RecogniCorp in order to thwart an ever-increasing expansion

of patent exclusion by the lower courts that have no bases in preemption and that violate the express holdings of this Court.

B. The Federal Circuit's Decision Is Not Based upon Preemption

The Federal Circuit erred in the Decision below because the Federal Circuit's decision has no basis in preemption. In fact, the Federal Circuit does *not* assert that any natural phenomena or anything under the sun previously made by man is preempted or at risk of preemption. It should be of concern to this Court that the word "preempt" (or its derivatives or equivalents) cannot be found anywhere in the Federal Circuit's relatively short decision when *the only reason to declare any claim patent ineligible is preemption*.

While the end result of the methods and systems at issue may not be tangible, the end result of RecogniCorp's claims is a specific facial image and more than just than a number. Regardless, even assuming that the end result were but a number, the Federal Circuit has properly held that there is no requirement that a method physically "transform an article" to be patentable. *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1315 (Fed Cir. 2016) (citing *Alice Corp*). "The concern underlying the exceptions to § 101 is not tangibility, but preemption." *Id.* (citing *Mayo*). The USPTO has for many decades allowed patents directed to the manipulation and production of data and other intangibles. The Federal Circuit's *Enfish*⁶ decision also declared claims directed to a new type of data structure, i.e., a self-referential database, to be patent eligible.

Turning to the present claims, rather than address the only valid concern to the exception to patent eligibility, the Federal Circuit fashioned a categorical rule to deny patent

⁶ *Enfish, LLC v. Microsoft Corp.*, 822 F.3d. 1327 (Fed. Cir. 2016).

eligibility to RecogniCorp's claims. Specifically, the Federal Circuit held that a claim directed to encoding and decoding image data must be abstract regardless of other claim limitations. *RecogniCorp*, slip op. at pp. 6-9.

However, the present claims do not preempt encoding and decoding image data, and the Federal Circuit made no assertion or suggestion to the contrary. Similarly, the present claims do not preempt the idea of using math, and such an idea is nonsensical. Most importantly, the present claims do not preempt the idea of encoding and decoding image data using math, and indeed the Federal Circuit made no assertion to the contrary.

C. The Federal Circuit's Decision Failed to Consider All of the Claim Limitations as an Ordered Combination

The *Diehr* Court⁷ wisely held that, in determining patent eligibility, "claims must be considered as a whole, it being inappropriate to dissect the claims into old and new elements and then to ignore the presence of the old elements in the analysis." *Diehr*, 450 U.S. at 188.

Mayo later clarified that, not only must claims be considered as a whole, but that all claim limitations must be considered "as an ordered combination." *Mayo*, 132 S.Ct. at 1291, 1298. *Alice Corp.* repeated this rule. *Alice Corp.*, 134 S. Ct. at 2350, 2351, 2355, 2359.

McRO, Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299 (Fed. Cir. 2016) not only adhered to the requirement of analyzing "the ordered combination of claimed steps" (*Id.* at 1302), it re-iterated that the courts "must be careful to avoid oversimplifying the claims' by looking at them generally and failing to account for the specific requirements of the claims," and held that "[w]hether at step one or step two of the *Alice* test, in determining the patentability of a method, a court

⁷ *Diamond v. Diehr*, 450 U.S. 175 (1981)

must look to the claims as an ordered combination, without ignoring the requirements of the individual steps.” *Id.* at 1313.

Unfortunately, the Federal Circuit’s decision in the present case does not comply with this Court’s precedent. Specifically, the Federal Circuit did not address all of the claim limitations as an ordered combination. Indeed, the Federal Circuit’s analysis consisted of: (1) conceptually dividing the claims into two portions: data encoding and decoding, and math; (2) asserting that data encoding and decoding is an abstract idea; (3) concluding that math is also an abstract idea; and (4) asserting that two abstracts cannot result in a non-abstract. To wit, the Federal Circuit stated, *inter alia*: “As we explained above, claim 1 is directed to the abstract idea of encoding and decoding. The addition of a mathematical equation that simply changes the data into other forms of data *cannot* save it” (emphasis added). *RecogniCorp*, slip op. at p. 10.

The word “cannot” is simply incorrect.

Certainly, at first blush, the idea that two abstract ideas cannot result in a patent-eligible claim has a flavor to it akin to “two wrongs don’t make a right.” However, the Federal Circuit is still mistaken.

The Federal Circuit’s piecemeal interpretation of claims is improper because it trivializes individual limitations as being abstract. Even assuming that the individual limitations of the instant claims, standing alone, seem ordinary and abstract, the Federal Circuit’s piecemeal analysis has *never* been accepted by this Court.

By way of example, without question curing rubber was as abstract in 1981 as the intermediary-based business method in *Alice Corp.* was in 2014,⁸ and certainly the

⁸ The *Diehr* Court observed that curing rubber is a practice going back to 1854 (*Diehr*, 450 U.S. 175, n. 8), and so curing rubber is evidently older than the business method, i.e., employing an intermediary to facilitate

Arrhenius equation (“ $\ln v = CZ + x$ ”) was and always will be abstract as it is a mathematical expression of a natural phenomenon. Yet a claim that added one abstract (math) to another abstract (curing rubber) was held to be patent eligible by virtue of the particular way that a computer solved the Arrhenius equation to calculate a “cure time” - the claim thereafter employing a conventional, post-solution step of opening a rubber mold.

Under the Federal Circuit’s new precedent, James Diehr’s invention of curing rubber (an abstract) would not have been aided by the inclusion of math (another abstract). Thus, the decision in *Diehr* demonstrates the difference between considering claims as a whole versus applying a specious categorical rule having no basis in preemption.

D. The Federal Circuit’s Decision Will Have Devastating Effects

Turning from legal precedent to practical consequence, the Federal Circuit’s holding will have devastating effects on communications industries and infrastructures.

By way of example, the patents issued in the last thirty years related to Moving Pictures Experts Group (MPEG) encoding and decoding number in the tens of thousands according the USPTO’s own database. The various evolutionary embodiments of MPEG encoding and decoding all constitute algorithms that change data from one form to another form and use math. Entire industries devoted to providing equipment and services for recording, viewing and distributing MPEG-encoded data arose with help from a patent system that encouraged and rewarded such innovation. Throughout the development and deployment of MPEG-related technologies, neither Congress nor the courts (until now) discouraged such technologies by specious

simultaneous exchange of obligations in order to minimize risk, in *Alice Corp.*

assertions that such technologies are abstract and unworthy of patent protection merely because they, as a category, change data from one form to another form and use math.

Amici Curiae do not assert that all claims directed to data encoding and decoding must be patent eligible. *Amici Curiae* merely assert that the Federal Circuit's holding in the instant case is irrationally detached from the doctrine of preemption and the analytical underpinnings in this Court's *Alice* and *Mayo* decisions. *Amici Curiae* further assert that the Federal Circuit's holding will do great damage to many Information Age technologies unless corrected.

V. Conclusion

In view of the foregoing, *Amici Curiae* respectfully requests that this Court *again* make plain that the judicial exceptions to patent eligibility under 35 U.S.C. § 101 must be based on the preemption concern, and that categorical rules that have no discernable basis in preemption be set aside. *Amici Curiae* also respectfully request that this Court *again* make clear that the preemption concern requires an analysis of all limitations of a claim taken as an ordered combination in order to determine whether a claim merely restates a physical principle, law of nature or abstract idea.

Thus, RecogniCorp's Petition should be granted.

Respectfully submitted,

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APPENDIX

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