17 - 645

No. _____

| FILED |
|--------------------------------------------|
| NOV - 1 2017 |
| OFFICE OF THE CLERK SUPREME COURT, U.S. |

In The

Supreme Court of the United States

RECOGNICORP, LLC,

Petitioner,

v.

NINTENDO CO., LTD. AND NINTENDO OF AMERICA, INC.,

Respondents.

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

PETITION FOR A WRIT OF CERTIORARI

JONATHAN D. BAKER

Counsel of Record

MICHAEL D. SAUNDERS

FARNEY DANIELS PC
411 Borel Avenue, Suite 310

San Mateo, California 94402

Telephone: (424) 268-5200

jbaker@farneydaniels.com

Counsel for Petitioner

QUESTIONS PRESENTED

In Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014), the Court set forth a two-step test for determining whether computer-implemented inventions claim patentable subject matter under 35 U.S.C. § 101. First, a court must determine whether the claims at issue are "directed to" an abstract idea. Second, if the claims are "directed to" an abstract idea, the court must then determine whether the claims recite inventive concepts — elements which ensure that the patent amounts to significantly more than a patent upon the abstract idea itself.

The questions presented are:

- 1. Whether computer-implemented inventions that provide specific improvements to existing technological processes for encoding or decoding data are patent-eligible under the first step of the *Alice* test, even if those inventions involve or make use of abstract ideas.
- 2. Whether the use of new mathematical algorithms to improve existing technological processes by reducing bandwidth and memory usage can constitute "inventive concepts" under the second step of the *Alice* test.

PARTIES TO THE PROCEEDINGS

Petitioner RecogniCorp, LLC is the petitioner in this action and was the appellant in the Federal Circuit.

Nintendo Co., Ltd. and Nintendo of America, Inc. are the respondents in this action and were the appellees in the Federal Circuit.

CORPORATE DISCLOSURE STATEMENT

Petitioner RecogniCorp, LLC is a wholly-owned subsidiary of Apache Innovations, L.P. Apache is privately held, has no parent corporation, and no publicly traded corporation owns more than 10% of its stock.

TABLE OF CONTENTS

| | | Page |
|-----|------|------------------------------------------------------------------------------------------------------------------|
| QUI | ESTI | ONS PRESENTEDi |
| PAR | TIE | S TO THE PROCEEDINGSii |
| COF | RPO] | RATE DISCLOSURE STATEMENTii |
| OPI | NIO | NS BELOW 1 |
| STA | TEN | MENT OF JURISDICTION1 |
| STA | TUT | CORY PROVISION INVOLVED1 |
| STA | TEN | 1ENT OF THE CASE2 |
| I. | PR | OCEEDINGS BELOW 5 |
| п. | | PROVEMENTS OF THE PATENTED CHNOLOGY OVER THE PRIOR ART 6 |
| REA | SOI | NS FOR GRANTING THE WRIT9 |
| I. | IS I | E FEDERAL CIRCUIT'S DECISION INCONSISTENT WITH THIS URT'S PRECEDENT IN <i>ALICE</i> , LSKI, AND MAYO9 |
| | A. | This Court's Two-Step Analysis of the Abstract Idea Exception Has Repeatedly Rejected Categorical Rules |
| | В. | Rather Than Applying the First Step of the Abstract Idea Test Set Forth in |

| TABLE OF CONTENTS - Continued | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| Alice and Mayo, the Federal Circuit Applied Broad Categorical Rules | | |
| 1. The Federal Circuit Held That Patents Involving Encoding Are Categorically Directed to an Abstract Idea | | |
| 2. The Federal Circuit Adopted a Categorical Rule That Claims Which Use a Computer "As a Tool" Are Abstract Regardless of Whether They Improve Existing Technology | | |
| C. The Federal Circuit's Step Two Analysis Also Applied Categorical Rules That Jeopardize Patentability of Numerous Areas of Modern Technology | | |
| II. THE FEDERAL CIRCUIT DESPERATELY NEEDS GUIDANCE IN APPLYING THE ABSTRACT IDEA EXCEPTION TO COMPUTER-BASED INVENTIONS | | |
| CONCLUSION 23 | | |

APPENDIX

| Decision of the United States Court of Appeals for the Federal Circuit entered on April 28, 2017 in RecogniCorp, LLC. v. Nintendo Co., Ltd. and Nintendo of America, Inc.; Case No. 2016-1499 |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Memorandum Opinion in the U.S. District Court for the Western District of Washington entered on December 15, 2015 in RecogniCorp, LLC v. Nintendo Co., Ltd. and Nintendo of America, Inc.; Case No. C12-1873RAJ |
| Order Denying Petition for Panel Rehearing and Rehearing En Banc entered on August 2, 2017 in RecogniCorp, LLC v. Nintendo Co., Ltd. and Nintendo of America, Inc.; Case No. 2016-1499 |
| Final Judgment in the U.S. District Court for the Western District of Washington entered on December 18, 2015 in RecogniCorp, LLC v. Nintendo Co., Ltd and Nintendo of America, Inc.; Case No. C12-1873RAJ |

TABLE OF AUTHORITIES

| Page |
|-------------------------------------------------------------------------------------------------------|
| CASES |
| Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347 (2014)passim |
| Bilski v. Kappos, 561 U.S. 593 (2010)passim |
| Diamond v. Chakrabarty, 447 U.S. 303 (1980)9 |
| Diamond v. Diehr, 450 U.S. 175 (1981)12, 14 |
| Eclipse IP LLC v. McKinley Equip. Corp., 2014 U.S. Dist. LEXIS 125395 (C.D. Cal. Sept. 4, 2014) |
| France Telecom SA v. Marvell Semiconductor Inc., 39 F. Supp. 3d 1080 (N.D. Cal. 2014)3 |
| JVC Kenwood Corp. v. Nero, Inc., 797 F.3d 1039 (Fed. Cir. 2015)2 |
| Lucent Technologies, Inc. v. Gateway, Inc., 543 F.3d 710 (Fed. Cir. 2008)2 |
| Mayo Collaborative Servs. v. Prometheus Labs., Inc. 132 S. Ct. 1289 (2012) |

TABLE OF AUTHORITIES - Continued

| O'Reilly v. Morse, |
|--------------------------------------------|
| 56 U.S. 62 (1854) |
| Smart Sys. Innovations, LLC v. Chicago |
| $Transit\ Auth.,$ |
| F.3d, 2017 U.S. App. LEXIS |
| 20333 (Fed. Cir. Oct. 18, 2017) 19, 20 |
| Statutes |
| 28 U.S.C. § 1254(1) |
| 35 U.S.C. § 101passim |
| RULES |
| Fed. R. Civ. P. 12 |
| OTHER AUTHORITIES |
| Donald S. Chisum, 1-1 CHISUM ON PATENTS |
| § 1.03[o][v] (2017)21 |
| David O. Taylor, Confusing Patent |
| Eligibility, 84 TENN. L. REV. 157 |
| (2016) 21, 22 |
| Federal Financial Institutions Examination |
| Council, "Authentication in an Internet |
| Banking Environment," |
| https://www.ffiec.gov/pdf/ |
| authentication_guidance.pdf 3 |

viii

TABLE OF AUTHORITIES - Continued

| Leslie J. Kushner, Federal Circuit Split | |
|------------------------------------------------------------------------|----|
| On Specification's Role In | |
| Determining Patent Eligibility, | |
| https://www.hklaw.com/publications/ | |
| federal-circuit-split-on-specifications- | |
| role-in-determining-patent-eligibility- | |
| 11-22-16 | 21 |
| Merriam-Webster's Collegiate Dictionary (11 th ed. 2003) | 15 |
| Robert R. Sachs, AliceStorm Update | |
| for Q1 2017 Bilski Blog, | |
| http://www.bilskiblog.com/ | |
| blog/2017/04/alicestorm-update- | |
| for-q1-2017.html | 21 |

PETITION FOR A WRIT OF CERTIORARI

Petitioner RecogniCorp, LLC respectfully submits this petition for a writ of certiorari to review the judgment of the U.S. Court of Appeals for the Federal Circuit.

OPINIONS BELOW

The Federal Circuit's opinion is reported at 855 F.3d 1322, and reproduced at Pet. App. 1a. The opinion and order of the U.S. District Court for the Western District of Washington granting judgment on the pleadings (Pet. App. 14a) is unreported. The Federal Circuit's order denying the petition for panel rehearing and rehearing en banc (Pet. App. 35a) is unreported.

STATEMENT OF JURISDICTION

A panel of the U.S. Court of Appeals for the Federal Circuit entered judgment on April 28, 2017. Pet. App. 1a. On August 3, 2017, the court of appeals denied RecogniCorp's petition for panel rehearing and rehearing en banc. *Id.* at 35a. This Court has jurisdiction pursuant to 28 U.S.C. § 1254(1).

STATUTORY PROVISION INVOLVED

Section 101 of the Patent Act provides: "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." 35 U.S.C. § 101.

STATEMENT OF THE CASE

The Federal Circuit's opinion in this case sets forth new rules of patent eligibility that threaten the validity of much, if not all computer technology. In particular, the Federal Circuit's opinion holds ineligible all encoding and decoding patents, including patents covering important technologies such as MP3 audio coding, MPEG video coding, and JPEG image coding. Encoding and decoding data using computers is an important and innovative field of technology.

Data compression is one type of encoding that allows data to be stored using less memory and to be transmitted more quickly. Many advances in technology were made possible by improved encoding algorithms that allowed storage and transmissions of large amounts of data. For example, MP3 players, DVD and Blu-ray players, digital cameras, cell digital televisions. videoconferencing systems, voice-over-IP telephone systems, and online video services such as Netflix and YouTube, all use encoding in the form of data compression to reduce the bandwidth and storage space required for audio/video content. See, e.g., Lucent Technologies, Inc. v. Gateway, Inc., 543 F.3d 710, 715 (Fed. Cir. 2008); JVC Kenwood Corp. v. Nero, Inc., 797 F.3d 1039, 1041 (Fed. Cir. 2015).

Error correction coding is another important encoding technology which allows reliable communication even in the presence of errors. For example, disk drives and optical drives use error correction coding to ensure that data can be correctly retrieved even if some of the bits become corrupted. See, e.g., France Telecom SA v. Marvell Semiconductor Inc., 39 F. Supp. 3d 1080, 1091 (N.D. Cal. 2014).

Similarly, encryption is another type encoding technology that brings security and privacy to a user's data. For example, every time a user visits their bank's website, secure socket layer (SSL) encoding encrypt technology uses to Federal Financial communications. See. e.g.Institutions Examination Council, "Authentication in an Internet Banking Environment," available at https://www.ffiec.gov/pdf/authentication_ guidance.pdf ("The use of digital certificates coupled with encrypted communications (e.g., Secure Socket Layer, or SSL) is one" of the "[t]echniques for authenticating a [banking] Web site.").

Despite the importance of encoding and decoding technology, the Federal Circuit's decision in this case casts a cloud over the patentability of all encoding and decoding patents. In particular, the Federal Circuit held that patents directed to "encoding and decoding," regardless of the specific method of encoding or the subject matter encoded, are categorically directed to an "abstract idea" and therefore fail the first step of this Court's *Alice* test. Pet. App. 8a (analogizing the patent at issue, and encoding in general, to "Morse Code" and "Paul Revere's 'one if by land, two if by sea' signaling system").

The Federal Circuit also held that novel mathematical algorithms or formulas that improve the manner of encoding over the prior art are categorically unpatentable, holding that "[a]dding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim nonabstract" under step one of the Alice test. Pet. App. 9a. Similarly, the Federal Circuit held, under step two of the Alice test, that "[t]he addition of a mathematical equation that simply changes the data into other forms of data," i.e., all encoding technology, "cannot save it." Pet. App. 12a.

These new categorical rules of subject matter patentability are contrary to this Court's well-established precedent. Indeed, in *Bilski*, this Court rejected the Federal Circuit's attempt to use categorical rules to define subject matter patentability, holding that they "would create uncertainty as to the patentability of software . . . and inventions based on linear programming, data compression, and the manipulation of digital signals." *Bilski v. Kappos*, 561 U.S. 593, 605 (2010) (emphasis added).

In Alice, this Court held that computer-based technology can be patentable when it "improve[s] the functioning of the computer itself" or when it "effect[s] an improvement in [a]...technology or technical field." Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2360 (2014). Despite finding that the patented invention "required less memory and bandwidth," the Federal Circuit held that the patent did not "improve[] the functioning of a computer." Pet. App. 2a-3a, 10a. After doing so, it declined to examine whether the patents-in-suit

improved a technology or technical field. Pet. App. 10a-13a. But, data compression and encoding are technical fields. Reductions in memory utilization and bandwidth are the types of technological improvements obtained from data compression and encoding inventions. Thus, although the Federal Circuit's decision purports to apply this Court's Alice test, it instead supplants that analysis with broad rules excluding all encoding and data compression inventions from patentability.

In light of the Federal Circuit's broad language rejecting the patentability of encoding, no matter how novel, sophisticated, or inventive, any patent involving any type of encoding is at risk of being held invalid for claiming unpatentable subject matter. Thus, this Court should grant certiorari to confirm the patent-eligibility of inventions in this important technological field, and to reject the Federal Circuit's categorical approach, which threatens the patentability of numerous technologies of the modern age.

I. PROCEEDINGS BELOW

RecogniCorp filed suit alleging that Nintendo infringes U.S. Patent No. 8,005,303 ("the '303 patent") by, inter alia, making, selling, using, and importing software on Nintendo's video game consoles. Pet. App. 2a, 4a, 15a. Nintendo subsequently filed a motion for judgment on the pleadings, arguing that the '303 patent is invalid under 35 U.S.C. § 101 for claiming patent-ineligible subject matter. Pet. App. 14a.

Applying the Alice test, the District Court granted Nintendo's motion, finding in step one that "encoding and decoding data is . . . an abstract idea" and that the '303 patent was "directed to the abstract idea of encoding and decoding composite facial images using a mathematical formula." Pet. App. 24a, 34a. Under step two of the Alice test, the District Court held that "the entirety of the '303 Patent consists of the encoding algorithm itself or purely conventional or obvious pre-solution activity and post-solution activity." Pet. App. 31a-32a (citations and quotations omitted). RecogniCorp subsequently appealed to the Federal Circuit, which affirmed. Pet. App. 13a.

II. IMPROVEMENTS OF THE PATENTED TECHNOLOGY OVER THE PRIOR ART

The Federal Circuit's opinion correctly described the '303 patent's most important improvements over the prior art:

Prior to the invention disclosed in the '303 patent, composite facial images typically were stored in file formats such as "bitmap." "gif," or "jpeg." But $_{
m these}$ file formats significant required memory. compressing the images often resulted in quality. decreased image Digital transmission of these images could be difficult. The '303 patent sought to solve this problem by encoding the image at one end through a variety of image classes that required less memory and bandwidth, and at the other end decoding the images.

Pet. App. 2a-3a; '303 patent (Federal Circuit Joint Appendix, Appx17) at 1:35-37, 1:57-2:12.

Consistent with this description, RecogniCorp argued that the claims, rather than being directed to the abstract idea of "encoding and decoding" generally, were instead directed to a particular improved encoding process using a specific mathematical algorithm to solve the technological problem of storing and transmitting computergenerated composite facial images. Pet. App. 9-11a; Federal Circuit Opening Appeal Br. at 11.

In particular, claim 1 of the '303 patent, as amended in reexamination before the Patent Office, was found representative by the Federal Circuit. Pet. App. 3a-4a. It recites:

- 1. A method for creating a composite image, comprising:
 - displaying facial feature images on a first area of a first display via a first device associated with the first display, wherein the facial feature images are associated with facial feature element codes;
 - selecting a facial feature image from the first area of the first display via a user interface associated with the first device, wherein the first device incorporates the selected facial feature image into a composite image on a second area of the first display, wherein

the composite image is associated with a composite facial image code having at least a facial element feature code and wherein the composite facial image code is derived by performing \mathbf{at} least one operation multiplication onfacial code using one or more code factors as input parameters to the multiplication operation; and

reproducing the composite image on a second display based on the composite facial image code.

Id,

RecogniCorp identified at least two inventive concepts recited in the claims of the '303 patent: (1) using a single composite facial image code composed of a number of facial feature element codes, such as for lips or eyes, to represent the entire facial image instead of encoding the image pixel-bypixel as was done in the prior art; and (2) using a particular algorithm to combine the various facial feature element codes together into a single composite facial image code by multiplying the facial code by a code factor for each facial feature. Pet. App. 2a, 11a; Federal Circuit Opening Appeal Br. at 30-31; Federal Circuit Reply Br. at 18-23.

REASONS FOR GRANTING THE WRIT

- I. THE FEDERAL CIRCUIT'S DECISION IS INCONSISTENT WITH THIS COURT'S PRECEDENT IN ALICE, BILSKI, AND MAYO.
 - A. This Court's Two-Step Analysis of the Abstract Idea Exception Has Repeatedly Rejected Categorical Rules.

As this Court held in Diamond v. Chakrabarty, 447 U.S. 303, 308 (1980), the Patent Act "embodie[s] [a] philosophy that 'ingenuity should receive a liberal encouragement." Indeed, the Court noted that Congress had described the intended scope of the statute "to 'include anything under the sun that is made by man." Id. at 309. However, this Court has nonetheless held that the statute implicitly excludes "[l]aws of nature, natural phenomena, and abstract ideas" because permitting patents on the "basic tools of scientific and technological work" risks "inhibit[ing] future innovation premised upon them." Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1301-02 (2012).

In applying these exceptions, this Court has repeatedly rejected attempts to establish categorical rules. In *Bilski*, this Court rejected the Federal Circuit's "categorical rule" appointing the "machine-or-transformation test" as "the sole criterion for determining the patentability of inventions." *Bilski v. Kappos*, 561 U.S. 593, 605 (2010). In particular, this Court noted that this test was particularly inappropriate in evaluating the patentability of

inventions in the "Information Age," including "software, advanced diagnostic medicine techniques, and inventions based on linear programming, data compression, and the manipulation of digital signals." *Id.* This Court noted that adopting such a categorical rule would risk "freez[ing] process patents to old technologies, leaving no room for the revelations of the new, onrushing technology." *Id.* at 606.

The *Bilski* court also rejected a proposed categorical rule excluding "business method patents" from the scope of patentability under Section 101. *Id.* at 607-09. The Court noted that although some business method patents could "represent[] an attempt to patent abstract ideas," "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." *Id.* at 608-09.

This Court in Alice again turned to the "abstract idea" exception, and clarified how it applies to computer-based technology. The Court once again rejected the Federal Circuit's attempt to establish regarding categorical rules subject patentability. In particular, the Alice court rejected the Federal Circuit's categorical rule, and instead held that "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." Alice Corp. Pty. Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2358 (2014). Despite holding the claims unpatentable, the Alice court cautioned that the abstract idea exception must not be interpreted too broadly and allowed to "swallow all of patent law," as "all inventions at

some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." Alice, 134 S. Ct. at 2354 (quoting Mayo) (emphasis added). Thus, this Court in Alice set forth several guidelines in determining whether computer-based invention was Inabstract. computer-based particular. Aliceholds that inventions are generally patentable when the claims (1) "purport to improve the functioning of the computer itself"; or (2) "effect an improvement in any other technology or technical field." Id. at 2359. By contrast, Alice holds that claims are generally they take unpatentable when merely "fundamental" and "long prevalent" "practice" and "instruct the practitioner to implement" it "on a generic computer." Id. at 2356, 2359.

- B. Rather Than Applying the First Step of the Abstract Idea Test Set Forth in Alice and Mayo, the Federal Circuit Applied Broad Categorical Rules.
 - 1. The Federal Circuit Held That Patents Involving Encoding Are Categorically Directed to an Abstract Idea.

This Court's Alice standard requires that courts "first determine whether the claims at issue are directed to a patent-ineligible concept." Alice Corp. Pty Ltd. v. CLS Bank Int'l, 134 S. Ct. 2347, 2355 (2014) (emphasis added). However, "an invention is not rendered ineligible for patent simply because it involves an abstract concept." Id. at 2354 (emphasis added). In applying this first part of the Alice test,

this Court has held that it is appropriate to examine whether "[o]n their face, the claims before us are drawn to" an "abstract idea," such as "a fundamental [] practice long prevalent." *Id.* at 2356. It is also well-established by this Court's precedent that, in performing this analysis, the "claims must be considered as a whole." *Diamond v. Diehr*, 450 U.S. 175, 188 (1981).

In this case, as demonstrated by claim 1, the claim requires a number of detailed steps for creating, encoding, and reproducing a composite facial image, including: (1) in designated areas on the user interface of a computer's display, selecting facial feature images to be combined into a composite facial image, (2) creating a composite facial image code by multiplying element codes associated with the selected facial features by code factors, and (3) reproducing the selected composite image on a second display using the composite image facial code. Pet. App. 3a-4a. However, the Federal disregarded the numerous detailed limitations in the claims and concluded that the claims of the '303 patent are "directed to the abstract idea of encoding and decoding image data." App. 8a.

In particular, the Federal Circuit asserted that "[t]his method reflects standard encoding and decoding, an abstract concept long utilized to transmit information," and cited to "Morse code, ordering food at a fast food restaurant via a numbering system, and Paul Revere's 'one if by land, two if by sea' signaling system" as "all exemplify[ing] encoding at one end and decoding at the other end."

Pet. App. 8a.1 In doing so, the Federal Circuit failed to heed this Court's command to consider the claims as a whole and to exercise prudence in the patentability analysis. Indeed, the Federal Circuit's analysis of step one of the Alice test does not mention that the codes are for creating facial images from selected facial features, does not mention that the facial features are selected in designated areas of a user interface of a computer, or that the facial features are each associated with facial feature element codes and code factors which are encoded together into a single composite facial image code using a particular algorithm. Pet. App. 7a-10a. Rather, the Federal Circuit instead held the claims to be directed to an abstract idea merely because they involved encoding, i.e. because the ultimate goal of the patent is "encoding at one end and decoding at the other end." Pet. App. 8a. Thus, the Federal Circuit's precedential holding in this established a new categorical rule that all patents which involve encoding fail the first step of the Alice test.

¹ Notably, despite its reliance on Morse Code, the Federal Circuit's holding was plainly contrary to this Court's holding in Morse. In Morse, the Court found Morse's patent valid except for its broadest claim. O'Reilly v. Morse, 56 U.S. 62 (1854). Specifically, this Court only invalidated the claim to "the use of...electro-magnetism, however developed, for making or printing intelligible characters, signs or letters at any distances." Id. at 62. But this Court found all of the other claims valid, including the claim directed to Morse Code, i.e., "the system of signs, consisting of dots and spaces, and of dots, spaces, and horizontal lines." Id. at 86, 112 ("We perceive no well founded objection to...his right to a patent for the first seven inventions.").

2. The Federal Circuit Adopted a Categorical Rule That Claims Which Use a Computer "As a Tool" Are Abstract Regardless of Whether They Improve Existing Technology.

The Federal Circuit's analysis of step one of the Alice test was also erroneous because it failed to to what extent claims provided analyze thetechnological improvements in the field of facial image encoding. See, e.g., Diamond v. Diehr, 450 U.S. 175, 193 n.15 (1981) ("respondents' claims describe a process of curing rubber beginning with the loading of the mold and ending with the opening of the press and the production of a synthetic rubber product that has been perfectly cured -- a result heretofore unknown in the art"); Alice, 134 S. Ct. at 2358 ("the claims in Diehr were patent eligible because they improved an existing technological process"). Notably, the Federal Circuit's opinion acknowledged that "Itlhe '303 patent sought to solve [the] problem" presented by prior art "file formats" which "required significant memory, and...often resulted in decreased image quality"-"by encoding the image at one end through a variety of image classes that required less memory and bandwidth, and at the other end decoding the images." Pet. App. Thus, plainly, the Federal Circuit acknowledged that the '303 patent improves upon existing technology in the technical field of image encoding and compression.

Nonetheless, the panel opinion rejected patentability under *Alice's* step one because it "does

not claim a software method that improves the functioning of a computer." Pet. App. 10a. As a threshold issue, this is plainly inconsistent with the same opinion's statement that the '303 patent "required less memory and bandwidth" compared to prior art techniques. Pet. App. 2a-3a. Memory consumption and bandwidth utilization properties of the functioning of a computer. See, e.g. Bandwidth. Merriam-Webster's Collegiate Dictionary (11th ed. 2003) ("2: the capacity for data transfer of an electronic communications system"). This apparent inconsistency was justified by another categorical rule adopted by the Federal Circuit—that to computer-based improvements patentable technologies must not involve using a computer "as a tool" but instead that the goal of the patent must be to "improve | the functioning of a computer." Pet. App. 10a. This categorical rule likewise has no support in the case law and jeopardizes the patentability of numerous fields, just like the rule rejected by this Court in Bilski. Indeed, the Federal Circuit's new rule against reciting a computer "as a tool" is even more troubling because it is easily manipulated by a draftsman's art. For example, a method for "reducing memory consumption on a computer" would be more likely to be held patentable than a method which obtains that benefit but which does not recite that as the express goal of the claims.

Additionally, the Federal Circuit's analysis wholly fails to comply with *Alice*'s holding that computer-based claims may be patentable if "they effect an improvement in" a "technology or technical field," even where they do not improve the functioning of the computer. *Alice*, 134 S. Ct. at

The Federal Circuit could not have 2359-60. concluded that the '303 patent did not improve upon a technology or technical field. As this Court has acknowledged, data compression and other forms of encoding are technical fields of invention. See Bilski, 561 U.S. at 605. Indeed, The Federal Circuit's opinion acknowledged that the '303 patent improved upon the prior art methods of encoding facial images. Pet. App. 2a-3a. Thus, its holding that "improv[ing] the functioning of the computer" itself is the sole and exclusive manner of showing patentability under step one for computer-related technologies was clearly inconsistent with Alice. Its choice analysis supplant such with the categorical "computer as a tool" rule provides improper guidance to district courts and to the U.S. Patent Office and justifies granting certiorari.

> C. The Federal Circuit's Step Two Analysis Also Applied Categorical Rules That Jeopardize Patentability of Numerous Areas of Modern Technology.

The panel opinion is also inconsistent with this Court's precedent regarding the second step of the Alice test. As this Court explained in Mayo, this inquiry asks whether the claim "has additional features that provide practical assurance that [it] is more than a drafting effort designed to monopolize the" abstract idea "itself." Mayo Collaborative Servs., 566 U.S. at 77. In particular, this Court has explained that the claims must recite "inventive concepts," other than the abstract idea itself, that

are not merely "well understood, routine, conventional activity." *Id.* at 79.

Indeed, RecogniCorp identified a number of claim limitations that were indisputably not conventional and were beyond merely "encoding." As noted in the Federal Circuit's opinion, "RecogniCorp argue[d] that the claims of the '303 patent contain an inventive concept sufficient to render them patent-eligible," including the "facial feature element codes" and the "particular encoding process using the specific algorithm disclosed" that uses those codes to create a "composite facial image code." Pet. App. 3a, 11a. Moreover, after the user's selection of the facial features and the derivation of the composite facial image code, the claims then recite "reproducing the composite image on a second display based on the composite facial image code." Pet. App. 3a. This limitation therefore reflects the benefits in "memory and bandwidth" described in the specification of the patent—the image can be reproduced from the composite facial image code, which requires less memory and can be sent more quickly than the prior art methods. '303 patent at 1:61-2:12, 2:41-60, 9:57-10:3, 12:1-10.

The Federal Circuit rejected the potential that any such combination of facial feature element codes, code factors, and mathematical algorithms could result in a patentable invention by broadly holding that "[t]he addition of a mathematical equation that simply changes the data into other forms of data cannot save it." Pet. App. 12a. That is, the Federal Circuit rejected the potential that mathematical algorithms, even when implemented on a computer to produce tangible benefits in that

computer's operation, can constitute patentable inventive concepts under the second step of *Alice*. Thus, the Federal Circuit's holding relied on the creation of new categorical rules rather than faithfully applying this Court's precedent.

In particular, the Federal Circuit did not attempt to analyze whether the claimed "facial feature element codes," "code factors," and the particular encoding process using the specific recited algorithm that uses those codes to create a "composite facial image code" were significantly more than "the abstract idea of encoding and decoding image data." Pet. App. 10a-13a. Rather, the Federal Circuit bypassed that analysis by categorically holding that "a mathematical equation that simply changes the data into other forms of data" cannot constitute an inventive concept. Pet. App. 12a. But this is not and should not be the law.

Holding that patents are not eligible for protection where the improvement over the prior art is in the nature of improved algorithms is directly contrary to this Court's repeated rejection of such fixed or categorical approaches to subject matter patentability. Indeed, in Bilski, this Court rejected "the machine-or-transformation test" because "it 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." Id. at 605. But all of those fields, like the claims at issue here, largely involve mathematical operations and algorithms that change "data into Moreover, innovative other forms of data." improvements in those fields, and in computer and

software technology generally, often take the form of new and innovative mathematical algorithms. When appropriately claimed as being performed on a computer as part of an improved technological process, such inventions should certainly be eligible for patent protection. The Federal Circuit's categorical rule to the contrary risks jeopardizing patentability of those and other important fields of the Information Age.

II. THE FEDERAL CIRCUIT DESPERATELY NEEDS GUIDANCE IN APPLYING THE ABSTRACT IDEA EXCEPTION TO COMPUTER-BASED INVENTIONS

As Judge Linn wrote in a recent dissent in another section 101 case: "the contours of the abstract idea exception are not easily defined" and "[f]or that reason, the abstract idea exception is almost impossible to apply consistently and coherently." 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 and concurring in part). In particular, Judge Linn highlighted the dilemma with the first step of the Alice test under the Federal Circuit's current precedent:

In applying the Supreme Court's test, we are instructed to examine the claims' "character as a whole," and look to "capture the 'basic thrust' of the Asserted Claims," or the "prominent idea in the mind of the inventor." This often results in the recharacterization of claims to "a high level of abstraction." Re-characterizing claims in a

way that is "untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule." But if we are not to re-characterize the claims, what are we supposed to do? Are we not to ignore any limitations? May we ignore some? If so, which ones? Which limitations matter and which do not? What exactly is the task at hand under step one?

Step one cannot be a hunt for the abstract idea underlying the claim, because underlying virtually every claim is an abstract idea. And if the task under step one is to assess whether the claim is directed to no more than an abstract idea, what is left for determination under step two? Where do you draw the line between properly determining what the claim is directed to and improperly engaging in an overly reductionist exercise to find the abstract idea that underlies virtually every claim? Despite the number of cases that have faced these questions and attempted to provide practical guidance, great uncertainty vet remains. And the danger of getting the answers to these questions wrong is greatest for some of today's most important inventions in computing, medical diagnostics, artificial intelligence, the Internet of Things, and robotics, among other things.

Id. at *26 (citations omitted).

Indeed, Judge Linn's comments echo those by scholars, commentators, and district court judges, who have characterized the state of the *Alice* test as

a "crisis" involving unpredictable, inconsistent, and panel-dependent decision-making which evokes an "I know it when I see it" standard. See, e.g., David O. Taylor, Confusing Patent Eligibility, 84 TENN. L. REV. 157, 158, 234 (2016) ("Patent law-and in particular the law governing patent eligibility-is in a state of crisis"); *Eclipse IP LLC v. McKinley Equip.* Corp., 2014 U.S. Dist. LEXIS 125395 (C.D. Cal. Sept. 4, 2014) ("So, the two-step test may be more like a one-step test evocative of Justice Stewart's most famous phrase. 'I shall not today attempt further to define the kinds of material I understand to be embraced within that shorthand description; and perhaps I could never succeed in intelligibly doing so. But I know it when I see it") (citation omitted): Donald S. Chisum, 1-1 CHISUM ON PATENTS § 1.03[o][v] (2017) ("The opinions in the [Federal Circuit's 2016 decisions varied in their approaches to the two steps."); Leslie J. Kushner, Federal Circuit Split On Specification's Role In Determining Patent Eligibility, https://www.hklaw.com/publications/federal-circuit-split-on-specifications-role-indetermining-patent-eligibility-11-22-16/ (last visited Oct. 27, 2017) ("since the Federal Circuit is divided on its approach to determination of §101 patent eligibility, the results of any such case will be paneldependent.").

As a result of the *Alice* decision and its application by the Federal Circuit, hundreds of patents and thousands of patent claims are being invalidated for lack of patentable subject matter. *See, e.g.*, Robert R. Sachs, AliceStorm Update for Q1 2017 Bilski Blog, http://www.bilskiblog.com/blog/2017/04/alicestorm-update-for-q1-2017.html (last

visited Oct. 27, 2017). This is likely to result in "substantially reduce[d] incentives to invest in research and development, particularly in the biotechnology and software technology areas." Taylor, *supra* at 240.

Thus, although the Federal Circuit has decided more than ninety cases involving subject matter patentability in the three years since Alice, the Judge Linn identified by problems unresolved. Therefore, the Federal Circuit appears incapable of applying Alice in an appropriate and predictable manner that properly distinguishes between technological improvements that merit patent protection and those that merely claim abstract ideas. Given the dire state of the law of subject matter patentability in the Federal Circuit, the Patent Office, and district courts, granting certiorari to clarify the proper standard for applying abstract idea exception is of significant importance.

For a number of reasons, this case presents an appropriate vehicle for addressing these concerns. First, this case was decided on a Rule 12 motion and therefore presents a pure legal issue that can be resolved without any concern regarding factual disputes. Second, the Federal Circuit decided this case by issuance of a precedential decision which is binding on all future panels at the Federal Circuit. Third, the Federal Circuit's analysis was based on a single exemplary claim, which limits the number of issues necessary for this Court to resolve.

In short, the state of the law of subject matter patentability, especially application of the abstract idea exception to computer-based technology, is unsettled and this case provides an appropriate vehicle to correct the state of the law and provide guidance to the bench and bar.

CONCLUSION

For the foregoing reasons, the Court should grant Petitioner's petition and issue a writ of certiorari to review the judgment of the U.S. Court of Appeals for the Federal Circuit.

Respectfully submitted,

JONATHAN D. BAKER
Counsel of Record
MICHAEL D. SAUNDERS
FARNEY DANIELS PC
411 Borel Avenue, Suite 310
San Mateo, California 94402
Telephone: (424) 268-5200
jbaker@farneydaniels.com

November 1, 2017

Counsel for Petitioner

APPENDIX

APPENDIX TABLE OF CONTENTS

| Decision of the United States Court of Appeals |
|------------------------------------------------|
| for the Federal Circuit entered on April 28, |
| 2017 in RecogniCorp, LLC. v. Nintendo |
| Co., Ltd. and Nintendo of America, Inc.; |
| Case No. 2016-1499 1a-13a |
| Oase 110. 2010-1400, 1a-100 |
| Memorandum Opinion in the U.S. District |
| Court for the Western District of |
| Washington entered on December 15, 2015 |
| |
| in RecogniCorp, LLC v. Nintendo Co., Ltd. |
| and Nintendo of America, Inc.; Case No. |
| C12-1873RAJ 14a-34a |
| Order Denying Petition for Panel Rehearing |
| and Rehearing En Banc entered on August |
| 2, 2017 in RecogniCorp, LLC v. Nintendo |
| Co., Ltd. and Nintendo of America, Inc.; |
| Case No. 2016-1499 |
| Oabe 110, 2010-1400 |
| Final Judgment in the U.S. District Court for |
| the Western District of Washington |
| entered on December 18, 2015 in |
| RecogniCorp, LLC v. Nintendo Co., Ltd |
| - -, |
| and Nintendo of America, Inc.; Case No. |
| C12-1873RAJ 37 |

[ENTERED APRIL 28, 2017]

United States Court of Appeals for the Federal Circuit

RECOGNICORP, LLC, Plaintiff-Appellant

 \mathbf{v} .

NINTENDO CO., LTD., NINTENDO OF AMERICA, INC.,

Defendants-Appellees

2016-1499

Appeal from the United States District Court for the Western District of Washington in No. 2:12-cv-01873-RAJ, Judge Richard A. Jones

Decided: April 28, 2017

JONATHAN DANIEL BAKER, Farney Daniels PC, San Mateo, CA, argued for plaintiff-appellant. Also represented by DAVID P. SWENSON, Minneapolis, MN.

MARK S. PARRIS, Orrick, Herrington & Sutcliffe LLP, Seattle, WA, argued for defendants-appellees. Also represented by DONALD E. DAYBELL, Irvine, CA; MARC SHAPIRO, New York, NY; WILL MELEHANI, San Francisco, CA.

Before LOURIE, REYNA, and STOLL, Circuit Judges REYNA, Circuit Judge.

RecogniCorp sued Nintendo for found The district court infringement. claims ineligible patent subject RecogniCorp's based on that finding, granted matter and. Nintendo's motion for judgment on the pleadings. RecogniCorp appeals. The patent's claims directed to the abstract idea of encoding and decoding image data, and the claims do not contain an inventive concept sufficient to render the patent eligible. Therefore, we affirm.

BACKGROUND

1. The '303 Patent

U.S. Patent No. 8,005,303 ("303 patent") patent is entitled "Method and Apparatus for Encoding/Decoding Image Data." J.A. 17. It teaches a method and apparatus for building a composite facial image using constituent parts. See, e.g., J.A. 27 (col. 1 ll. 30–56 and col. 2 ll. 19–28); J.A. 28 (col. 4 ll. 35–45).

Prior to the invention disclosed in the '303 patent, composite facial images typically were stored in file formats such as "bitmap," "gif," or "jpeg." But these file formats required significant memory, and compressing the images often resulted in decreased image quality. Digital transmission of these images could be difficult. The '303 patent sought to solve this problem by encoding the image at one end through a variety of image classes that required less

memory and bandwidth, and at the other end decoding the images.

For purposes of this appeal, we find amended claim 1 to be representative. It recites:

1. A method for creating a composite image, comprising:

displaying facial feature images on a first area of a first display via a first device associated with the first display, wherein the facial feature images are associated with facial feature element codes;

selecting a facial feature image from the first area of the first display via a user interface associated with the first device, wherein the first device incorporates the selected facial feature image into a composite image on a second area of the first display, wherein the composite image is associated with a composite facial image code having at least a facial feature element code and wherein the composite facial image code is derived by performing at least one multiplication operation on a facial code using one or more code factors as input parameters to the multiplication operation; and

¹ RecogniCorp argued before the district court that "each asserted claim must be analyzed separately." J.A. 3 n.1. RecogniCorp does not maintain this argument on appeal; it therefore is waived. *SmithKline Beecham Corp. v. Apotex Corp.*, 439 F.3d 1312, 1319 (Fed. Cir. 2006). We discuss limitations of other claims where appropriate.

reproducing the composite image on a second display based on the composite facial image code.

J.A. 35 (US 8,005,303 C1, col. 1 ll. 23-40) (Reexamination Certificate for '303 patent)).

2. District Court Litigation and Reexamination

The '303 patent issued on August 23, 2011. J.A. 17. It later was assigned to RecogniCorp, LLC ("RecogniCorp"). In 2012, RecogniCorp filed suit in the United States District Court for the District of Oregon against Nintendo Co., Ltd. and Nintendo of America, Inc. (together, "Nintendo") for infringement of several claims of the '303 patent. J.A. 49, 196. In 2012, the case was transferred to the United States District Court for the Western District of Washington.

The district court stayed the case in 2013 pending a reexamination by the United States Trademark Office ("PTO"). Patent and reexamination focused on obviousness and resulted in several amended claims, including claim 1. See J.A. 35. The amended claims all contain similar multiplication regarding operations. language Specifically, the limitation "wherein the composite facial image code is derived by performing at least one multiplication operation on a facial code using one or more code factors as input parameters to the multiplication operation" (or limitation а added to identical) was substantially independent claims. J.A. 4. In light of these amendments, the PTO issued a reexamination certificate for the '303 patent. Upon completion of the reexamination in 2014, the district court lifted the stay.

In March 2015, Nintendo filed a motion for judgment on the pleadings, asserting that the claims were ineligible under 35 U.S.C. § 101. Section 101 provides that "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and use-ful improvement thereof, may obtain a patent therefore"

There is an exception to that general principle: subject matter directed to laws of nature, natural phenomena, or abstract ideas is not patent-eligible. Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014). The Supreme Court has established a twostep test to determine whether patent claims are directed to ineligible subject matter. In the first step. "we determine whether the claims at issue are directed to one of those patent-ineligible concepts." Id. at 2355. If the answer in step one is yes, "we then ask, '[w]hat else is there in the claims before us?" Id. (quoting Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1297 (2012)). In other words, step two asks whether the patent claims an "inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." Id. at 2357 (quoting Mayo, 132 S. Ct. at 1294, 1298).

In December 2015, without issuing a claim construction ruling, the district court granted Nintendo's motion. At *Alice* step one, the district court concluded that the asserted claims are "directed to the abstract idea of encoding and

decoding composite facial images using a mathematical formula." J.A. 8.

According to the district court:

[The claims] boil down to: (1) displaying potential input variables (the facial features and their modifications), (2) selecting and manipulating the inputs, (3) deriving an output code by performing a "multiplication operation" on the inputs, and (4) outputting the original inputs on another device by performing the sequence in reverse on another device.

J.A. 8. The district court analogized the process to "paint by numbers." J.A. 8.

At Alice step two, the district court found that the '303 patent contains no inventive concept. J.A. 11. It stated that "the entirety of the '303 Patent consists of the encoding algorithm itself or purely conventional or obvious pre-solution activity and post-solution activity insufficient to transform the unpatentable abstract idea into a patent-eligible application." J.A. 14 (quotation marks, citations, and alterations omitted). Based on these findings, the district court granted Nintendo's motion for judgment on the pleadings.

RecogniCorp timely appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(1).

DISCUSSION

1. Standard of Review

We review procedural aspects of motions for judgment on the pleadings using regional circuit law, which in this case is the Ninth Circuit. McRO, Inc. v. Bandai Namco Games Am. Inc., 837 F.3d 1299, 1311 (Fed. Cir. 2016). The Ninth Circuit reviews motions for judgment on the pleadings de novo. Enron Oil Trading & Transp. Co. v. Walbrook Ins. Co., 132 F.3d 526, 528 (9th Cir. 1997). We review § 101 patent eligibility determinations de novo. McRO, 837 F.3d at 1311.

2. Analysis

A. Alice Step One

Under the first step of Alice, we decide whether the claims are directed to ineligible subject matter, such as an abstract idea. McRO, 837 F.3d at 1312; Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343, 1346 (Fed. Cir. 2015). The inquiry often is whether the claims are directed to "a specific means or method" for improving technology or whether they are simply directed to an abstract end-result. McRO, 837 F.3d at 1314. If the claims are not directed to an abstract idea, the inquiry ends. Thales Visionix Inc. v. United States, 850 F.3d 1343, 1349 (Fed. Cir. 2017).

While "generalized steps to be performed on a computer using conventional computer activity" are abstract, *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327, 1338 (Fed. Cir. 2016), not all claims in all

software patents are necessarily directed to an abstract idea, *Ultramercial*, *Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). For example, we have held that software patent claims satisfy *Alice* step one when they are "directed to a specific implementation of a solution to a problem in the software arts," such as an improvement in the functioning of a computer. *Enfish*, 822 F.3d at 1338–39.

We find that claim 1 is directed to the abstract idea of encoding and decoding image data. It claims a method whereby a user displays images on a first display, assigns image codes to the images through an interface using a mathematical formula, and then reproduces the image based on the codes. See J.A. 35 (col. 1 ll. 23-40). This method reflects standard encoding and decoding, an abstract concept long utilized to transmit information. Cf. Intellectual Ventures I LLC v. Capital One Fin. Corp., 850 F.3d 1340-41 (Fed. Cir. 2017) (organizing. 1332.displaying, and manipulating data encoded for human- and machine-readability is directed to an abstract concept). Morse code, ordering food at a fast food restaurant via a numbering system, and Paul Revere's "one if by land, two if by sea" signaling system all exemplify encoding at one end and decoding at the other end. Even the '303 patent describes "a common technique for synthesizing of faces involv[ing] horizontally single images dividing the image of a face into bands for different features," such that "[p]aper strips containing exemplary features [can] then be combined to form a composite drawing of a face." J.A. 27 (col. 1 ll. 37-43).

RecogniCorp invokes Diamond v. Diehr, 450 U.S. 175 (1981), to support its argument that claiming the use of a mathematical formula does not necessarily render a patent ineligible. RecogniCorp is correct. In Diehr, the Supreme Court held that method claim's recitation mathematical formula, "a physical and chemical process for molding precision synthetic rubber products falls within the § 101 categories of possibly patentable subject matter." Id. at 184. In confirming patentability, the Supreme Court focused not on the presence of a mathematical formula but on the subject matter of the claims as a whole. Id. at 192 ("[A] claim containing a mathematical formula" satisfies § 101 when it "implements or applies that formula in a structure or process which, when considered as a whole, is performing a function which the patent laws were designed to protect."). Here, the relevant inquiry does not turn one way or the other just on claim 1's use of multiplication. See J.A. 35 (303 Reexamination Certificate, col. 1 ll. 34-38). Rather, the focus is on the claim as a whole. Diehr is distinguishable because, outside of the math, claim 1 of the '303 patent is not directed to otherwise eligible subject matter. Adding one abstract idea (math) to another abstract idea (encoding and decoding) does not render the claim non-abstract.

RecogniCorp argues that, as in *Enfish*, "the district court mischaracterized the invention using an improperly high level of abstraction that ignored the particular encoding process recited by the claims." Appellant's Op. Br. 11. In *Enfish*, we warned that "describing the claims at such a high level of abstraction and untethered from the

language of the claims all but ensures that the exceptions to § 101 swallow the rule." 822 F.3d at 1337. But the district court did not make that mistake regarding the '303 patent. The claims of the '303 patent are clearly directed to encoding and decoding image data. Unlike Enfish, claim 1 does not claim a software method that improves the functioning of a computer. See id. It claims a "process that qualifies as an 'abstract idea' for which computers are invoked merely as a tool." Id. at 1336.

case is similar to Digitech Image Technologies, LLC v. Electronics for Imaging, Inc., 758 F.3d 1344 (Fed. Cir. 2014). There, the claims of the challenged patent were directed to the abstract organizing information idea ρf mathematical correlations. Id. at 1350-51. We explained that the claim at issue "recites a process of taking two data sets and combining them into a single data set" simply by organizing existing data into a new form. Id. at 1351. A process that started with data, added an algorithm, and ended with a new form of data was directed to an abstract idea. Id. In this case, the '303 patent claims a method whereby a user starts with data, codes that data using "at least one multiplication operation," and ends with a new form of data. We discern no material difference between the Alice step one analysis in Digitech and the analysis here.

We proceed to the second step of *Alice* because the '303 patent claims are directed to an abstract idea.

B. Alice Step Two

In step two of the Alice inquiry, we search for an "inventive concept' sufficient to 'transform the claim into \mathbf{of} the a patent-eligible application." McRO, 837 F.3d at 1312 (quoting Alice, 134 S. Ct. at 2355). To save a patent at step two, an inventive concept must be evident in the claims. See Alice, 134 S. Ct. at 2357 ("[W]e must examine the elements of the claim to determine whether it contains an 'inventive concept." (emphasis added)); Synopsys, Inc. v. Mentor Graphics Corp., 839 F.3d 1138, 1149 (Fed. Cir. 2016) ("The § 101 inquiry must focus on the language of the Asserted Claims themselves.").

RecogniCorp argues that the claims of the '303 patent contain an inventive concept sufficient to render them patent-eligible. Specifically, it contends that the combination of claim elements, i.e., the "particular encoding process using the specific algorithm disclosed" in the patent "transforms" the patentable invention. ideainto a RecogniCorp also points out the "facial feature element codes" and "pictorial entity symbols" disclosed in the '303 patent claims. We find that these claim elements do not transform the nature of the '303 patent claims into a patent-eligible application. McRO, 837 F.3d at 1312.

In DDR Holdings, LLC v. Hotels.com, L.P., we found that the patent claims satisfied Alice step two because "the claimed solution amounts to an inventive concept for resolving [a] particular Internet-centric problem." 773 F.3d 1245, 1259 (Fed. Cir. 2014). Claim 1 of the '303 patent contains no

similar inventive concept. Nothing "transforms" the abstract idea of encoding and decoding into patenteligible subject matter. Alice, 134 S. Ct. at 2357. Nor does the presence of a mathematical formula dictate otherwise. Claims that are directed to a nonabstract idea are not rendered abstract simply because they use a mathematical formula. Diehr, 450 U.S. at 187. But the converse is also true: A claim directed to an abstract idea does not automatically become eligible merely by adding a mathematical formula. See, e.g., Clarilogic, Inc. v. FormFree Holdings Corp., _ F. App'x __, 2017 WL 992528, at *3 (Fed. Cir. Mar. 15, 2017). 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.

In BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC, the patent owner "alleged that an inventive concept can be found in the ordered combination of claim limitations that transform the abstract idea of filtering content into a particular, practical application of that abstract idea." 827 F.3d 1341, 1352 (Fed. Cir. 2016). We found the allegation sufficient to survive a motion to dismiss, where all facts had to be construed in the patent owner's favor. alleged Here, RecogniCorp has notparticularized application of encoding and decoding image data. Indeed, claim 1 does not even require a computer; the invention can be practiced verbally or with a telephone. J.A. 28 (col. 4 ll. 59-63); J.A. 32 (col. 11 ll. 53-59). Independent claim 36 claims the use of a computer, but it does exactly what we have warned it may not: tell a user to take an abstract idea and apply it with a computer. Versata Dev.

Grp., Inc. v. SAP Am., Inc., 793 F.3d 1306, 1332 (Fed. Cir. 2015).

In sum, the claims of the '303 patent lack an inventive concept that transforms the claimed subject matter from an abstract idea into a patent-eligible application. *Alice*, 134 S. Ct. at 2357.

CONCLUSION

The claims of the '303 patent are directed to encoding and decoding image data, an abstract idea. The claims provide no inventive concept to render them eligible under § 101. We therefore affirm the district court's grant of Nintendo's motion for judgment on the pleadings.

AFFIRMED

Costs

No costs.

[DECIDED DECEMBER 15, 2015]

HONORABLE RICHARD A. JONES

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF WASHINGTON AT SEATTLE

RECOGNICORP, LLC

Plaintiff,

V.

NINTENDO CO., LTD., et al.,

Defendant

CASE NO. C121873RAJ

ORDER

I. INTRODUCTION

This matter comes before the court on Defendants Nintendo Co., Ltd. and Nintendo of America, Inc.'s (collectively "Nintendo") Motion for Judgment on the Pleadings on the grounds that the single patent asserted by Plaintiff RecogniCorp, LLC ("Recognicorp") covers ineligible subject matter. Dkt. # 105. Having heard and considered the Parties' arguments, the Court hereby GRANTS Nintendo's Motion. Dkt. # 105.

II. BACKGROUND & ANALYSIS

Recognicorp is the assignee of United States Patent No. 8,005,303 (the "303 Patent"), entitled "Method And Apparatus For Encoding/Decoding Image Data." Dkt. # 1 (Compl.) ¶¶ 10, 12; Dkt. # 106-1 (Parris Decl.) Ex. A. Recognicorp alleges that Nintendo has infringed upon the '303 Patent by selling composite image customization products, including "software included on the Nintendo Wii to create and customize a facial (or other) feature of a Mii." Id. ¶¶ 13, 15.

This case was originally filed in the United States District Court for the District of Oregon, but was transferred to this Court in October 2012. See Dkt. #43. In May 2013, the Court stayed this action pending the United States Patent and Trademark Office's ("USPTO") reexamination of the '303 Patent. See Dkt. # 83. As a result of the USPTO's reexamination, the USPTO issued a reexamination certificate for the '303 Patent. The claims of the '303 Patent were amended to include additional limitations and several claims were canceled. See Dkt. # 87; see also Dkt. # 106-3 (Parris Decl.) Ex. C. Accordingly, the Court lifted the stay on May 27, 2014. Dkt. # 88.

The '303 Patent discloses a "method and an apparatus for encoding images." Dkt. # 106-1 (Parris Decl.) Ex. A at Abstract. It explains that "[i]t is known in the art to create images on the basis of components that are assembled to form a complete image," such as by using "[p]aper strips containing exemplary features" or by using "a program element running on a computing platform which allows a user to select individual components and combining them on a preselected face." See id. at 1:36-46. In so "constructing an image, pictorial entities are selected from a library of entities as assembled into images," storage of which

may require "significant amounts of memory." *Id.* at 1:57-62. As a result, the '303 Patent explains that "there exists a need in the industry to refine the process of encoding images such as to reduce the memory requirements for storage and the bandwidth required for the transmission of the image." *Id.* at 2:9-13.

Nintendo argues that Claim 1 is representative. See Dkt. # 105 at 5-6. That Claim reads:

The Court finds that it is appropriate to consider Nintendo's Motion without an explicit claim-by-claim analysis because each of the independent claims in the '303 Patent, as amended on reexamination, is directed at the same purpose. Furthermore, the dependent claims add only minor limitations without changing the image encoding process. Claim 2, for example, requires that the facial image be reproduced on another device. Dkt. #106-1 (Parris Decl) Ex. A 12:46-47. Claims 3 through 9 add that the user may be able to modify the facial features. *Id.* 12:48-67. And claims 11 through 15 provide that the composite image code can be saved or transmitted to another device. *Id.* at 13:3-17.

¹ RecogniCorp argues each asserted claim must be analyzed separately. See Dkt. # 113 at 7-8. Neither party provides a comprehensive claim-by-claim analysis. As such, where necessary, the Court addresses the few instances where the claims need be separately discussed. Where all claims are directed to the same abstract idea, "addressing each claim of the asserted patents . . . [is] unnecessary." Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1348 (Fed. Cir. 2014); In re TLI Comme'ns LLC Patent Litig., MDL No. 1:14md2534, 2015 WL 627858, at *9 (E.D. Va. Feb. 6, 2015); see also IPLearn-Focus, LLC v. Microsoft Corp., Case No. 14-cv-00151-JD, 2015 WL 4192092, at *5 (N.D. Cal. July 10, 2015).

A method for creating a composite image, comprising:

displaying facial feature images on a first area of a first display via a first device associated with the first display, wherein the facial feature images are associated with facial feature element codes;

selecting a facial feature image from the first area of the first display via a user interface associated with the first device, wherein the first device incorporates the selected facial feature image into a composite image on a second area of the first display, wherein the composite image is associated with a composite facial image code having at least a facial feature element code and wherein the composite facial image code is derived by performing at least one multiplication operation on a facial code using one or more code factors as input parameters to the multiplication operation; and

reproducing the composite image on a second display based on the composite facial image code.

Dkt. # 106 (Parris Decl.) Ex. C at 1:23-41 (emphasis in original).

The other independent claims recite similar, if not identical, limitations, including the limitation "wherein the composite facial image code is derived by performing at least one multiplication operation on a facial code using one or more code factors as input parameters to the multiplication operation," which was added on reexamination. See Dkt. # 106 (Parris Decl.) Ex. C at 1:34-39, 1:59-62, 2:14-17, 2:34-37, 2:54-57.

III. LEGAL STANDARD

A motion for judgment on the pleadings under Federal Rule of Civil Procedure 12(c) is "functionally equivalent" to a Rule 12(b)(6) motion to dismiss for failure to state a claim. Harris v. Cnty. of Orange, 682 F.3d 1126, 1131 (9th Cir. 2012). Rule 12(b)(6) requires the court to assume the truth of the complaint's factual allegations all and credit reasonable inferences arising from its allegations. Sanders v. Brown, 504 F.3d 903, 910 (9th Cir. 2007). The plaintiff must point to factual allegations that "state a claim to relief that is plausible on its face." Bell Atl. Corp. v. Twombly, 550 U.S. 544, 568 (2007). If the plaintiff succeeds, the complaint avoids dismissal if there is "any set of facts consistent with the allegations in the complaint" that would entitle the plaintiff to relief. Id. at 563; Ashcroft v. Igbal, 556 U.S. 662, 679 (2009) ("When there are well-pleaded factual allegations, a should assume their veracity and then court determine whether they plausibly give rise to an entitlement to relief.").

The court typically cannot consider evidence beyond the four corners of the complaint, although it may rely on a document to which the complaint refers if the document is central to the party's claims and its authenticity is not in question. *Marder v. Lopez*, 450 F.3d 445, 448 (9th Cir. 2006). The court may also

consider evidence subject to judicial notice. *United States v. Ritchie*, 342 F.3d 903, 908 (9th Cir. 2003).²

IV. ANALYSIS

A. Initial Procedural Issues

Initially, Recognicorp argues that Nintendo's motion is premature because the Court has not yet construed the claims at issue in this case. See Dkt. # 113 at 6-7.

The Federal Circuit has instructed that "claim construction is not an inviolable prerequisite to a validity determination under § 101." Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Canada (U.S.), 687

² Nintendo presents a significant portion of the '303 Patent's prosecution history in support of their motion. See Dkt. # 106 (Parris Decl.); Dkt. # 123. The Court does not rely on any of the presented materials other than documents expressly incorporated by reference in the '303 Patent, such as certain other patents and therefore declines to take judicial notice of the '303 Patent's prosecution history.

³ Numerous courts have considered patent subject matter eligibility questions at the pleadings stage without having conducted claim construction. See e.g., Personalized Media Commc'ns, LLC v. Amazon.Com, Inc., No. 13-1608-RGA, 2015 WL 4730906, at *9 (D. Del. Aug. 10, 2015) (finding that asserted patents claimed patent ineligible subject matter and granting motion for judgment on the pleadings); Morsa v. Facebook, Inc., 77 F. Supp. 3d 1007, 1016 (C.D. Cal. Dec. 23, 2014) (finding that claims were directed to patent-ineligible subject matter and granting motion for judgment on the pleadings); Cogent Med., Inc. v. Elsevier Inc., 70 F. Supp. 3d 1058, 1066 (N.D. Cal. 2014) (finding that claims were "invalid for failure to claim patentable subject matter under § 101" and granting motion to dismiss); but see OpenTV, Inc. v. Netflix Inc., F. Supp. 3d 886, 891-92 (N.D. Cal. 2014).

F.3d 1266, 1273 (Fed. Cir. 2012); see also Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n, 776 F.3d 1343, 1349 (Fed. Cir. 2014) (citing Ultramercial, Inc. v. Hulu, LLC, 772 F.3d 709, 714 (Fed. Cir. 2014)). Indeed, the question of whether a patent claims ineligible subject matter is a "threshold inquiry" of law. In re Bilski ("Bilski I"), 545 F.3d 943, 950 (Fed. Cir. 2008). However, none of this is to say that claims construction is irrelevant to the issue as whether a patent claims ineligible subject matter is "often dependent on the scope and meaning of the claims." See Internet Patents Corp. v. Active Network, Inc., 790 F.3d 1343, 1348 (Fed. Cir. 2015).

Recognicorp does not explain why claim construction is necessary to determine whether the '303 Patent contains patent-eligible subject matter. See Dkt. # 118 at 12. Accordingly, the Court finds that Nintendo's Motion is not premature. See Morales v. Square, Inc., 75 F. Supp. 3d 716, 721-22 (W.D. Tex. 2014) (finding claims construction unnecessary where plaintiff's opposition did not identify any issues of fact or claim construction requiring resolution to determine patent eligibility issues); see also Priceplay.com, Inc. v. AOL Advert., Inc., 83 F. Supp. 3d 577, 578 (D. Del. 2015).

Recognicorp also appears to argue that the Court should apply a "clear and convincing" standard in determining the instant patent eligibility issues. See Dkt. # 113 at 2, 8. There is some question as to whether that standard applies to the Court's § 101 analysis. See Intellectual Ventures I LLC v. Symantec Corp., 100 F. Supp. 3d 371, 379-80 (D. Del. 2015) (citing cases). "Eligibility questions mostly involve general historical observations, the sorts of findings

routinely made by courts deciding legal questions." See Cal. Inst. of Tech. v. Hughes Commc'ns Inc., 59 F. Supp. 3d 974, 979 n.6 (C.D. Cal. 2014. Accordingly, this Court applies the "clear and convincing" standard to disputed questions of fact – which the Parties do not raise.

B. Patent Invalidity Under 35 U.S.C. § 101

Section 101 of the Patent Act defines patenteligible 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.

The Supreme Court has, however, recognized that laws of nature, natural phenomena, and abstract ideas are not patentable. Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2354 (2014) (quoting Ass'n for Molecular Pathology v. Myriad Genetics, Inc., 133 S. Ct. 2107, 2116 (2013)). The purpose of these exceptions is to protect the "basic tools of scientific and technological work." Mayo Collaborative Servs. v. Prometheus Labs., Inc., 132 S. Ct. 1289, 1293 (2012). Still, courts must "tread carefully in construing this exclusionary principle lest it swallow all of patent law." Alice, 134 S. Ct. at 2354.

In "distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts," courts apply a two-part test. *Alice*, 134 S. Ct. at 2355. Courts must first "determine whether the

claims at issue are directed to one of those patentineligible concepts." Id. If so, then courts must examine "[w]hat else is there in the claims before [them]" by considering "the elements of each claim both individually and 'as an ordered combination' to whether the additional determine 'transform the nature of the claim' into a patenteligible application." Id. The Court has characterized this search as one "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." Id. (quoting Mayo, 132 S. Ct. at 1294).

C. Whether the '303 Patent is Directed to a Patent Ineligible Concept

The first step in the Court's analysis is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts." Alice, 134 S. Ct. at 2355. Some courts have characterized the test as a "quick look' test, the purpose of which is to identify a risk of preemption and ineligibility." Enfish, LLC v. Microsoft Corp., 56 F. Supp. 3d 1167, 1173 (C.D. Cal. 2014); see also Open Text S.A. v. Box, Inc., 78 F. Supp. 3d 1043, 1046 (N.D. Cal. 2015) (in step one, "the Court distills the gist of the claim").

Nintendo argues that the claims in the '303 Patent are directed to the non-patentable concept of encoding images through a mathematical formula. See Dkt. # 105 at 13; Dkt. # 118 at 2. Recognicorp argues that the '303 Patent is instead "directed to an improved system and method for creating, encoding, and reproducing images in a computer network." Dkt. # 113 at 9.

In essence, the steps claimed in the '303 Patent boil down to: (1) displaying potential input variables (the facial features and their modifications), (2) selecting and manipulating the inputs, (3) deriving an output code by performing a "multiplication operation" on the inputs, and (4) outputting the original inputs on another device by performing the sequence in reverse on another device. See Dkt. # 106-3 (Parris Decl.) Ex. C at 1:23-41. In other words, the '303 Patent utilizes a "paint by numbers" approach to creating, encoding, and decoding composite facial images. These steps are directed to the abstract idea of encoding and decoding composite facial images using a mathematical formula. ^{4 5 6}

⁴ Recognicorp argues that the '303 Patent is directed to "a particularized method of encoding and decoding data," which it claims "is not an abstract idea." That is not entirely correct. Merely adding "a degree of particularity" does not affect the first step of the Alice inquiry. See Mkt. Track, LLC v. Efficient Collaborative Retail Mktg., LLC, No. 14 C 4957, 2015 WL 3637740, at *5 (N.D. Ill. June 11, 2015) (quoting Ultramercial, 772 F.3d at 715).

⁵ Recognicorp further argues that under the *Alice* framework, it is improper to view patents at too high a level of abstraction. That may be true, but the '303 Patent itself makes clear that its claims are simply directed to the abstract idea of encoding composite facial image data. In fact, the '303 Patent explicitly states that "[t]he invention provides a novel method and apparatus for encoding images." Dkt. # 106-1 (Parris Decl.) Ex. A at 2:17-18. There could hardly be a clearer statement of its purpose.

⁶ In this way, Timeplay, Inc. v. Audience Entm't LLC, CV 15-05202 SJO (JCx) (C.D. Cal. Nov. 10, 2015), supplied by Recognicorp as supplemental authority, is easily distinguishable. The Court there found that the patent was directed at the highly unusual "idea of multi-player gaming

As other courts have noted, encoding and decoding data is a "fundamental concept" - in other words, an abstract idea. See Cal. Inst. of Tech., 59 F. Supp. 3d at 993 (holding that claimed inventions were directed to abstract idea where their purpose was to encode and decode data to achieve data correction); cf. Veracode, Inc. v. Appthority, Inc., No. CV 12-10487-DPW, 2015 WL 5749435, at *13 (D. Mass. Sept. 30, 2015); Fid. Nat'l Info. Servs., Inc. v. DataTreasury Corp., CBM2014-00021, 2015 WL 1967328, at *7-8 (P.T.A.B. Apr. 29, 2015) ("Encryption, in general, represents a basic building block of human ingenuity that has been used for hundreds, if not thousands, of years."). Moreover, as Nintendo correctly notes, encoding information has countless pre-computer applications, See Dkt. # 118 at 3. The '303 Patent contemplates as much, describing several "encoding schemes" which pre-existed the one described in the Patent, including "bitmap', 'gif or 'jpeg." See Dkt. # 106-1 (Parris Decl.) Ex. A at 1:65-67.

That the '303 Patent encodes images through a mathematical algorithm does not make its claims any less directed to an abstract idea. If anything, the Supreme Court has made "clear that 'a scientific truth, or the mathematical expression of it, is not a patentable invention." Enfish, 56 F. Supp. 3d at 1171 (quoting Gottschalk v. Benson, 409 U.S. 63, 67 (1972)). Indeed, "the Supreme Court has heavily scrutinized algorithms and mathematical formulas under § 101."

using a hand-held controller that has a display screen where the players are also in front of a shared display." See Dkt. # 128-2 Ex. B.

Id. (citing Parker v. Flook, 437 U.S. 584, 594-95 (1978); Benson, 409 U.S. at 71-72).

Courts have also held that processes that can be performed entirely in the human mind or with pen and paper are not patentable. CyberSource Corp. v. Retail Decisions, Inc., 654 F.3d 1366, 1373 (Fed. Cir. 2011) ("such a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101"). Even without construing the claims to determine the precise parameters of the encoding scheme, the Court notes that the specific image encoding process likely can be performed entirely within the human mind or with pen and paper. So long as the individual is provided the specific input variables – here, the facial feature element codes and code factors - she can apply the "multiplication operation" on the facial code until she can derive a composite image code. When another individual is provided this same composite facial image code, he could perform the multiplication operation backward to derive the same composite image.

To be sure, where a claim provides a solution "necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks," it may still be eligible for patent protection. See DDR Holdings, LLC v. Hotels.com, 773 F.3d 1245, 1257 (Fed. Cir. 2014). "In determining whether technology created the relevant problem, courts look to whether the claims at issue override some conventional sequence of events taking place within a particular technological environment." Source Search Techs., LLC v. Kayak Software Corp., No. CIV.A. 11-3388 JEI, 2015 WL 3980628, at *7

(D.N.J. July 1, 2015) (citing Messaging Gateway Sols., LLC v. Amdocs, Inc., No. 14-732-RGA, 2015 WL 1744343 (D. Del. Apr. 15, 2015)). But even if a claim is limited to a particular technological environment, that would not necessarily save the claim. See Certus View Techs., LLC v. S&N Locating Servs., LLC, No. 2:13CV346, 2015 WL 269427, at *17 (E.D. Va. Jan. 21, 2015) (finding that claims were directed to the abstract idea of creating computer readable file to store information, as applied to the particular technological environment of locate operations).

But the '303 Patent does not overcome such a problem. claims merelvRather. its reproducing the image on a different device (see Dkt. # 106-1 (Parris Decl.) Ex. A at 12:46-47 (Claim 2)) or generically "transmitting" the image code (see id. at 13:3-4 (Claim 11)). Transmission may be completed "either verbally or through electronic communication means." See id. at 11:58-65 (also providing that the "data transmission medium" can be through "any other communication medium suitable for transfer of data"). Moreover, the claims explicitly provide that input of the facial code may be done manually. See id. at 13:14-17 (Claim 15); see also id. at 10:55-56; see also Affinity Labs of Texas, LLC v. Amazon.Com, Inc., No. 6:15-CV-0029-WSS-JCM, 2015 WL 3757497, at *11 (W.D. Tex. June 12, 2015) (finding a user interface to be a generic computer component). In other words, the '303 Patent does not solve a problem created by or specifically arising in a

particular technological environment⁷ as it can be applied to many technological environments.

D. Whether the '303 Patent Contains an "Inventive Concept"

Having determined that the '303 Patent's claims are "directed to" an abstract idea, the Court must next determine if its claims are nevertheless patentable because they contain an "inventive concept" sufficient to "transform the claimed abstract idea into a patent-eligible application." Alice, 134 S. Ct. at 2357. To do so, courts are instructed to consider the elements of the claims – both individually and in an ordered combination – to assess whether the elements transform the nature of the claims into a patent-eligible inventive concept. See Content Extraction, 776 F.3d at 1347.

⁷ Indeed, for this reason, Finjan, Inc. v. Blue Coat Sys., No. 13-CV-03999-BLF, 2015 WL 7351450 (N.D. Cal. Nov. 20, 2015), which Recognicorp provides as supplemental authority, is easily distinguishable. The invention in that case was plainly limited to the specific technological environment of electronic communication. See id. at *10. No such limitation exists for the '303 Patent.

Recognicorp's other supplemental case, Mobile Telecommunications Techs., LLC v. Leap Wireless Int'l, Inc., No. 2:13-CV-885-RSP, 2015 WL 5604691 (E.D. Tex. Sept. 23, 2015), is easily distinguishable. In that case, the patent was clearly not directed at an abstract idea as it had to deal with a very specific technological environment. See id. at *5. Moreover, unlike in this case, the mathematical algorithm employed by the challenged patent was merely a small part of the claimed method, whereas it consumes nearly the entire claim in this case. See id. at *3.

The Court must disregard "well-understood, routine, conventional activit[ies]' previously known to the industry" at this step of the analysis. See Alice, 134 S. Ct. at 2359 (quoting Mayo, 132 S. Ct. at 1299) (alterations in original). "A conventional element may be one that is ubiquitous in the field, insignificant or obvious." Enfish, 56 F. Supp. 2d at 1175 (citing Mayo, 132 S. Ct. at 1298). Such a "conventional element may also be a necessary step, which a person or device must perform in order to implement the abstract idea." Id. Although "conventional elements and prior art may overlap," "conventional elements do not constitute everything in prior art." Id.

The Court finds that there is no such inventive concept in the claims, whether considered individually or as an ordered combination.

As an initial matter, a "basic mathematical equation, like a law of nature, [is] not patentable." Mayo, 132 S. Ct. at 1298; see Bilski v. Kappos ("Bilski II"), 561 U.S. 593, 611 (2010). Thus, the step of deriving a composite image code by performing at least one "multiplication operation" claimed in each of the '303 Patent's independent claims cannot, standing alone, be an "inventive concept."

Furthermore, there is little doubt that the claimed steps for generating a composite facial image – namely selecting, manipulating, and incorporating facial features into a composite image – are purely conventional. Although not dispositive (but see McRO, Inc. v. Sony Comput. Entm't Am., LLC, 55 F. Supp. 3d 1214, 1225 (C.D. Cal. 2014)), the '303 Patent's specification itself discloses that these very methods for creating composite facial images were well

established in the prior art. See Dkt. # 106-1 (Parris Decl.) Ex. A at 1:36-56. This alone is at least suggestive that the '303 Patent claim elements which focus on the steps for creation and manipulation of the composite facial image are conventional.

The other claimed steps are also obvious in the field. Generating a composite facial image necessarily degree of customization based requires a manipulating the essential elements of a face. Those would be essential elements individual facial features. And, as the '303 Patent itself acknowledges. common techniques for creating composite facial images involved dividing the image of a face into features constituent and then selecting combining features to create the image from a given library of features. See generally, Dkt. # 106-1 (Parris Decl.) Ex. A at 1:35-2:13. There is little to separate this from a typical data-gathering step. And it is well established that "adding a data-gathering step to an algorithm is insufficient to convert that algorithm into a patent-eligible process." Bilski I, 545 F.3d at 963 (citing In re Grams, 888 F.2d 835, 840 (Fed. Cir. 1989)). Finally, the step of reproducing a previously generated facial image is obvious as well - why create a customized face if not to recreate it?

Recognicorp argues that the claims in the '303 Patent contain inventive concepts by including the concept that composite images are composed of separate facial feature images associated with facial feature element codes, which resulted in smaller code. See Dkt. # 113 at 15. Furthermore, Recognicorp argues that the encoding scheme and algorithm provide the "inventive concept" needed to render the claims patent-eligible. See Dkt. # 113 at 15.

Neither argument carries the day. As the '303 Patent itself acknowledges, constructing composite images based on selected individual features was well known in the art. See Dkt. # 106-1 (Parris Decl.) Ex. A at 1:36-56; see also Dkt. # 123-3 (Parris Decl.) Ex. I. And the encoding algorithm, standing by itself, cannot constitute an inventive concept. See Diamond v. Diehr, 450 U.S. 175, 204 (1981) ("the algorithm is treated for § 101 purposes as though it were a familiar part of the prior art"). The '303 Patent's claimed methods and systems do not improve the function of a computer nor do they improve upon methods of creating composite images. The innovation claimed by the '303 Patent is merely a more efficient manner of encoding composite facial image data by using a generic computer. As numerous courts have held, that is not enough, particularly when a human could perform the same steps, albeit at a slower pace. See Source Search Techs., LLC v. Kayak Software Corp., No. CIV.A. 11-3388 JEI, 2015 WL 3980628, at *7 (D.N.J. July 1, 2015) (citing Jericho Sys. Corp. v. Axiomatics, Inc., No. 3:14-CV-2281-K, 2015 WL 2165931, at *5-6 (N.D.Tex. May 7, 2015)).

Recognicorp further argues that each of the dependent claims has inventive concepts, such as of transmitting the composite facial image code. See Dkt. # 113 at 16. But the only discussed dependent claim, "transmitting," is as generic or traditional a computing function as there is. See BuySAFE, Inc. v. Google, Inc., 765 F.3d 1350, 1355 (Fed. Cir. 2014) ("The computer functionality is generic... a computer receives a request for a guarantee and transmits an offer of guarantee in return."; "That a computer receives and sends the information over a network—with no further specification—is not even arguably

inventive."); Cloud Satchel, LLC v. Amazon.com, Inc., 76 F. Supp. 3d 553, 564 (D. Del. 2014); Joao Bock Transaction Sys., LLC v. Jack Henry & Assocs., Inc., 76 F. Supp. 3d 513, 523 (D. Del. 2014) (citing In re Katz, 639 F.3d 1303, 1316 (Fed. Cir. 2011)).

additional claim elements Recognicorp points to bear special mention. Recognicorp argues that the creation of the composite image is not conventional because it relies on specialized programming and a database of images. But maintaining a library of relevant information is not inventive. See Cogent Med., Inc., 70 F. Supp. 3d at 1063-64. And its inclusion as a necessary part of the claimed steps is obvious, given that the facial feature images must come from somewhere. Nor is the facial feature creation composite process intertwined with the creation of the composite facial image code as to render the process patentable - the selection and manipulation of the facial feature images is simply a means of selecting the relevant inputs for creating the composite facial image code.

The Court concludes that the entirety of the '303 Patent consists of the encoding algorithm itself or "[p]urely 'conventional or obvious' '[pre]-solution activity" and post-solution activity insufficient to transform the unpatentable abstract idea "into a patent-eligible application." Mayo, 132 S. Ct. at 1298 (quoting Flook, 437 U.S. at 590). As such, the Court finds that the '303 Patent fails both prongs of the Alice test.

E. The "Machine or Transformation" Test

Alternatively, the "Machine or Transformation" serves a "useful and important clue" in determining subject matter eligibility. Bilski II, 561 U.S. at 604. Under this test, a method claim may be patentable if "(1) it is tied to a particular machine or apparatus or (2) it transforms a particular article into a different state or thing." Id. at 602. A system claim that corresponds to or is in substance identical to a method claim that fails the test is similarly not patentable. Alice, 134 S. Ct. at 2360.

Recognicorp does not argue that the "303 Patent's claims satisfy the "machine" prong of the "Machine or Transformation" test. Instead, Recognicorp argues that the claims satisfy the "transformation" prong because the claims involve the creation of the composite image code and its recreation on another display. See Dkt. # 113 at 22. But as courts have repeatedly held, "[t]he mere manipulation or reorganization of data . . . does not satisfy the transformation prong." Cybersource, 654 F.3d at 1375.

Bilski I, cited by Recognicorp, does not change this Court's analysis. In Bilski I, the court found that a claim was drawn to patent-eligible subject matter where the manipulated "data [was] X-ray attenuation data produced" by a scanner. Bilski I, 545 F.3d at 962. Because the data "clearly represented physical and tangible objects, namely the structure of bones, organs, and other body tissues," the court explained it was directed to patent-eligible subject matter. Id. at 963. In other words, pursuant to Bilski I, the data

manipulated must transform either a "physical object or substance, or an electronic signal representative of any physical object or substance." *Id.* at 964. The data here obviously does not transform any physical object or substance nor does it transform an electronic signal representative of such an object or substance. In short, the "transformation" described in the '303 Patent does no more than simply manipulate existing data using a mathematical formula, which is not enough. *See Digitech Image Techs.*, *LLC v. Elecs. For Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014).

F. Recognicorp's Preemption Arguments Do Not Save The '303 Patent

Finally, Recognicorp argues that the '303 Patent is limited to a particular application and therefore avoids preemption. See Dkt. # 113 at 20. But the Supreme Court has explained that "the prohibition against patenting abstract ideas cannot be circumvented by attempting to limit the use of [the idea] to a particular technological environment." Alice, 134 S. Ct. at 2358 (quoting Bilski II, 561 U.S. 610-11)) (alterations in original).

Moreover, Recognicorp's proposed claim construction for the term "multiplication operation" – although not at play for purposes of this motion – makes clear that Recognicorp's purpose is precisely to preempt the use of nearly all potential encoding formulas in the field of composite facial imaging. See Dkt. # 102-12 Ex. C at 7 ("a process of combining matrices, vectors, or other quantities under specific rules to obtain their mathematical product"). The limitations it identifies – constructing an image on

one part of a screen to incorporate into another part of the screen, encoding a derived code, and reconstructing the image based on that code – do not ameliorate that concern.

V. CONCLUSION

For the reasons stated above, the Court GRANTS Nintendo's Motion for Judgment on the Pleadings (Dkt. # 105). Accordingly, the Court dismisses Recognicorp's complaint with prejudice and will enter judgment in favor of Nintendo.

DATED this 15th day of December, 2015.

s/ Richard A. Jones

The Honorable Richard A. Jones United States District Court

[ENTERED AUGUST 3, 2017]

United States Court of Appeals for the Federal Circuit

RECOGNICORP, LLC.

Plaintiff-Appellant

v.

NINTENDO CO., LTD., NINTENDO OF AMERICA, INC.,

Defendants-Appellees

2016-1499

Appeal from the United States District Court for the Western District of Washington in No. 2:12cv-01873-RAJ, Judge Richard A. Jones

ON PETITION FOR PANEL REHEARING AND REHEARING EN BANC

Before Prost, Chief Judge, Newman, Lourie, Dyk, Moore, O'Malley, Reyna, Wallach, Taranto, Chen, Hughes and Stoll, Circuit Judges.

PER CURIAM.

ORDER

Appellant RecogniCorp, LLC filed a combined petition for panel rehearing and rehearing en banc. A response to the petition was invited by the court and filed by appellees Nintendo Co., Ltd and Nintendo of America, Inc. The petition was referred to the panel that heard the appeal, and thereafter the petition for hearing en banc was referred to the circuit judges who are in regular active service.

Upon consideration thereof,

IT IS ORDERED THAT:

The petition for panel rehearing is denied.

The petition for rehearing en banc is denied.

The mandate of the court will issue on August 10, 2017.

For the Court

August 3, 2017 Date /s/ Peter R. Marksteiner Peter R. Marksteiner Clerk of the Court

[ENTERED: DECEMBER 18, 2015]

UNITED STATES DISTRICT COURT WESTERN DISTRICT OF WASHINGTON AT SEATTLE

| RECOGNICORP, LLC Plaintiff, | | JUDGMENT IN A CIVIL CASE |
|----------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-----------------------------|
| v. NINTENDO CO., LTD., et al., Defendant | | Case Number: C12-1873RAJ |
| Jury Verdict. This action came before the Court for a trial by jury. The issues have been tried and the jury has rendered its verdict. | | |
| <u>X</u> | Decision by Court. To consideration before the have been considered been rendered. | he Court. The issues |

THE COURT HAS ORDERED THAT

For the reasons stated in the Court's order of December 15, 2015, Judgment is entered in favor of Defendant and against Plaintiff.

Dated this 18th day of December, 2015.

WILLIAM M. McCOOL Clerk of the Court

By: <u>/s/ Victoria Ericksen</u> Deputy Clerk