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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JERAD J. HAHN and RYAN M. KROCAK

Appeal 2017-010368
Application 13/891,881
Technology Center 3600

Before JOSEPH L. DIXON, JOHNNY A. KUMAR, and LARRY J. HUME,
Administrative Patent Judges.

DIXON, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants¹ appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1–4, 7–12, and 22. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

The claims are directed to a system and method for managing medical imaging professional certifications. Claim 1, reproduced below, is illustrative of the claimed subject matter:

1. A computing device comprising a processor, a display, a system interface, and accessible storage having instructions stored thereon that, when executed by the processor, cause the computing device to perform a method for managing medical imaging credentials for medical imaging professionals, the method comprising:

processing medical imaging credential data stored in a database with information for a plurality of medical imaging professionals and a plurality of credential identities to identify a renewal date for each of the plurality of credential identities, wherein the medical imaging credential data comprises a user identity, a plurality of credential identities associated with the user identity, and a renewal schedule associated with each of the plurality of credential identities and wherein the renewal date is identified from the renewal schedules, wherein credential identities comprise professional certification name and credential requirements for the professional certification wherein at least one credential requirement comprises both continuing education units and exam/reading requirements over a period of time;

displaying to a display device, operably coupled to the computing device, the plurality of medical imaging credential identities, associated renewal dates, a first input field configured to receive input indicating a user's renewed status, a second input field configured to receive input indicating a corresponding date

¹ According to Appellants, the real party in interest is Atirix Medical Systems, Inc. App. Br. 3.

the renewed status was obtained, a third input field indicating information for entry concerning completion of continuing education units, and a fourth input field indicating information to enter concerning completion of exam/reading requirements; and

receiving input from a user through a system interface to alter the first input field, the second input field, the third input field, the fourth input field, or combinations thereof, wherein the receiving by the processor of the indication of updated status relating to one or more of the input fields causes the processor to update the renewal schedule in the database.

REFERENCES

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

| | | |
|---------------|--------------------|---------------|
| Ghosh | US 2001/0032094 A1 | Oct. 18, 2001 |
| Goldhaber | US 2002/0188652 A1 | Dec. 12, 2002 |
| Schramm-Apple | US 2004/0078225 A1 | Apr. 22, 2004 |

REJECTIONS²

The Examiner made the following rejections:

Claims 1–4, 7–12, and 22 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more.

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldhaber in view of Schramm-Apple.

Claims 3, 4, 7–12, and 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Goldhaber in view of Schramm-Apple further in view of Ghosh.

² The Examiner withdrew the indefiniteness rejections under 35 U.S.C. § 112, second paragraph. (Advisory Action, dated October 12, 2016).

ANALYSIS

PRINCIPLES OF LAW

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter.” 35 U.S.C. § 101. However, the Supreme Court has long interpreted 35 U.S.C. § 101 to include implicit exceptions: “[I]aws of nature, natural phenomena, and abstract ideas” are not patentable. *E.g.*, *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

In determining whether a claim falls within an excluded category, we are guided by the Supreme Court’s two-step framework, described in *Mayo* and *Alice*. *Id.* at 217–18 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (2012)). In accordance with that framework, we first determine what concept the claim is “directed to.” *See Alice*, 573 U.S. at 219 (“On their face, the claims before us are drawn to the concept of intermediated settlement, *i.e.*, the use of a third party to mitigate settlement risk.”); *see also Bilski v. Kappos*, 561 U.S. 593, 611 (2010) (“Claims 1 and 4 in [P]etitioners’ application explain the basic concept of hedging, or protecting against risk.”).

Concepts determined to be abstract ideas, and thus patent ineligible, include certain methods of organizing human activity, such as fundamental economic practices (*Alice*, 573 U.S. at 219–20; *Bilski*, 561 U.S. at 611); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). Concepts determined to be patent eligible include physical and chemical processes, such as “molding rubber products” (*Diamond v. Diehr*, 450 U.S. 175, 192

(1981)); “tanning, dyeing, making water-proof cloth, vulcanizing India rubber, smelting ores” (*id.* at 182 n.7 (quoting *Corning v. Burden*, 56 U.S. 252, 267–68 (1854))); and manufacturing flour (*Benson*, 409 U.S. at 69 (citing *Cochrane v. Deener*, 94 U.S. 780, 785 (1876))).

In *Diehr*, the claim at issue recited a mathematical formula, but the Supreme Court held that “[a] claim drawn to subject matter otherwise statutory does not become nonstatutory simply because it uses a mathematical formula.” *Diehr*, 450 U.S. at 176, 191 (“We view respondents’ claims as nothing more than a process for molding rubber products and not as an attempt to patent a mathematical formula.”). Having said that, the Supreme Court also indicated that a claim “seeking patent protection for that formula in the abstract . . . is not accorded the protection of our patent laws, . . . and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment.” *Id.* (citing *Benson* and *Flook*), and *id.* at 187 (“It is now commonplace that an *application* of a law of nature or mathematical formula to a known structure or process may well be deserving of patent protection.”).

If the claim is “directed to” an abstract idea, we turn to the second step of the *Alice* and *Mayo* framework, where “we must examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent eligible application.” *Alice*, 573 U.S. at 221 (quotation omitted). “A claim that recites an abstract idea must include ‘additional features’ to ensure ‘that the [claim] is more than a drafting effort designed to monopolize the [abstract idea].’” *Id.* (alteration in original) (quoting *Mayo*, 566 U.S. at 77).

“[M]erely requir[ing] generic computer implementation[] fail[s] to transform that abstract idea into a patent-eligible invention.” *Id.*

USPTO Guidance

The PTO recently published revised guidance in the Federal Register concerning the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (January 7, 2019) (hereinafter “Guidance”) (<https://www.govinfo.gov/content/pkg/FR-2019-01-07/pdf/2018-28282.pdf>).

Under that Guidance, we first look to whether the claim recites:

- (1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activity such as a fundamental economic practice, or mental processes);³ and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h)).⁴

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, do we then look to whether the claim:

- (3) adds a specific limitation beyond the judicial exception that are not “well-understood, routine, conventional” in the field (*see* MPEP § 2106.05(d)); or

- (4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception.⁵

See Guidance.

Step 2A(i) – Abstract Idea

³ Referred to as “*Revised Step 2A, Prong 1*” in the Guidance (hereinafter “*Step 2A(i)*”).

⁴ Referred to as “*Revised Step 2A, Prong 2*” in the Guidance (hereinafter “*Step 2A(ii)*”).

⁵ Items (3) and (4) continue to be collectively referred to as “*Step 2B*” of the Supreme Court’s two-step framework, described in *Mayo* and *Alice*.

Informed by our judicial precedent, the recent Guidance extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes the following groupings of subject matter, when recited as such in a claim limitation:

(a) Mathematical concepts—mathematical relationships, mathematical formulas or equations, mathematical calculations;

(b) Certain methods of organizing human activity — fundamental economic principles or practices (including hedging, insurance, mitigating risk); commercial or legal interactions (including agreements in the form of contracts; legal obligations; advertising, marketing or sales activities or behaviors; business relations); managing personal behavior or relationships or interactions between people (including social activities, teaching, and following rules or instructions); and

(c) Mental processes—concepts performed in the human mind (including an observation, evaluation, judgment, opinion).

Under the Guidance, if the claim does not recite a judicial exception (a law of nature, natural phenomenon, or subject matter within the enumerated groupings of abstract ideas above), then the claim is patent-eligible at *Step 2A(i)*. This determination concludes the eligibility analysis, except in situations identified in the Guidance.

However, if the claim recites a judicial exception (i.e., an abstract idea enumerated above, a law of nature, or a natural phenomenon), the claim requires further analysis for a practical application of the judicial exception in *Step 2A(ii)*.

Step 2A(ii) – Practical Application

If a claim recites a judicial exception in *Step 2A(i)*, we determine whether the recited judicial exception is integrated into a practical application of that exception in *Step 2A(ii)* by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

The seven identified “practical application” sections of the MPEP, cited in the Guidance under *Step 2A(ii)*, are:

- (1) MPEP § 2106.05(a) Improvements to the Functioning of a Computer or To Any Other Technology or Technical Field
- (2) MPEP § 2106.05(b) Particular Machine
- (3) MPEP § 2106.05(c) Particular Transformation
- (4) MPEP § 2106.05(e) Other Meaningful Limitations
- (5) MPEP § 2106.05(f) Mere Instructions To Apply An Exception
- (6) MPEP § 2106.05(g) Insignificant Extra-Solution Activity
- (7) MPEP § 2106.05(h) Field of Use and Technological Environment

See MPEP § 2106.05(a)–(c), (e)–(h). Citations to the MPEP herein refer to revision [R-08.2017].

If the recited judicial exception is integrated into a practical application as determined under one or more of the MPEP sections cited above, then the claim is not directed to the judicial exception, and the patent-eligibility inquiry ends. If not, then analysis proceeds to *Step 2B*.

Step 2B – “Inventive Concept” or “Significantly More”

Under our precedent, it is possible that a claim that does not “integrate” a recited judicial exception under *Step 2A(ii)* is nonetheless patent eligible. For example, the claim may recite additional elements that render the claim patent eligible even though a judicial exception is recited in a separate claim element.⁶ The Federal Circuit has held claims eligible at the second step of the *Alice/Mayo* test (USPTO *Step 2B*) because the additional elements recited in the claims provided “significantly more” than the recited judicial exception (e.g., because the additional elements were unconventional in combination).⁷ Therefore, if a claim has been determined to be directed to a judicial exception under *Revised Step 2A*, we must evaluate the additional elements individually and in combination under *Step 2B* to determine whether they provide an inventive concept (i.e., whether the additional elements amount to significantly more than the exception itself).⁸

Under the Guidance, we must consider in *Step 2B* whether an additional element or combination of elements: (1) “Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present;” or (2) “simply appends well-understood,

⁶ See, e.g., *Diehr*, 450 U.S. at 187.

⁷ See, e.g., *Amdocs (Israel), Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1304 (Fed. Cir. 2016); *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1349–52 (Fed. Cir. 2016); *DDR Holdings v. Hotels.com*, 773 F.3d 1245, 1257-59 (Fed. Cir. 2014).

⁸ We note the patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader, Inc. v. First Choice Loan Servs. Inc.*, 811 F.3d 1314, 1325 (Fed. Cir. 2016). In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1368 (Fed. Cir. 2018).

routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.” *See* Guidance, III.B.⁹

In the *Step 2B* analysis, an additional element (or combination of elements) is not well-understood, routine, or conventional unless the examiner finds an evidentiary basis, and expressly supports a rejection in writing with, one or more of the following:

1. A citation to an express statement in the specification or to a statement made by an applicant during prosecution that demonstrates the well-understood, routine, conventional nature of the additional element(s).
2. A citation to one or more of the court decisions discussed in MPEP § 2106.05(d)(II) as noting the well-understood, routine, conventional nature of the additional element(s).
3. A citation to a publication that demonstrates the well-understood, routine, conventional nature of the additional element(s).
4. A statement that the examiner is taking official notice of the well-understood, routine, conventional nature of the additional element(s).

See Berkheimer Memo.

⁹ In accordance with existing *Step 2B* Guidance, an Examiner’s conclusion that an additional element (or combination of elements) is well understood, routine, conventional activity must be supported with a factual determination. For more information concerning evaluation of well-understood, routine, conventional activity, *see* MPEP § 2106.05(d), as modified by the USPTO *Berkheimer* Memorandum (USPTO Commissioner for Patents Memorandum dated Apr. 9, 2018, “Changes in Examination Procedure Pertaining to Subject Matter Eligibility, Recent Subject Matter Eligibility Decision (*Berkheimer v. HP, Inc.*)” (hereinafter “*Berkheimer Memo*”).

The analysis in *Step 2B* further determines whether an additional element or combination of elements:

(a) Adds a specific limitation or combination of limitations that are not well-understood, routine, conventional activity in the field, which is indicative that an inventive concept may be present; or

(b) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception, which is indicative that an inventive concept may not be present.

Guidance, and see *Berkheimer Memo*.

If the Examiner or the Board determines under *Step 2B* that the element (or combination of elements) amounts to significantly more than the exception itself, the claim is eligible, thereby concluding the eligibility analysis.

However, if a determination is made that the element and combination of elements does not amount to significantly more than the exception itself, the claim is ineligible under *Step 2B*, and the claim should be rejected for lack of subject matter eligibility.

35 U.S.C. § 101

With respect to claims 1–4, 7–12, and 22, Appellants argue the claims together. (App. Br. 8–20). Therefore, we select independent claim 1 as the representative claim for the group and will address Appellants’ arguments thereto. 37 C.F.R. § 41.37(c)(1)(iv). Arguments which Appellants could

have made but did not make in the Briefs are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Step 1

Claim 1, as a method claim, recites one of the enumerated categories of eligible subject matter in 35 U.S.C. § 101. Therefore, the issue before us is whether it is directed to a judicial exception without significantly more.

Step 2A(i): Does the Claim Recite a Judicial Exception?

The Examiner determines the claims are patent ineligible under 35 U.S.C. § 101, because the claims are directed to an abstract idea of processing credential data “with information for a plurality of medical imaging professionals and a plurality of credential identities,” which is a fundamental economic practice, and the claims do not recite limitations that provide significantly more than the abstract idea itself. (Ans. 3).

Based upon the Guidance, we refine the Examiner’s statement of the abstract idea to characterize the abstract idea as the “processing medical imaging credential data . . .” step of independent claim 1, which is a mental process that can be performed in the human mind and/or by pen and paper. We find this type of activity, i.e., managing medical imaging credentials for medical imaging professionals, for example, includes longstanding conduct that existed well before the advent of computers and the Internet, and could be carried out by a human with pen and paper. *See CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1375 (Fed. Cir. 2011) (“That purely

mental processes can be unpatentable, even when performed by a computer, was precisely the holding of the Supreme Court in *Gottschalk v. Benson*.”¹⁰

Our reviewing court has previously held other patent claims ineligible for reciting similar abstract concepts. For example, while the Supreme Court has enhanced the § 101 analysis since *CyberSource* in cases like *Mayo* and *Alice*, the Federal Circuit continues to “treat[] analyzing information by steps people go through in their minds, . . . without more, as essentially mental processes within the abstract-idea category.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146–47 (Fed. Cir. 2016) (quoting *Elec. Power Grp. v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)).

*Step 2A(ii): Judicial Exception Integrated
into a Practical Application?*

If the claims are directed to a patent-ineligible concept, as we conclude above, we proceed to the “practical application” *Step 2A(ii)* in which we determine whether the recited judicial exception is integrated into a practical application of that exception by: (a) identifying whether there are any additional elements recited in the claim beyond the judicial exception(s); and (b) evaluating those additional elements individually and in combination to determine whether they integrate the exception into a practical application.

In addition to the abstract idea “processing medical imaging credential data . . .” limitation identified in *Step 2A(i)*, *supra*, claim 1 recites the

¹⁰ *CyberSource* further guides that “a method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.” *CyberSource*, 654 F.3d at 1373.

additional element/steps in the second and third steps of the claimed method which recite “displaying to a display device . . .” and “receiving input from a user”

As to these specific limitations, we find the limitation “receiving input from a user” recites insignificant data gathering. *See* MPEP § 2106.05(g). Data gathering, as performed by the steps or function in Appellants’ claims, is a classic example of insignificant extra-solution activity. *See, e.g., In re Bilski*, 545 F.3d 943, 963 (Fed. Cir. 2008) (en banc), *aff’d sub nom, Bilski v. Kappas*, 561 U.S. 593 (2010).

We also find the “displaying to a display device . . .” step and “wherein the receiving by the processor of the indication of updated status relating to one or more of the input fields causes the processor to update the renewal schedule in the database” limitation recite insignificant post solution activity.¹¹ The Supreme Court guides that the “prohibition against patenting abstract ideas ‘cannot be circumvented’ [by] adding ‘insignificant post-solution activity.’” *Bilski*, 561 U.S. at 610–11 (quoting *Diehr*, 450 U.S. at 191–92).

On this record, Appellants’ claims do not operate the recited generic computer components in an unconventional manner to achieve an improvement in computer functionality. *See* MPEP § 2106.05(a). Appellants identify pages 7–8 of the Specification which discloses the system “may take the form of a variety of different embodiments, including one or more servers associated with one or more databases and other physical components for performing data management, user interfaces

¹¹ We also note the “determining” steps can be carried out by a human in the mind or by use of pen and paper. *See CyberSource*, 654 F.3d at 1375.

generation, information storage, or performing other operations as described herein” and the system “may communicate through a variety of suitable means, such as the Internet, frame relay, point to point networking, or other appropriate architectures.” Additionally, the Specification discloses “all code, operating systems, databases, and web servers reside on hard drives local to the server 100,” but “optional on-site and/or off-site storage services, storage area network (SAN)” may be from a third party provider. (App. Br. 3 citing Spec. 8). Furthermore, the Examiner finds pages 8–9 of the Specification discloses “a technologist may interact with the system via system interfaces provided at any number of tech stations located within a facility . . .” support a finding of generic computer structure. (Final Act. 4).

Accordingly, we conclude the recited judicial exception is not integrated into a practical application as determined under one or more of the MPEP sections cited above, such that the claim is directed to the judicial exception.

Step 2B – “Inventive Concept” or “Significantly More”

If the claims are “directed to” a patent-ineligible concept, as we conclude above, we proceed to the “inventive concept” step. For *Step 2B*, we must “look with more specificity at what the claim elements add, in order to determine ‘whether they identify an “inventive concept” in the application of the ineligible subject matter’ to which the claim is directed.” *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1258 (Fed. Cir. 2016) (quoting *Elec. Power Grp.*, 830 F.3d at 1353).

In applying step 2 of the *Alice* analysis, our reviewing court guides we must “determine whether the claims do significantly more than simply

describe [the] abstract method” and thus transform the abstract idea into patentable subject matter. *Ulramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014). We look to see whether there are any “additional features” in the claims that constitute an “inventive concept,” thereby rendering the claims eligible for patenting even if they are directed to an abstract idea. *Alice*, 573 U.S. at 221. Those “additional features” must be more than “well-understood, routine, conventional activity.” *Mayo*, 566 U.S. at 79.

Limitations referenced in *Alice* that are not enough to qualify as “significantly more” when recited in a claim with an abstract idea include, as non-limiting or non-exclusive examples: adding the words “apply it” (or an equivalent) with an abstract idea¹²; mere instructions to implement an abstract idea on a computer¹³; or requiring no more than a generic computer to perform generic computer functions that are well-understood, routine and conventional activities previously known to the industry.¹⁴

Evaluating representative claim 1 under step 2 of the *Alice* analysis, we agree with the Examiner that claim 1 lacks an inventive concept that transforms the abstract idea of “processing medical imaging credential data

¹² *Alice*, 573 U.S. at 221–23.

¹³ *Alice*, 573 U.S. at 221, *e.g.*, simply implementing a mathematical principle on a physical machine, namely a computer (citing *Mayo*, 566 U.S. at 84–85).

¹⁴ *Alice*, 573 U.S. at 225, *e.g.*, using a computer to obtain data, adjust account balances, and issue automated instructions.

. . . ” into a patent-eligible application of that abstract idea. *See* Final Act. 4; Ans. 3.¹⁵

We note the patent eligibility inquiry may contain underlying issues of fact. *Mortg. Grader*, 811 F.3d at 1325. In particular, “[t]he question of whether a claim element or combination of elements is well-understood, routine and conventional to a skilled artisan in the relevant field is a question of fact.” *Berkheimer*, 881 F.3d at 1368.

As evidence of the conventional nature of the computing device, processor, display, system interface and storage, we note the Examiner’s citation to pages 6–9 and 57 of Appellants’ Specification. (Ans. 3).

We agree with the Examiner that the claim limitations may be broadly but reasonably construed as reciting conventional computer components and

¹⁵ “The additional elements present (computing device comprising a processor, a display, a system interface and accessible storage having instructions stored thereon) are generic computer components (page 6, line 30 to page 7, line 6, page 7, line 31 to page 8, line 4, page 8, line 31 to 9, lines 4, and page 57, lines 14-16 of Specification), which are (a) well-known, routine and conventional. The additional elements present are arranged in a well-known, routine and conventional fashion and used in ways that are also well-known, routine and conventional found in the claim recited, “receiving input from a user through a system interface to alter the first input field, the second input field, the third input field, the fourth input field, or combinations thereof, wherein the receiving by the processor of the indication of updated status relating to one or more of the input fields causes the processor to update the renewal schedule in the database;” (independent claim1) which is interpreted as insignificant extra-solution activity, i.e. mere data gathering.”

techniques, particularly in light of Appellants' Specification, as quoted above.¹⁶

With respect to the *Step 2B* analysis, we agree with the Examiner because, as in *Alice*, the recitation of a “computing device comprising a processor, a display, a system interface, and accessible storage having instructions stored thereon” (claim 1) is simply not enough to transform the patent-ineligible abstract idea here into a patent-eligible invention. See *Alice*, 573 U.S. at 221 (“[C]laims, which merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.”).

Accordingly, based upon the findings above, on this record, we are not persuaded of error in the Examiner's conclusion that the appealed claims are directed to patent-ineligible subject matter. Therefore, we sustain the Examiner's § 101 rejection of representative independent claim 1, and grouped claims 2–4, 7–12, and 22, not argued separately, and which fall therewith.

¹⁶ During prosecution, claims must be given their broadest reasonable interpretation when reading claim language in light of the specification as it would be interpreted by one of ordinary skill in the art. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). Under this standard, we interpret claim terms using “the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification.” *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997).

We address Appellants' arguments as they apply to the Guidance and add the following primarily for emphasis and clarification with respect to the Guidance.

First, Appellants argue the Examiner errs in determining the claims are directed to an abstract idea, because "the Examiner extracts less than two lines from a 23 line claim and identifies this abstraction of the claim as the claimed invention." (App. Br. 9). "Appellant's initial point with respect to Enfish is to pay heed to a trap of abstracting claim language for analysis and then concluding that the claim is necessarily abstract, which the Federal Circuit has cautioned against doing in multiple cases based on a specific Supreme Court caution." (Reply Br. 3).

Second, Appellants provide a brief discussion of five separate cases and analogize the claims with conclusory statements after each of the brief discussions. (App. Br. 10–18).

Third, Appellants contend:

Even if the claims were an abstract idea under an *Alice* analysis, Appellant's claims are directed to an inventive concept under the second step of an *Alice* analysis. Appellant's claims are directed to a method does not do anything without an interaction with a user. The user thus provides an instrumental input in the function of the system. The system then reacts to the input provided by the user. Such functions expressly indicate the function of a tool in the hands of the user, which involves an inventive concept.

(App. Br. 19).

Finally, Appellants present attorney argument regarding objective evidence of commercial success with regards to patent eligible subject matter similar to that provided with regards to obviousness rejections:

With respect to the present claimed invention, Appellant’s “QC-TRACK®.Credentials” product, the undersigned has confirmed with Appellant’s CEO the following information. This product is part of a larger QC-Track product used by over 200 imaging facilities, including academic medical centers, hospitals imaging department, and outpatient imaging centers. The QC-Track.Credentials module collectively tracks the credentials status of thousands of clinical imaging professionals, including in such well known centers as Mayo Clinic, Rochester, MN, Sutter Health, Sacramento, CA, and University of Virginia, Charlottesville, VA.

(App. Br. 19).

Although Appellants present attorney argument regarding a commercial product, Appellants have not provided a correlation to the invention as recited in the language of independent claim 1. As a result, the attorney argument does not provide any substantive evidence of commercial success of the claimed invention and would not impact the patent eligibility determination. Attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997).

Based on the record before us, we do not discern “a meaningful limit on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception.” Memorandum, Section III(A)(2). Accordingly, the claim does not integrate the judicial exception into a practical application. *See* Memorandum, Section III(A)(2) (Prong Two: If the Claim Recites a Judicial Exception, Evaluate Whether the Judicial Exception Is Integrated Into a Practical Application). Nor does the claim include a specific limitation or a combination of elements that amounts to significantly more than the judicial exception itself. *See* Memorandum, Section III(B) (Step 2B: If the Claim Is Directed to a Judicial

Exception, Evaluate Whether the Claim Provides an Inventive Concept). The remaining claim elements only recite generic computer components that are well-understood, routine, and conventional. *See* Ans. 3 (citing Spec. 6–8, 57), Figs. 1–2; *Alice*, 573 U.S. at 226.

Additionally, we find the Examiner’s identified abstract idea is a mental process using merely conventional computer hardware because of the following claim interpretation.

With respect to the first step of independent claim 1, we find the claim recites processing medical image credential data stored in a database and then recites a number of facets of the data items in “wherein” clauses without setting forth specific aspects regarding any of the processing “to identify a renewal date for each of the plurality of credential identities.” In the second step, the claim merely recites displaying the plurality of medical image credential identities and lists four “input fields” without actively performing any additional functions beyond conveying information. Finally, in the third step, the claim recites “receiving input from a user through a system interface to alter” one or a combination of the “input fields” displayed in the second step and the claim concludes with “wherein the receiving by the processor of the indication of updated status relating to one or more of the input fields causes the processor to update the renewal schedule in the database.” But the recited steps of the claimed process do not actually update the renewal schedule or perform any additional functions beyond “causing.” The Summary of the Claimed Subject Matter identifies pages 61–62 of the Specification, which indicate a wide spectrum of additional functions, but may merely be checking the “renewed checkbox,” which we find is merely modifying a data item. (App. Br. 4.)

Alternatively, Appellants have not identified how the claimed invention is integrated into a practical application under MPEP 2106.05(g) and the “causing” function in the third step may be viewed as insignificant extra-solution activity because no further details are recited. We find the broadest reasonable interpretation of the claimed method merely recites processing various stored data and displaying four additional fields for medical credential information and receiving user input.

As a result, we find Appellants’ arguments do not show error in the Examiner’s conclusion of a lack of patent eligible subject matter of representative independent claim 1 and claims 2–4, 7–12, and 22 grouped claims therewith.

35 U.S.C. §103

With regards to claims 1–4, 7–12, and 22, Appellants argue claims 1 and 2 together as a first group and claims 3, 4, 7–12, and 22 together as a second group. (App. Br. 5).

We select independent claim 1 and dependent claim 3 as the representative claims for the two groups and will address Appellants’ arguments thereto. Arguments which Appellants could have made but did not make in the Briefs are deemed to be waived.

For independent claim 1, Appellants argue the Examiner’s claim interpretation is not reasonable with regards to the claimed “processing medical imaging credential data stored in a database ... to identify a renewal date for each of a plurality of credential identities.” (App. Br. 20–22). Appellants contend “[w]ith all due respect, a person of ordinary skill in the art would not interpret the notation of a semiannual renewal requirement as identifying a date on which the renewal is due.” (App. Br. 20–21).

Appellants further contend that “just knowing the frequency of renewal does not provide sufficient information to obtain a renewal date, and construing the claim differently is not reasonable.” (App. Br. 21).

Appellants further contend:

[C]laim construction is not reasonable in view of the specification from the perspective of a person of ordinary skill in the art. “Exam/reading requirements” refers to image readings as part of an exam performed with the imaging device, and not to reading a text. Refer to Appellant’s Fig. 59, which recites imaging facilities for performing exams/readings. The claims refers repeatedly to the context of medical imaging professionals who would understand what exam/reading means in this context in view of the specification.

(App. Br. 21). Yet, Appellants have not included the totality of the details of Figure 59 in the language of independent claim 1 nor have Appellants identified any specific definition in the Specification to further limit the Examiner’s claim interpretation.

In addition to the claim interpretation argument, Appellants argue the Examiner has not addressed the claim as a whole and three elements of the claim are missing from the combination. (App. Br. 21–22). Specifically, Appellants contend that, “to identify a renewal date for each of a plurality of credential identities,” “at least one credential requirement comprises both continuing education units and exam/reading requirements over a period of time,” and “a first input field..., a second input field . . . and a fourth input field” are not taught or suggested by the combination. (App. Br. 21–22).

The Examiner addresses Appellants’ arguments in the Examiner’s Answer. (Ans. 9–10). The Examiner finds that the Goldhaber reference in paragraphs 51–52 implicitly teaches a recurring renewal date for physicians and technologists. We agree with the Examiner. With the Goldhaber

suggestion that the continuing education be monitored in combination with the interface of the Schramm Apple's system, we agree with the Examiner that the combination teaches and fairly suggests the claimed limitation.

With regards to the claimed "at least one credential requirement comprises both continuing education units and exam/reading requirements over a period of time" or "monitoring information relating to exam/reading requirements," the Examiner finds that the Goldhaber reference in paragraph 50 suggests continuing medical education and additional storage of non-image data. (Ans. 9–10 (emphasis omitted)). Additionally, we find the Schramm-Apple reference in figures 2A and 2B identified both continuing education 201 and course examination 222 elements. As a result, we agree with the Examiner that the combination teaches and fairly suggests the claimed limitation.

With respect to the input fields, the Examiner finds that "Schramm-Apple's figures 4A, 5 and 6 show tools to input and display a licensure period, end of licensure period, start date, end date and other continuing education (CE) activities shown in Fig. 18, mentioned in paragraphs 104-107, serve as inputting first, second and third input fields." (Ans. 10). We agree with the Examiner.

Reply Brief

In the Reply Brief, with regards to the identifying a renewal date, Appellants contend there is a renewal date in the Goldhaber reference, but that Goldhaber does not teach doing anything with a renewal date. (Reply Br. 9).

We disagree with Appellants and find the Goldhaber reference teaches and suggests identifying a renewal date for accreditation purposes.

(Goldhaber ¶¶ 14, 43, 50, 51, claim 14). Furthermore, in combination with the Schramm-Apple reference, which suggests identifying a renewal date, it would have been obvious to one of ordinary skill in the art at the time of the invention.

With regards to both continuing education units and exam/reading requirements limitation, Appellants contend:

[T]he Examiner has steadfastly refused without explanation to construct “exam/reading requirements” as would be understood in view of the specification as having performed examination/readings of patient images. Exam/reading requirement has nothing to do with reading or writing/typing any words, but the Examiner has refused to construe these terms correctly or provided any basis for her claim construction which respectfully is clearly in error in the context of the claims and specification.

(Reply Br. 10).

We disagree with the Appellants and find Appellants are attempting to import limitations from the Specification. Additionally, we find Appellants’ Summary of the Claimed Subject Matter merely identifies Figure 55 for corresponding support, but we find no corresponding definition to limit the interpretation in the claim language.

With respect to the missing input fields, Appellants contend, “at least three of the four specific input fields of the claim were not taught by the cited art. With all due respect, the Examiner has failed to explain a legal basis for obviousness based on vaguely related teachings and not reciting the specific features of the claimed invention.” (Reply Br. 10).

We disagree with Appellants and find the Examiner has addressed the specific input fields. Moreover, the specific labels for each of the input fields do not change the displaying step or any recited functionality in the

language of independent claim 1. Therefore, Appellants have not shown error in the Examiner's factual findings or conclusion of obviousness of representative independent claim 1 and dependent claim 2 which is grouped therewith.

Dependent Claim 3

With respect to the rejection of representative dependent claim 3 over the combination of Goldhaber, Schramm-Apple, and Ghosh, Appellants argue there are fundamental differences between Ghosh and Schramm-Apple that do not support their combination as suggested in the rejection absent improper hindsight based on Appellants' disclosure. (App. Br. 23–24). Appellants further argue the rejection seems to use the features of the references as pieces of a puzzle to assemble the rejection based on the template of Appellants' claim without reasonable support from the references of knowledge in the art. (App. Br. 23).

Appellants further argue that even if the references are improperly combined, the rejection is deficient since the combination of references does not teach anything about “exam/reading requirements” relating to imaging professional credentials. (App. Br. 24). Because we find no error in the base combination with regards to the exam reading requirements, we similarly find that the Ghosh reference does not need to remedy that proffered deficiency.

Appellants argue that due to the deficiencies described above with respect to combining references related to very different purposes and not teaching all of the claimed features, the combined teachings of Goldhaber, Schramm-Apple, and Ghosh clearly do not render Appellants' claimed invention *prima facie* obvious. (App. Br. 24). Because we find no error in

the base combination, we similarly find the Ghosh reference does not need to remedy that proffered deficiency, and Appellants have not identified any specific line of reasoning why it would not have been obvious to one of ordinary skill in the art at the time the invention to combine the three references.

Appellants provide no further arguments with regards to the Ghosh reference in the Reply Brief. Therefore, Appellants' arguments have not shown error in the Examiner's factual findings or conclusion of obviousness of representative dependent claim 3 and dependent claims 4, 7–12, and 22.

CONCLUSION

The Examiner did not err in rejecting claims 1–4, 7–12, and 22 under 35 U.S.C. § 101 as being directed to a judicial exception without significantly more.

The Examiner did not err in rejecting claims 1–4, 7–12, and 22 based upon obviousness under 35 U.S.C. § 103.

DECISION

For the above reasons, we affirm the Examiner's rejection of claims 1–4, 7–12, and 22 under 35 U.S.C. § 101 and the obviousness rejection of claims 1–4, 7–12, and 22 under 35 U.S.C. § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED