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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ROBERT METZGER

Appeal 2017-003967
Application 13/174,856[1]
Technology Center 3600

Before ST. JOHN COURTENAY III, JENNIFER L. McKEOWN, and JAMES W. DEJMEK, *Administrative Patent Judges*.

DEJMEK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134(a) from a Final Rejection of claims 1–14 and 25–34. Appellant has canceled claims 15–24. *See* Final Act. 2. We have jurisdiction over the remaining pending claims under 35 U.S.C. § 6(b).

We affirm.

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[1] Appellant identifies Biomet Manufacturing, LLC as the real party in interest. Br. 2.

STATEMENT OF THE CASE

Introduction

Appellant's disclosed and claimed invention generally relates to "preparing a backup kit for a shipment of patient-specific arthroplasty kits for corresponding arthroplasty procedures scheduled at the same medical facility." Spec. ¶ 2. According to the Specification, patient-specific devices (e.g., implants, alignment guides, and other instruments) may be designed prior to the implant procedure (i.e., preoperatively) based on, for example, three-dimensional images of the patient's joint anatomy. Spec. ¶¶ 14–17. However, during the implant surgery (i.e., intraoperatively), the size of the implant, as preoperatively determined, may not be ideal and a different size may be required. Spec. ¶ 24. In such situations a backup kit may have differently sized implants that are a better match. Spec. ¶ 24. "Providing backup sizes (one size larger or one size smaller than a planned size) for each and every implant in the shipment to the same facility can be costly, wasteful and inefficient both in bulk and weight." Spec. ¶ 26. Accordingly, Appellant's claimed invention is intended "to reduce the number of backup implants for the shipment, while still providing a high probability that the intraoperatively determined implant size is the planned size or is included in the backup kit." Spec. ¶ 26.

Claim 1 is representative of the subject matter on appeal and is reproduced below:

> 1. A method for preparing a backup kit for a plurality of patient-specific arthroplasty procedures scheduled at the same medical facility for a plurality of different patients, the method comprising:
>
> generating a database of data from completed arthroplasty procedures using patient-specific arthroplasty kits, information

> collected and provided by the database including comparisons between preoperatively planned implant sizes and intraoperatively implanted implant sizes, the database being updated after the patient-specific arthroplasty procedures are performed and depending upon the characteristics of implants and instruments used in the plurality of patient-specific arthroplasty procedures;
>
> determining a statistically expected implant size deviation from a planned implant size for each implant included in a plurality of patient-specific arthroplasty kits for a plurality of different patients during a planned time period prepared for a shipment to the medical facility using the database, the determining of the statistically expected implant size deviation being performed utilizing algorithms for statistical analysis; and
>
> assembling an omnibus backup kit of backup implants for the shipment, the assembling including accessing and referencing the database, wherein the number and size of the backup implants are determined from the statistically expected implant size deviations and a number of implants corresponding to the planned implant size based on the totality of procedures for the plurality of different patients during the planned time period, and wherein construction of the backup implants is determined from the statistically expected implant size deviations and the number of implants corresponding to the planned implant size based on the totality of procedures for the plurality of different patients during the planned time period.

The Examiner's Rejection

Claims 1–14 and 25–34 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2–3.

ANALYSIS[2]

Appellant disputes the Examiner's conclusion that the pending claims are directed to patent-ineligible subject matter. Br. 12–23. In particular, Appellant asserts the Examiner failed to make an evidentiary showing to establish a prima facie case of ineligibility. Br. 12–13. Further, Appellant argues the claims are not directed to patent-ineligible subject matter, but rather "to a specific set of steps for preparing a backup kit for a plurality of patient-specific arthroplasty procedures scheduled at the same medical facility for a plurality of different patients." Br. 16. Appellant asserts this is neither a method of organizing human activity nor a fundamental economic practice. Br. 16.

Contrary to Appellant's assertions, there is no requirement that Examiners *must* provide evidentiary support in every case before a conclusion can be made that a claim is directed to an abstract idea. *See, e.g.*, para. IV "July 2015 Update: Subject Matter Eligibility" to 2014 Interim Guidance on Subject Matter Eligibility (2014 IEG), 79 Fed. Reg. 74618 (Dec. 16, 2014) ("The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be a *question of law*. Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings.") (Emphasis added). Further, the Office did not change the standard in the May 4, 2016 Memorandum, *Formulating a*

[2] Throughout this Decision, we have considered the Appeal Brief, filed June 9, 2016 ("Br."); the Examiner's Answer, mailed September 13, 2016 ("Ans."); and the Final Office Action, mailed February 9, 2016 ("Final Act."), from which this Appeal is taken.

Subject Matter Eligibility Rejection and Evaluating the Applicant's Response to a Subject Matter Eligibility Rejection. Evidence may be helpful in certain situations where, for instance, facts are in dispute. However, it is not always necessary. It is not necessary in this case.

Additionally, the Federal Circuit has repeatedly noted that "the prima facie case is merely a procedural device that enables an appropriate shift of the burden of production." *Hyatt v. Dudas*, 492 F.3d. 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)). The court has, thus, held that the USPTO carries its procedural burden when its rejection satisfies the requirements of 35 U.S.C. § 132 by notifying the applicant of the reasons for rejection, "together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." *In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011). Thus, all that is required of the Office is that it set forth the statutory basis of the rejection in a sufficiently articulate and informative manner as to meet the notice requirement of 35 U.S.C. § 132. *Jung*, 637 F.3d at 1362; *see also Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990) (Section 132 "is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection."). As set forth in the Final Office Action, we find the Examiner has met the notice requirements of Section 132(a) in rejecting claims 1–14 and 25–34 under 35 U.S.C. § 101. *See* Final Act. 2–3.

The Supreme Court's two-step framework guides our analysis of patent eligibility under 35 U.S.C. § 101. *Alice Corp. Pty. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2355 (2014). If a claim falls within one of the statutory categories of patent eligibility (i.e., a process, machine, manufacture, or

composition of matter) then the first inquiry is whether the claim is directed to one of the judicially recognized exceptions (i.e., a law of nature, a natural phenomenon, or an abstract idea). *Alice*, 134 S. Ct. at 2355. If so, the second step is to determine whether any element, or combination of elements, amounts to significantly more than the judicial exception. *Alice*, 134 S. Ct. at 2355.

Although the independent claims each broadly fall within the statutory categories of patentability, the Examiner concludes the claims are directed to a judicially recognized exception—i.e., an abstract idea. Final Act. 2–3. In particular, the Examiner concludes the claims are directed to the abstract idea of managing medical supplies and processing medical information. Final Act. 2. The Examiner explains that managing medical supplies is a method of organizing human activities and processing medical information collects, organizes, compares, stores, transmits, and applies mathematical formulas/relationships to data. Final Act. 2.

Instead of using a definition of an abstract idea, "the decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen—what prior cases were about, and which way they were decided." *Amdocs (Isr.) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016)); *accord* United States Patent and Trademark Office, *July 2015 Update: Subject Matter Eligibility* (July 30, 2015), https://www.uspto.gov/sites/default/files/documents/ieg-july-2015-update.pdf (instructing Examiners that "a claimed concept is not identified as an abstract idea unless it is similar to at least one concept that the courts have identified as an abstract idea."). As part of this

inquiry, we must "look at the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter." *Affinity Labs of Tex., LLC v. DirecTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

Our reviewing court has concluded that abstract ideas include the concepts of collecting data, recognizing certain data within the collected data set, and storing the data in memory. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014); *see also Smart Sys. Innovations, LLC v. Chicago Transit Authority*, 873 F.3d 1364, 1372 (Fed. Cir. 2017) (concluding "claims directed to the collection, storage, and recognition of data are directed to an abstract idea"). Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power*, 830 F.3d at 1353. Similarly, "collecting, displaying, and manipulating data" is an abstract idea. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017); *see also SAP Am., Inc. v. InvestPic, LLC*, 890 F.3d 1016, 1021 (Fed. Cir. 2018) ("merely presenting the results of abstract processes of collecting and analyzing information . . . is abstract as an ancillary part of such collection and analysis") (quotations omitted). Moreover, our reviewing court recently has concluded that acts of parsing, comparing, storing, and editing data are abstract ideas. *Berkheimer v. HP Inc.*, 881 F.3d 1360, 1366 (Fed. Cir. 2018).

Further, merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co. Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) ("Adding one abstract idea (math) to

another abstract idea . . . does not render the claim non-abstract."); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093–94 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas).

Here, Appellant's claims are generally directed to identifying likely components (i.e., implants) for a backup arthroplasty kit based on a statistical analysis of gathered and collected data. The data includes information from previous procedures (including comparisons between preoperatively determined implant sizes and intraoperatively implanted sizes). The data is maintained in a database. Statistical analysis algorithms are used to determine a statistically expected implant size deviation. Based on the expected deviations for a plurality of arthroplasty procedures, the appropriate set of backup implants may be identified and assembled into an omnibus backup kit of backup implants.

The claimed "generating a database of data" using collected information and comparisons of collected and stored information is similar to the collection, manipulation, recognition, and storing of data, which our reviewing court has concluded to be abstract ideas. *See Content Extraction*, 776 F.3d at 1347; *Elec. Power*, 830 F.3d at 1353; *Berkheimer*, 881 F.3d at 1366. Further, utilizing algorithms for statistical analysis to determine an expected implant size deviation does not make the analysis of data any less abstract. *See RecogniCorp*, 855 F.3d at 1327; *see also Digitech Image Techs., LLC v. Elec. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (concluding "a process of organizing information through mathematical correlations and is not tied to a specific structure or machine" to be abstract); *Parker v. Flook*, 437 U.S. 584, 595 (1978) ("If a claim is directed essentially

to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory."). Additionally, the identification of backup implants for assembly in backup kits is similar to recognizing data and organizing human activities. *See BASCOM Global Internet Servs. V. AT&T Mobility LLC*, 827 F.3d 1341, 1348 (Fed. Cir. 2016); *Content Extraction*, 776 F.3d at 1347; *see also Digitech Image Techs., LLC v. Elec. for Imaging, Inc.*, 758 F.3d 1344, 1350 (Fed. Cir. 2014) (concluding "a process of organizing information through mathematical correlations and is not tied to a specific structure or machine" is an abstract idea). Accordingly, we conclude the character as a whole of the claims is directed to an abstract idea.

To the extent Appellant contends the Examiner's conclusion that the claims are directed to an abstract idea is inconsistent with other patent claims (*see* Br. 17–19), we are unpersuaded of Examiner error. Rather than a review of other patents related to similar subject matter that may have issued, the correct inquiry and analysis must be directed to the pending claims. *See Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (admonishing that "the important inquiry for a § 101 analysis is to look to the claim"). "Each case is determined on its own merits," and "[i]n reviewing specific rejections of specific claims, [the Board] does not consider allowed claims in other applications or patents." *In re Gyurik*, 596 F.2d 1012, 1018 n.15 (CCPA 1979) (citations omitted).

Because we determine the claims are directed to an abstract idea or combination of abstract ideas, we analyze the claims under step two of *Alice* to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to "significantly more" than

the abstract idea. *Alice*, 134 S. Ct. at 2355 (*citing Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1294, 1297–98 (2012)). The implementation of the abstract idea involved must be "more than [the] performance of 'well-understood, routine, [and] conventional activities previously known to the industry.'" *Content Extraction*, 776 F.3d at 1347–48 (quoting *Alice*, 134 S. Ct. at 2359) (alteration in original). "Whether something is well-understood, routine, and conventional to a skilled artisan at the time of the patent is a factual determination." *Berkheimer*, 881 F.3d at 1369.

Appellant does not dispute the Examiner's finding that the functions of "providing a database having data, determining implant sizes, determining a statistical expected implant size deviation, assembling backup kits, etc." are well-understood, routine, and conventional activities previously known to the pertinent industry. Final Act. 3; *see* Br. *passim*; *see also Intellectual Ventures I LLC v. Capital One Bank*, 792 F.3d 1363, 1371 (Fed. Cir. 2015); *Intellectual Ventures I LLC v. Erie Indem. Co.*, 850 F.3d 1315, 1327–31 (Fed. Cir. 2017). Rather, Appellant asserts the claimed solution addresses a technological problem in conventional industry practice. Br. 20–22. We disagree. As the Examiner explains, "the claims do not solve a technological problem but a business method problem of choosing the correct implant sizes for implantation by linking the abstract ideas to a technological environment using well-known computer technology." Ans. 7; *see also Intellectual Ventures*, 850 F.3d at 1340 (limiting an invention to a technological environment for which to apply the underlying abstract concept does not make an abstract concept any less abstract).

Appellant also contends the pending claims would not preempt the abstract idea of "providing healthcare by assembling backup kits for patient-specific arthroplasty procedures. Br. 17–18, 22–23. As such, Appellant asserts the instant claims are eligible for a streamlined analysis. Br. 18.

As an initial matter, "[f]or purposes of efficiency *in examination*, a streamlined analysis can be used for a claim that may or may not recite a judicial exception but, when viewed as a whole, *clearly* does not seek to tie up any judicial exception such that others cannot practice it." *2014 Interim Guidance on Patent Subject Matter Eligibility*, 79 Fed. Reg. 74618, 74625 (December 16, 2014) (emphases added). Additionally, the Interim Guidance indicates a "full analysis should be conducted" if there is doubt that the applicant is effectively seeking coverage for a judicial exception. *Interim Guidance*, 79 Fed. Reg. at 74625. Thus, a streamlined eligibility analysis is available to Examiners who are of the view that a claim clearly does not have a subject matter eligibility problem. In this Appeal, the controlling law on patent eligibility is the two-step test under *Alice/Mayo* as described herein.

Further, "'while preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.'" *FairWarning IP*, 839 F.3d at 1098 (quoting *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *see also OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) ("[T]hat the claims do not preempt all price optimization or may be limited to price optimization in the e-commerce setting do not make them any less abstract."). Moreover, "[w]here a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework,

as they are in this case, preemption concerns are fully addressed and made moot." *Ariosa*, 788 F.3d at 1379; *see also* Ans. 19–20.

For the reasons discussed *supra*, we are unpersuaded of Examiner error. Accordingly, we sustain the Examiner's rejection of independent claim 1 under 35 U.S.C. § 101. For similar reasons, we also sustain the Examiner's rejection of independent claims 10 and 31 under 35 U.S.C. § 101. Additionally, we sustain the Examiner's rejection of claims 2–9, 11–14, 25–30, and 32–34, which depend directly or indirectly therefrom and were not argued separately. *See* Br. 23; *see also* 37 C.F.R. § 41.37(c)(1)(iv) (2015).

DECISION

We affirm the Examiner's decision rejecting claims 1–14 and 25–34 under 35 U.S.C. §101.

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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED