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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DAVID E. FUHRMANN, KHIANG SEOW, and
CHARLES S. SQUIRES¹

Appeal 2017-000319
Application 14/047,723
Technology Center 3600

Before JOHN A. EVANS, LARRY J. HUME, and JOYCE CRAIG,
Administrative Patent Judges.

HUME, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the Final Rejection of claims 2–7 and 9–22, which are all claims pending in the application. Appellants have canceled claims 1 and 8. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ According to Appellants, the real party in interest is Epic Systems Corp. App. Br. 2.

STATEMENT OF THE CASE²

The Invention

Appellants' disclosed embodiments and claimed invention "relate[] generally to health record management, and more particularly, this patent relates to *a system and method for facilitating cross enterprises data sharing of healthcare information.*" Spec. ¶ 2 (emphasis added).

Exemplary Claim

Claim 2, reproduced below, is representative of the subject matter on appeal:

2. A method for sharing patient charts among a plurality of computer systems corresponding to a plurality of geographically diverse health care organizations in communication through a network comprising the steps of:

storing a first patient chart corresponding to examination of a patient in a data repository in communication with the computer system at a first health care organization at a first geographic location;

generating a retrieval key, the retrieval key comprising information related to the patient and a health enterprise identifier identifying the first health care organization;

encrypting the retrieval key;

generating a first release authorization (RA) token including the retrieval key and identifying at least a portion of the first chart authorized to be accessed from at least one other

² Our decision relies upon Appellants' Appeal Brief ("App. Br.," filed Jan. 19, 2016); Reply Brief ("Reply Br.," filed Sept. 13, 2016); Examiner's Answer ("Ans.," mailed July 28, 2016); Final Office Action ("Final Act.," mailed July 2, 2015); and the original Specification ("Spec.," filed Oct. 7, 2013).

health care organization, and storing the first RA token and the retrieval key in an authorization vault memory structure;

receiving the first RA token from a computer system at a second health care organization at a second geographic location and using the first RA token including the retrieval key to request access to the first patient chart;

receiving a second release authorization (RA) token corresponding to a second patient chart produced at the second health care organization, the second RA token identifying at least a portion of the second chart authorized to be accessed from at least one other health care organization, and

storing the second RA token with the first RA token in the data repository at the first health care organization, wherein the first and second RA tokens are accessible through the network to provide a patient medical history compiled from geographically diverse health care organizations, and wherein the computer system is accessible to retrieve a consent form authorizing access to the portion of each of the first and second patient charts identified by the first and second RA tokens, respectively.

*Rejection on Appeal*³

Claim 2–7 and 9–22 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2.

CLAIM GROUPING

Based on Appellants' arguments (App. Br. 5–6), we decide the appeal of the patent-ineligible subject matter rejection of claims 2–7 and 9–22 on the basis of representative claim 2.⁴

³ In the event of further prosecution, we leave it to the Examiner to determine whether claim 9 should be rejected under pre-AIA 35 U.S.C. § 112, second paragraph, or AIA 35 U.S.C. § 112(b). Claim 9 depends from canceled claim 8.

ISSUE

Appellants argue the rejection of claim 2 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error. These contentions present us with the following issue:

Did the Examiner err in concluding claim 2 is drawn to a judicial exception, i.e., an abstract idea, without significantly more, and thus is patent-ineligible?

ANALYSIS

In reaching this decision, we consider all evidence presented and all arguments actually made by Appellants. We do not consider arguments Appellants could have made but chose not to make in the Briefs, and we deem any such arguments waived. 37 C.F.R. § 41.37(c)(1)(iv).

We disagree with Appellants' arguments with respect to claims 2–7 and 9–22 and, unless otherwise noted, we incorporate by reference herein and adopt as our own: (1) the findings and reasons set forth by the Examiner in the action from which this appeal is taken, and (2) the reasons and rebuttals set forth in the Examiner's Answer in response to Appellants' arguments. We highlight and address specific findings and arguments regarding claim 2 for emphasis as follows.

⁴ "Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately." 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellants do not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

Appellants contend, "[t]he sole issue on appeal . . . is whether the Examiner has established a *prima facie* case that the claims are not directed to patentable subject matter. Applicants respectfully submit that the rejection does not meet this burden, and that the rejection should be overturned." App. Br. 5.

The Federal Circuit has held, "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). The Federal Circuit stated that this burden is met by "adequately explain[ing] the shortcomings it perceives so that the applicant is properly notified and able to respond." *Id.* at 1370. It is only "when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection" that the *prima facie* burden has not been met and the rejection violates the minimal requirements of 35 U.S.C. § 132. *Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990).

Appellants further argue:

To meet the initial burden, the Examiner must clearly and specifically explain why a claim or claims are unpatentable, so that applicant has sufficient notice and is able to effectively respond. For rejections based on subject matter eligibility, the Examiner must articulate a reasoned rationale that identifies the judicial exception recited in the claim, and explains why it is considered an exception. A thorough analysis and a clear rejection is a critical part of the Examiner's burden The Office Action here does not establish a *prima facie* case that the claims are directed to unpatentable subject matter, and the rejection should be overturned.

The rejection articulated in the Office Action relies entirely on circular logic that fails to specifically identify

anything at all, and is so unclear that applicants cannot effectively respond The logic provided in the office action is not a "reasoned rationale" at all, but is tentative, inconclusive, and confusing [and] effectively leaves it to the Applicant both to identify the "abstract idea," determine which "type," of abstract idea applies, and then to provide an argument to the contrary.

App. Br. 5–6.

On this record, and as discussed further, *infra*, we disagree with Appellants and find the Examiner has met the minimal requirements of 35 U.S.C. § 132 in setting forth a prima facie case under § 101.

Alice Framework

Section 101 provides that anyone who "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. 35 U.S.C. § 101. The Supreme Court has repeatedly emphasized that patent protection should not extend to claims that monopolize "the basic tools of scientific and technological work." *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012); *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014). Accordingly, laws of nature, natural phenomena, and abstract ideas are not patent-eligible subject matter. *Id.*

The Supreme Court's two-part *Mayo/Alice* framework guides us in distinguishing between patent claims that impermissibly claim the "building blocks of human ingenuity" and those that "integrate the building blocks into something more." *Alice*, 134 S. Ct. at 2354. First, we "determine whether the claims at issue are directed to a patent-ineligible concept." *Id.* at 2355.

If so, we "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." *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72, 79). While the two steps of the *Alice* framework are related, the "Supreme Court's formulation makes clear that the first-stage filter is a meaningful one, sometimes ending the § 101 inquiry."⁵ *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016).

Alice Step 1 — Abstract Idea

We note the Supreme Court "has not established a definitive rule to determine what constitutes an 'abstract idea'" for the purposes of step one. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) (citing *Alice*, 134 S. Ct. at 2357). Our reviewing court has held claims ineligible as being directed to an abstract idea when they merely collect electronic information, display information, or embody mental processes that could be performed by humans. *Elec. Power Grp.*, 830 F.3d at 1353–54 (collecting cases). At the same time, "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Alice*, 134 S. Ct. at 2354 ("[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.").

⁵ Applying this two-step process to claims challenged under the abstract idea exception, the courts typically refer to step one as the "abstract idea" step and step two as the "inventive concept" step. *Affinity Labs of Tex., LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016).

Appellants contend, "the Office Action fails to identify a judicial exception." App. Br. 6. Appellants further alleges the Examiner "provide[s] a bullet point list of elements of claim 2, and then again circularly, tentatively, and inconclusively states the following" *Id.* (quoting Final Act. 3).

Contrary to Appellants' contentions, we find the Examiner, in the Final Action, concludes the abstract ideas in claim 2 may be characterized by, *inter alia*, storing a chart, generating and encrypting a key, identifying portions of a chart to release (i.e., selecting information), storing data (tokens) (Final Act. 2–3), "comparing new and stored information and using rules to identify options . . . using categories to organize, store, and transmit information; and/or . . . organizing information through mathematical correlations." Final Act. 3. Thus, we find Appellants' arguments unavailing that the Examiner failed to identify a judicial exception, i.e., an abstract idea.

Under the "abstract idea" step we must evaluate "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*, 838 F.3d at 1257 (citation omitted).

Turning to the claimed invention, claim 2 recites:

A method for sharing patient charts among a plurality of computer systems corresponding to a plurality of geographically diverse health care organizations in communication through a network

Claim 2 (preamble).

Method claim 2's limitations also require the steps of "storing a first patient chart [storing data]. . . ; generating a retrieval key

[generating data] . . . ; encrypting the retrieval key [processing data] . . . ; generating a first release authorization (RA) token [generating data] . . . and storing the first RA token and the retrieval key [storing data]. . . ; receiving a second . . . [RA] token [receiving data] . . . and storing the second RA token with the first RA token [storing data] . . . wherein the computer system is accessible to retrieve a consent form [retrieve data] authorizing access to the portion of each of the first and second patient charts [accessing data] identified by the first and second RA tokens, respectively."

In the Answer, the Examiner buttressed the legal conclusion claim 2 is directed to an abstract idea by stating:

These steps [of claim 2] describe the concept of generating an encryption key and encrypting this key for subsequent retrieval, which corresponds to the concepts identified as abstract ideas by the courts, such as comparing new and stored information and using rules to identify options in *SmartGene*, using categories to organize and store information for transmission in *Cyberfone*, and a mathematical procedure for converting one form of numerical representation to another in *Benson*. The concept described in this claim is not meaningfully different from those found by the courts to be abstract ideas. As such, the description in this claim is an abstract idea.

Ans. 3.

Under step one, we agree with the Examiner that the inventions claimed in each of independent claims 2, 11, and 18 are directed to an abstract idea, i.e., "comparing new and stored information and using rules to identify options . . . using categories to organize, store, and transmit

information; and/or . . . organizing information through mathematical correlations." Final Act. 3.

As the Specification itself observes, "[t]his patent relates generally to health record management, and more particularly, this patent relates to a system and method for facilitating cross enterprises data sharing of healthcare information." Spec. ¶ 2.⁶ We conclude this type of activity, i.e., managing health care records and sharing information, 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*.").⁷

⁶ *See also* Spec. 37 ("Abstract"):

A method and system for sharing charts associated with a first patient among system entities within a networked system wherein different entities maintain different charts for the first patient, the method comprising the steps of at each of at least a subset of the entities and for the first patient, when a chart is generated, generating a release authorization (RA) token for the chart, maintaining an RA token list including all of tokens received for the first patient from any other system entities, when a token is received from another entity, using the received token to access a chart associated with the received token that is stored at another entity and when a requesting entity requests a chart associated with the first patient, providing the chart along with the RA token list associated with the first patient to the requesting entity.

⁷ *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.

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*, they continue to "treat[] analyzing information by steps people go through in their minds, or by mathematical algorithms, 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) (alteration in original) (quoting *Elec. Power Grp.*, 830 F.3d at 1354).

In this regard, the claims are similar to claims our reviewing court has found patent ineligible in *Electric Power Group*, 830 F.3d at 1353–54 (collecting information and "analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, [are] essentially mental processes within the abstract-idea category").

Therefore, in agreement with the Examiner, we conclude claim 2 involves nothing more than identifying, collecting, storing, comparing, and securely sharing and generating data, without any particular inventive technology — an abstract idea. *See Elec. Power Grp.*, 830 F.3d at 1354. We further refer to *Content Extraction*, where the Federal Circuit has provided additional guidance on the issue of statutory subject matter by holding claims to collecting data, recognizing certain data within the collected data set, and storing that recognized data in memory were directed to an abstract idea and therefore unpatentable under § 101. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343 (Fed. Cir. 2014).

Accordingly, on this record, and under step one of *Alice*, we agree with the Examiner's conclusion that the claims are directed to an abstract idea.

Alice Step 2 —Inventive Concept

If the claims are directed to a patent-ineligible concept, as we conclude above, we proceed to the "inventive concept" step. For that step 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*, 838 F.3d at 1258 (quoting *Elec. Power Grp.*, 830 F.3d at 1353).

In applying step two 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. *Ultramercial, 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*, 134 S. Ct. at 2357. Those "additional features" must be more than "well-understood, routine, conventional activity." *Mayo*, 566 U.S. at 79.

We note, in the Appeal Brief, Appellants fail to respond in any manner to the Examiner's legal conclusion under Step 2 of the *Alice* analysis

(Final Act. 3 *et seq.*), i.e., that the claimed method may be carried out with a generic/general purpose computer.⁸

In the Reply Brief, Appellants argue the Examiner's rejection "is not consistent with the points made in the May 19, 2016 [Examiner's training] memorandum to the Patent Examining Corps, and the rejection should therefore be overturned." Reply Br. 1.

⁸ The Examiner states:

The Specification as originally filed appears to disclose that a machine within the context of the claim may be any device with one or more processors. This interpretation appears to envelop a generic/general purpose computer.

The claim further appears to recite generating data tokens and releasing data based on these tokens. This appears to be generic computer functions that are well understood, routine, and conventional activities previously known to the pertinent industry.

The claim does not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: mere instructions to implement the idea on a computer, and/or recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Therefore, the claim(s) is/are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Final Act. 3–4.

Appellants' present additional arguments based on these examination guidelines. Reply Br. 1–3. We have considered these guidelines, which are based on controlling case law and USPTO policy at the time the guidelines were issued. However, the Board applies relevant U.S. Supreme Court and the Federal Circuit case law to the facts of each patent application on appeal.

As intervening case law between the filing of the Appeal Brief and the Examiner's Answer, Appellants additionally cite *Enfish*, in prefacing their arguments in the Reply Brief (1). However, we find Appellants' claim 2 is distinguishable over the claim considered by the court in *Enfish*, which was determined to be "directed to an improvement in the functioning of a computer." *Enfish*, 822 F.3d at 1338. The court in *Enfish* noted: "In contrast, the claims at issue in *Alice* and *Versata* can readily be understood as simply adding conventional computer components to well-known business practices."⁹ *Id.*

In the Reply Brief, Appellants argue:

Like *Enfish*, the claims here are directed to an improvement in computer technology, and in particular, to a specific implementation of a solution to a problem in the software arts. In particular, this system provides the ability for a

⁹ The Supreme Court held that the claims in *Alice* were drawn to the abstract idea of intermediated settlement and that "the mere recitation of a generic computer cannot transform a patent-ineligible abstract idea into a patent-eligible invention." See *Alice*, 134 S. Ct. at 2358. *Alice* involved "a method of exchanging financial obligations between two parties using a third-party intermediary to mitigate settlement risk." *Id.* at 2356. Like the method of hedging risk in *Bilski v. Kappos*, 561 U.S. 593, 628 (2010)—which the Court deemed "a method for organizing human activity"—*Alice*'s "concept of intermediated settlement" was held to be "a fundamental economic practice long prevalent in our system of commerce." *Alice*, 134 S. Ct. at 2356.

Healthcare Organization (HCO) to create a release authorization that may be used by a second organization that adheres to a set of standards to request patient information from the HCO. The release authorization greatly improves the security of sensitive information that must be shared with other entities. (See, for example, paragraph [0030]) The claims are each directed to geographically diverse health care organizations connected through networked processors (independent claims 11 and 18), or computer systems (independent claim 2). The claims each encrypt specific types of data, for use in a specific application. The focus of the claims is on the specific asserted improvement in computer capabilities, not on a process that qualifies as an "abstract idea" for which computers are invoked merely as a tool. (*Enfish*, at 11)

Reply Br. 3–4

Evaluating representative claim 2 under step 2 of the *Alice* analysis, we agree with the Examiner that claim 2 lacks an inventive concept that transforms the abstract idea of sharing patient information into a patent-eligible application of that abstract idea. *See* Ans. 4–6.

We agree with the Examiner because, as in *Alice*, we find the recitation of (1) sharing patient charts using "a plurality of computer systems . . . in communication through a network" (claim 2); (2) "sharing charts associated with a patient among processors . . . within a networked system" (claim 11); or (3) "sharing patient charts associated with a patient among processors . . . within a networked system" (claim 18) is simply not enough to transform the patent-ineligible abstract idea here into a patent-eligible invention. *See Alice*, 134 S. Ct. at 2357 ("[C]laims, which merely require generic computer implementation, fail to transform [an] abstract idea into a patent-eligible invention.").

Accordingly, 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 independent claim 2, and grouped claims 3–7 and 9–22, not argued separately, and which fall therewith. *See Claim Grouping, supra.*

REPLY BRIEF

To the extent Appellants may advance new arguments in the Reply Brief (Reply Br. 1–5) not in response to a shift in the Examiner's position in the Answer, we note arguments raised in a Reply Brief that were not raised in the Appeal Brief or are not responsive to arguments raised in the Examiner's Answer will not be considered except for good cause (*see* 37 C.F.R. § 41.41(b)(2)), which Appellants have not shown.

CONCLUSION

The Examiner did not err with respect to the patent-ineligible subject matter rejection of claims 2–7 and 9–22 under 35 U.S.C. § 101, and we sustain the rejection.

Appeal 2017-000319
Application 14/047,723

DECISION

We affirm the Examiner's decision rejecting claims 2–7 and 9–22.

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