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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ERICA LORRAINE FORD, RACHEL LEE COOMBE, and
NIKLAS CHRISTIAN BOIVE FORSBERG

Appeal 2017-007762
Application 13/592,623¹
Technology Center 3600

Before HUNG H. BUI, NABEEL U. KHAN, and SHARON FENICK,
Administrative Patent Judges.

BUI, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants seek our review under 35 U.S.C. § 134(a) from the Examiner’s Final Rejection of claims 1–3, 5–13, and 15–18. Claims 4 and 14 have been canceled. Claims App’x. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.²

¹ According to Appellants, the real party in interest is Cerner Innovation, Inc. App. Br. 3.

² Our Decision refers to Appellants’ Appeal Brief (“App. Br.”) filed October 17, 2016; Examiner’s Answer (“Ans.”) mailed February 1, 2017; Final Office Action (“Final Act.”) mailed May 17, 2016; and original Specification (“Spec.”) filed August 23, 2012.

STATEMENT OF THE CASE

Appellants' invention relates to "methods, systems, graphical user interfaces, and computer readable media for populating custom patient worklists using demographic and clinical criteria." Spec. ¶ 3; Abstract.

Claims 1, 11, and 18 are independent. Claim 1 is illustrative of Appellants' invention, as reproduced below:

1. One or more non-transitory storage media having computer-executable instructions embodied thereon that, when executed, facilitate a method of creating custom patient worklists, the method comprising:
 - receiving a selection of a patient list for a healthcare facility;
 - receiving a name of a view associated with a custom patient worklist, wherein a view is a number of custom patient lists saved under a certain name;
 - receiving a selection of a unit within the healthcare facility;
 - receiving a selection of one or more criteria associated with the patient list;
 - receiving a selection of a sequence to display the selection of one or more criteria such that criteria that is of greater importance appears more prominently;
 - building the custom patient worklist based on the selections, wherein each of various columns representing the one or more criteria that are created in the sequence;
 - retrieving a plurality of data associated with the selections from at least one of a health information system and electronic medical records associated with patients, wherein the plurality of data includes at least one piece of data received from a medical device;
 - automatically populating the custom patient worklist for a clinician using the plurality of data; and
 - displaying the custom patient worklist with the plurality of data.

App. Br. 20 (Claims App'x).

EXAMINER'S REJECTION

Claims 1–3, 5–13, and 15–18 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to an abstract idea. Final Act. 2–5.

DISCUSSION

In *Alice Corp. v. CLS Bank International*, 134 S. Ct. 2347 (2014), the Supreme Court reiterates an analytical two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66, 79 (2012), “for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Alice*, 134 S. Ct. at 2355. The first step in the analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” such as an abstract idea. *Id.* If the claims are directed to eligible subject matter, the inquiry ends. *Thales Visionix Inc. v. United States*, 850 F.3d 1343, 1349 (Fed. Cir. 2017); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1339 (Fed. Cir. 2016).

If the claims are directed to a patent-ineligible concept, the second step in the analysis is to consider the elements of the claims “individually and ‘as an ordered combination’” to determine whether there are additional elements that “‘transform the nature of the claim’ into a patent-eligible application.” *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 566 U.S. at 79, 78). In other words, the second step is to “search for an ‘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.* (citing *Mayo*, 566 U.S. at 72–73).

In rejecting claims 1–3, 5–13, and 15–18 under 35 U.S.C. § 101, the Examiner determines these claims are directed to an abstract idea of **“creating and building custom patient worklists based on user selections of demographical and clinical criteria”** and includes limitations that are analogous to those discussed in *Cyberfone*. Final Act. 2–3 (quoting *Cyberfone Sys., LLC v. CNN Interactive Grp., Inc.*, 558 F. App’x 988, 992 (Fed. Cir. 2014) (holding that “using categories to organize, store, and transmit information is well-established . . . the idea of collecting information in classified form, then separating and transmitting that information according to its classification, is an abstract idea that is not patent-eligible”). The Examiner also finds the claims are merely mental steps that could also be performed in the human mind or by a human using a pen and paper. Final Act. 3; see *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011).

The Examiner also determines:

[t]he claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because [i] the additional elements when considered both individually and as an ordered combination do not amount to significantly more than the abstract idea. [ii] the additional elements . . . amount to no more than a recitation of: A) Generic computer structure . . . B) Generic computer functions that are well-understood, routine and conventional activities previously known to the pertinent industry (i.e., **receiving, building, and populating data**) . . . There is no indication that the combination of elements improves the functioning of a computer or improves any other technology.

Final Act. 4–5.

Alice/Mayo—Step 1 (Abstract Idea)

Turning to the first step of the *Alice* inquiry, Appellants argue the claims are not directed to an abstract idea within the meaning of *Alice* because (1) “creating and building custom patient worklists based on user selections of demographical and clinical criteria” is not merely “using categories to organize, store, and transmit information” as discussed in *Cyberfone*; and (2) the abstract ideas, as explained by the Supreme Court in *Alice*, are limited to “those concepts that are necessarily ‘the basic tools of scientific and technological work’ that may be considered ‘fundamental truths’ or ‘building blocks to human ingenuity.’” App. Br. 10–13 (quoting *Alice*, 134 S.Ct. at 2354–2356. According to Appellants, the Examiner “has failed to provide any evidence” that “‘creating and building custom patient worklists based on user selections of demographical and clinical criteria’ is a building block of human ingenuity.” App. Br. 13.

Appellants’ arguments are not persuasive. At the outset, we note the “abstract idea” exception is not limited to “those concepts that are necessarily ‘the basic tools of scientific and technological work’ that may be considered ‘fundamental truths’ or ‘building blocks to human ingenuity,’” as Appellants argue. App. Br. 10–13. As the Federal Circuit has recognized, there is no single universal definition of an abstract idea, and because there is no single universal definition of an abstract idea, the Examiner is asked “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 (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (citing *Elec. Power Grp.*, 830 F.3d at 1353–54); accord USPTO Memorandum, 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”); MPEP § 2106.04(a). In this case, the Examiner did what was required under the USPTO Memorandum and the Manual of Patent Examining and Procedure, and characterized the claims as similar to concepts that the courts have already identified (i.e., *Cyberfone*) as required pursuant to *Alice*.

Contrary to Appellants’ arguments, Appellants’ Specification describes the invention as directed to “methods, systems, graphical user interfaces, and computer readable media for populating custom patient worklists using demographic and clinical criteria.” Spec. ¶ 3. According to Appellants’ Specification, “[p]atient lists and units associated with healthcare facilities are selected. Names of views associated with the custom patient worklists are received. Criteria are selected and sequences for displaying selected criteria are received. Custom patient worklists are built based on the selections.” Abstract. Embodiments of Appellants’ Specification, as shown in Figure 3, describe basic steps of (1) “receiv[ing] a selection of a patient list for a healthcare facility” (*see* Fig. 3, step 310); (2) “receiv[ing] a name of a view associated with a custom patient list” (*see* Fig. 3, step 320); (3) “receiv[ing] a selection of a unit within the healthcare facility” (*see* Fig. 3, step 330); (4) “receiving a selection of one or more criteria associated with the patient list” (*see* Fig. 3, step 340); (5) “receiv[ing] a selection of a sequence to display the selection of one or more criteria” (*see* Fig. 3, step 350); and (6) “building the custom patient list based on the selections” (*see* Fig. 3, step 360) as recited in Appellants’

claims 1, 11, and 18. All these steps are nothing more than “creating and building custom patient worklists based on user selections of demographical and clinical criteria” as correctly recognized by the Examiner. Final Act. 2—
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Thus, we agree with the Examiner (*see* Ans. 2) that the claims are directed to an abstract idea of “creating and building custom patient worklists based on user selections of demographical and clinical criteria” which is considered as “certain methods of organizing human activities” as identified in *Alice* and *Bilski v. Kappos*, 561 U.S. 593 (2010) — concepts that courts have characterized as abstract ideas.³ Such activities are squarely within the realm of abstract ideas.

As further recognized by the Examiner (Final Act. 3), “creating and building custom patient worklists based on user selections of demographical and clinical criteria” can also be performed manually using a pen and paper. *See CyberSource*, 654 F.3d at 1372–73 (“[A] method that can be performed by human thought alone is merely an abstract idea and is not patent-eligible under § 101.”); *see also In re Comiskey*, 554 F.3d 967, 979 (Fed. Cir. 2009) (“[M]ental processes—or processes of human thinking—standing alone are not

³ *See* (1) “*The 2014 Interim Guidance on Patent Subject Matter Eligibility*,” published on Dec. 16, 2014 (79 Fed. Reg. 74618); (2) “*July 2015 Update: Subject Matter Eligibility*” (July 2015 Update); (3) “*May 2016 Subject Matter Update*” (May 4, 2016 Memorandum) at <https://www.uspto.gov/patent/laws-and-regulations/examination-policy/subject-matter-eligibility>; (4) USPTO June 2017: *Interim Eligibility Guidance Quick Reference Sheet* identifying abstract idea examples of “certain methods of organizing human activity.” *See also In re Bilski*, 545 F.3d 943, 972 (Fed. Cir. 2008); *Bilski v. Kappos*, 561 U.S. 593 (2010); and *Alice*, 134 S. Ct. 2361 (concurrence from Justice Sotomayor joined by Justices Ginsburg and Breyer).

patentable even if they have practical application.”); *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“Phenomena of nature . . . , *mental processes*, and abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work” (emphasis added)). Additionally, mental processes remain unpatentable even when automated to reduce the burden on the user of what once could have been done with pen and paper.

CyberSource, 654 F.3d at 1375 (“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*.”).

Moreover, all the steps recited in Appellants’ claim 1 (similarly claims 11 and 18) including, for example, (1) “receiving a selection of a patient list for a healthcare facility”; (2) “receiving a name of a view associated with a custom patient worklist”; (3) “receiving a selection of a unit within the healthcare facility”; (4) “receiving a selection of one or more criteria associated with the patient list”; (5) “receiving a selection of a sequence to display the selection of one or more criteria”; (6) “building the custom patient list based on the selections”; (7) “retrieving a plurality of data . . . automatically populating the custom patient worklist; and displaying the custom patient worklist with the plurality of data” are analogous or similar to those discussed in *Cyberfone* as well as “collecting information, analyzing it, and displaying certain results of the collection and analysis” discussed in *Electric Power Group LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016) (holding “collecting information, analyzing it, and displaying certain results of the collection and analysis” are abstract-idea processes). These steps are also abstract processes of receiving, processing and analyzing data of a specific content, i.e., a customer patient worklist. Information, as such,

is intangible, and the data analysis and comparisons are abstract ideas. *See, e.g., Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12 (2007); *Alice*, 134 S. Ct. at 2355; *Parker v. Flook*, 437 U.S. 584, 589, 594–95 (1978); *Gottschalk*, 409 U.S. at 71–72. “[C]ollecting information and analysis, including when limited to particular content (which does not change its character as information),” and “analyzing information by steps people go through in their minds, or by mathematical algorithms, without more,” are “within the realm of abstract ideas.” *Electric Power Group*. 830 F.3d at 1353–54; *see also Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1349 (Fed. Cir. 2015); *Digitech Image Techs., LLC v. Elecs. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014); *CyberSource* 654 F.3d at 1370.

Accordingly, we agree with the Examiner that claims 1–3, 5–13, and 15–18 are directed to an abstract idea of “creating and building custompatient worklists based on user selections of demographical and clinical criteria” which is “certain methods for human activities” similar to concepts identified in *Alice* and *Bilski*, as well as “mental steps” under *Benson*.

Alice/Mayo—Step 2 (Inventive Concept)

Appellants argue “the inventive concept embodied in claims 1–3, 5–13, and 15–18 of the present Application is not merely automation of prior processes . . . [but] recite a new combination of steps or computer system components for building custom patient worklists that is not generic or well-known as illustrated by the absence of a prior-art rejection.” App. Br. 17 (quoting *McRO, Inc. v. Bandai Namco Games America, Inc.*, 837 F.3d 1299 (Fed. Cir. 2016)).

Appellants' argument is not persuasive. Likewise, we note Appellants' reliance on *McRO* is misplaced because *McRO* is relied upon to determine whether a claim is directed to an abstract idea under *Alice* step 1, not *Alice* step 2. For example, *McRO*'s claims contain (i) specific limitations regarding a set of rules that “define [] a morph weight set stream as a function of phoneme sequence and time of said phoneme sequence” to enable computers to produce “accurate and realistic lip synchronization and facial expressions in animated characters” and, when viewed as a whole, are directed to (ii) a “technological improvement over the existing, manual 3–D animation techniques” that uses “limited rules in a process specifically designed to achieve an improved technological result in conventional industry practice,” *McRO*, 837 F.3d at 1315. In contrast to *McRO*, Appellants' claims and Specification are directed to “methods, systems, graphical user interfaces, and computer readable media for populating custom patient worklists using demographic and clinical criteria.” Spec. ¶ 3; Abstract.

According to *Alice*, the second step is to “search for an ‘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.’” *Alice*, 134 S. Ct. at 2355 (quoting *Mayo*, 566 U.S. at 72–73). The Federal Circuit cases on point include (1) *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014) and (2) *Amdocs*, 841 F.3d 1288, both of which involved business-centric inventions.

In *DDR* and *Amdocs*, the Federal Circuit opted to bypass *Alice* step 1 in favor of step 2. In particular, the Federal Circuit found *DDR*'s claims

contain an “inventive concept” under *Alice* step 2 because *DDR*’s claims (1) do not merely recite “the performance of some business practice known from the pre-Internet world” previously disclosed in *Bilski* and *Alice*, but instead (2) provide a technical solution to a technical problem unique to the Internet, *i.e.*, a “solution . . . necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *DDR*, 773 F.3d at 1257. Likewise, the Federal Circuit also found *Amdocs*’ claims contain a sufficient “inventive concept” because like *DDR*, *Amdocs*’ claims “entail[] an unconventional technological solution (enhancing data in a distributed fashion) to a technological problem (massive record flows which previously required massive databases)” and “improve the performance of the system itself.” *Amdocs*, 841 F.3d at 1300, 1302. Under current Federal Circuit precedent, an “inventive concept” under *Alice* step 2 can be established by showing, for example, that the patent claims:

(1) provide a technical solution to a technical problem unique to the Internet, *e.g.*, a “solution . . . necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” (*see DDR*, 773 F.3d at 1257);

(2) transform the abstract idea into “a particular, practical application of that abstract idea,” *e.g.*, “installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user” (*see Bascom Global Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341, 1352, 1350 (Fed. Cir. 2016)); or

(3) “entail[] an unconventional technological solution ([*e.g.*,] enhancing data in a distributed fashion) to a technological problem ([*e.g.*,] massive record flows [that] previously required massive databases)” and “improve the performance of the system itself” (*see Amdocs*, 841 F.3d at 1300, 1302).

In this case, however, we find no element or combination of elements recited in Appellants' claims 1, 11, and 18 that contains any "inventive concept" or adds anything "significantly more" to transform the abstract concept (i.e., "creating and building customer patient worklists based on user selections of demographical and clinical criteria") into a patent-eligible application. *Alice*, 134 S. Ct. at 2357. We agree with the Examiner that added computer elements (such as a computing device and network interface device) cannot transform the abstract idea into a patent eligible invention. As our reviewing court has observed, "after *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible." *DDR*, 773 F.3d at 1256 (citing *Alice*, 134 S. Ct. at 2358)).

Additional Argument

Appellants argue that the claims do not seek to tie up or preempt an entire field, i.e., an abstract idea of "creating and building custom patient worklists based on user selections of demographical and clinical criteria." App. Br. 18. However, this argument is not persuasive because, although "preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). "Where a patent's claims are deemed only to disclose patent ineligible subject matter" under the *Alice/Mayo* framework, "preemption concerns are fully addressed and made moot." *Id.*

Because Appellants' claims 1, 11, and 18 are directed to a patent-ineligible abstract concept and does not recite something "significantly

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more” under the second prong of the *Alice* analysis, we sustain the Examiner’s rejection of claims 1–3, 5–13, and 15–18 under 35 U.S.C. § 101.

CONCLUSION

On the record before us, we conclude Appellants have not demonstrated the Examiner erred in rejecting claims 1–3, 5–13, and 15–18 under 35 U.S.C. § 101.

DECISION

As such, we AFFIRM the Examiner’s Final Rejection of claims 1–3, 5–13, and 15–18 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).

AFFIRMED