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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/622,317	09/18/2012	Teppo Neuvonen	2010467-0025 PRK-014US	1045
24280	7590	03/21/2018	EXAMINER	
CHOATE, HALL & STEWART LLP TWO INTERNATIONAL PLACE BOSTON, MA 02110			TIEDEMAN, JASON S	
			ART UNIT	PAPER NUMBER
			3626	
			NOTIFICATION DATE	DELIVERY MODE
			03/21/2018	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte TEPPU NEUVONEN, SAMI RANTALA, GRANT GAILLARD,
and CURT PAULETTE

(Applicants: Wallac OY and PerkinElmer Health Sciences, Inc.)

Appeal 2017-000018
Application 13/622,317¹
Technology Center 3600

Before JUSTIN BUSCH, MATTHEW R. CLEMENTS,
and NORMAN H. BEAMER, *Administrative Patent Judges*.

BEAMER, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 1–4, 6–18, 22–24, and 27–41. Claims 5, 19–21, 25, 26, and 42–70 are cancelled. (Final Act. 2.) We have jurisdiction over the pending rejected claims under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify PerkinElmer Health Sciences, Inc. and Wallac OY as the real parties in interest. (App. Br. 2.)

THE INVENTION

Appellants' disclosed and claimed invention is directed to storing and transferring patient information related to biological sample testing using biological sample cards and short range communications. (Abstract.) Independent claim 1, reproduced below, is illustrative of the subject matter on appeal:

1. A biological sample card comprising:
 - one or more collection regions, each configured to stably contain a biological sample; and
 - a transmission and storage device comprising:
 - an antenna configured for short range communication, and
 - a computer-readable medium,wherein the transmission and storage device is configured to:
 - receive patient data transmitted to the antenna,
 - store the patient data in the computer-readable medium, and
 - transmit the patient data via the antenna responsive to a query signal.

REJECTIONS

The Examiner rejected claims 1–4, 6–18, 22–24, and 27–41 under 35 U.S.C. § 101 as being directed to ineligible subject matter. (Final Act. 3–4.)

The Examiner rejected claims 1–4, 6, 11, and 12 under 35 U.S.C. § 103(a) as being unpatentable over Morrison (US 2004/0126281 A1, pub. July 1, 2004), Conry et al. (US 2006/0074713 A1, pub. Apr. 6, 2006), and

Applicant Admitted Prior Art (as evidenced by Niemiec et al. (US 2008/0103827 A1, pub. May 1, 2008)). (Final Act. 5–10.)

The Examiner rejected claims 13, 14, 16, 17, 22–24, 27, 31–35, and 38–41 under 35 U.S.C. § 103(a) as being unpatentable over Conry, Morrison, and Applicant Admitted Prior Art. (Final Act. 10–24.)²

The Examiner rejected claims 7–10 and 28–30 under 35 U.S.C. § 103(a) as being unpatentable over Morrison, Conry, Applicant Admitted Prior Art, and Penuela et al. (US 2004/0113421 A1, pub. June 17, 2004). (Final Act. 24–30.)

The Examiner rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Morrison, Conry, Applicant Admitted Prior Art, and Gucciardi et al. (US 2009/0248437 A1, pub. Oct. 1, 2009). (Final Act. 30–31.)

The Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Morrison, Conry, Applicant Admitted Prior Art, and Finn (US 2006/0219776 A1, pub. Oct. 5, 2006). (Final Act. 31–32.)

The Examiner rejected claims 36 and 37 under 35 U.S.C. § 103(a) as being unpatentable over Morrison, Conry, Applicant Admitted Prior Art, and Cunningham (US 2003/0170143 A1, pub. Sept. 11, 2003). (Final Act. 33–34.)

² Although claims 38–41 are not listed in the heading of the section dealing with this rejection, those claims are rejected in the body of the section. (Final Act. 22–24.)

ISSUES ON APPEAL

Appellants' arguments in the Appeal Brief present the following dispositive issues:³

Issue One: Whether claims 1–4, 6–18, 22–24, and 27–41 are directed to ineligible subject matter. (App. Br. 7–15.)

Issue Two: Whether the Examiner erred in finding the combination of Morrison, Conry, and the Applicant Admitted Prior Art teaches or suggests the limitations of independent claims 1, 13, and 31. (App. Br. 15–21.)

ANALYSIS

We have reviewed the Examiner's rejections in light of Appellants' arguments that the Examiner erred. We disagree with Appellants' arguments, and we adopt as our own (1) the pertinent findings and reasons set forth by the Examiner in the Action from which this appeal is taken (Final Act. 3–34) and (2) the corresponding findings and reasons set forth by the Examiner in the Examiner's Answer in response to Appellants' Appeal Brief. (Ans. 4–19.) We concur with the applicable conclusions reached by the Examiner, and emphasize the following.

Issue One

The Examiner concludes the pending claims are patent-ineligible under 35 U.S.C. § 101:

³ Rather than reiterate the arguments of Appellants and the positions of the Examiner, we refer to the Appeal Brief (filed Jan. 11, 2016) (herein, "App. Br."); the Reply Brief (filed Sept. 22, 2016) (herein, "Reply Br."); the Final Office Action (mailed Mar. 18, 2015) (herein, "Final Act."); and the Examiner's Answer (mailed July 22, 2016) (herein, "Ans.") for the respective details.

[The claims] are directed to the abstract idea of storing patient information, which are/is method of organizing human activity (i.e., the fundamental human activity of storing information). This is analogous to using categories to organize, store, and transmit information which has been held to constitute an abstract idea.

(Final Act. 3.) In addition, the Examiner concludes:

The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because receiving and transmitting data does not add meaningful limitations to the abstract idea because they would be routine in any computer implementation (they constitute extra-solution activity).

(Final Act. 3–4.)

Appellants argue the Examiner incorrectly describes the subject matter of the claims, and that, when correctly characterized, the claims do not fall under the various statutory exceptions recognized by the authorities:

Contrary to the Examiner's position, each of claims . . . recites various physical structural limitations including “a biological sample card”

There is a significant difference between, among other things, (1) using a biological sample card to contain a biological sample, and (2) receiving and/or transmitting patient data, as disclosed in the present claims, and the abstract ideas described [in case law], for example, of “comparing data that can be done mentally.” (See July 2015 Update: Subject Matter Eligibility, page 3.) That is, using a biological sample card to contain a biological sample and transmitting/receiving patient data is not in any way analogous to the abstract ideas of merely organizing, storing, and transmitting information, as alleged in the Office Action.

(App. Br. 7, 12.) In elaboration, Appellants cite the benefits of the claimed subject matter: “improv[ing] the efficiency of obtaining biological samples and conducting tests on the samples, and also improving the reliability of the

samples and tests.” (App. Br. 12) Appellants further argue “the subject matter of the claims does not seek to tie up a judicial exception and, therefore, does not preempt others from using a judicial exception.” (App. Br. 13.)

Appellants also argue the claims recite significantly more than an abstract idea — relying on specific dependent claim limitations such as encryption of data, physical characteristics of the claimed sample collection regions and other sample card characteristics, use of bar codes and RFID or NFC tags, and use of a processor to determine punching patterns and data handling. (App. Br. 13–14.)

We are not persuaded by Appellants’ arguments. We adopt the Examiner’s findings and conclusions provided in the Final Office Action and Answer. (Final Act. 3–4; Ans. 6–14.) The Supreme Court has long held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S.Ct. 2347, 2354 (2014) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S.Ct. 2107, 2116 (2013)). The “abstract ideas” category embodies the longstanding rule that an idea, by itself, is not patentable. *Alice Corp.*, 134 S.Ct. at 2354–55 (quoting *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)).

In *Alice*, the Supreme Court sets forth an analytical “framework for distinguishing patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts.” *Id.* 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 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.” *Id.* (quoting *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 79, 78 (2012)). 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.* (quoting *Mayo*, 566 U.S. at 73.) The prohibition against patenting an abstract idea “‘cannot be circumvented by attempting to limit the use of the formula to a particular technological environment’ or adding ‘insignificant postsolution activity.’” *Bilski v. Kappos*, 561 U.S. 593, 610–11 (2010) (internal citation omitted.)

Turning to the first step of the *Alice* inquiry, we agree with the Examiner that Appellants’ claims are reasonably characterized as directed to an abstract idea of the “receipt, storage, and transmission of patient data.” (Ans. 6.) The fact that this idea is used in connection with a biological sample card is an example of the use of the abstract idea in a particular technological environment, which does not circumvent the prohibition of patenting an abstract idea. Moreover, the use of bar codes and RFID or NFC tags to track the sample cards is itself an example of the common business practice of tracking inventory by these well-established means, and does not alter the conclusion that the claims are directed to an abstract idea.

There is no definitive rule to determine what constitutes an “abstract idea.” Rather, the Federal Circuit has explained that “both [it] and the Supreme Court have found it sufficient to compare claims at issue to those claims already found to be directed to an abstract idea in previous

cases.” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016); *see also Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1294 (Fed. Cir. 2016) (explaining that, in determining whether claims are patent-eligible under § 101, “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”). The Federal Circuit also noted that “examiners are to continue to determine if the claim recites (i.e., sets forth or describes) a concept that is similar to concepts previously found abstract by the courts.” *Amdocs*, 841 F.3d at 1294 n.2 (internal citation omitted.)

Here, the claims are similar to the claims that the Federal Circuit determined are patent ineligible in *Electric Power Group, LLC v. Alstom S. A.*, 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”). The Federal Circuit has also held similar data manipulation claims to be directed to patent-ineligible abstract ideas — *see Digitech Image Techs., LLC v. Elecs. For Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014) (employing mathematical algorithms to manipulate existing information); *OIP Tech., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362–63 (Fed. Cir. 2015) (offer-based price optimization); *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1370 (Fed. Cir. 2015) (tailoring information presented to a user based on particular information); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1346 (Fed. Cir. 2013) (generating tasks in an insurance organization); and *Versata Dev. Grp. v. SAP Am.*, 793 F.3d 1306, 1333–34

(Fed. Cir. 2015) (price-determination method involving arranging organizational and product group hierarchies).

Appellants' argument that the claims do not preempt all methods of using biological sample cards do not make them any less abstract. *See buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (collecting cases); *Accenture*, 728 F.3d at 1345; *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (“While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility”).

Turning to the second step of the *Alice* inquiry, we find nothing in the claims that adds anything “significantly more” to transform the abstract idea of the receipt, storage, and transmission of patient data. *Alice*, 134 S. Ct. at 2357. Beyond that abstract idea, the claims merely recite “‘well-understood, routine, conventional activit[ies],”” such as tracking objects using bar codes and radio-frequency tags, encryption of data, and using a processor to determine punching patterns (the latter as established by the Cunningham reference at Paragraph 91). *Alice*, 134 S. Ct. at 2359 (quoting *Mayo*, 566 U.S. at 73). Considered individually or taken together as an ordered combination, the claim elements fail “to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72–73, 78).

Because Appellants' claims are directed to a patent-ineligible abstract concept and do not recite something “significantly more” under the second prong of the *Alice* analysis, we sustain the Examiner's 35 U.S.C. § 101 rejection of the pending claims.

Issue Two

In rejecting the independent claims, the Examiner relies on the disclosure in Morrison of a storage container for a biological sample in which the container includes a sliding platform with a bar code identification and the ability to hold a filter paper card containing a biological sample, where the platform can be enclosed and locked into the container, and the container can include an RFID tag and memory for storing and transmitting sample identification data. (Final Act. 5–6; Morrison Abstract, Fig. 1, ¶¶ 25–26, 32.) The Examiner also relies on the disclosure in Conry of an RFID device located on a patient card used to receive, store and transmit patient data. (Final Act. 6–7; Conry ¶¶ 11, 28, 36.)

Appellants argue that the separate container and platform cannot correspond to the claimed biological sample card, because that combination would “eliminate the advantages of the claimed invention . . . which include maintaining together (1) the data stored on the transmission and storage device of the biological sample card, with (2) the biological samples contained in the one or more collection regions.” (App. Br. 18–19.) However, we agree with the Examiner, that the combination teaches, or at least suggests, the claimed biological sample card, given that the platform is completely enclosed, and can be locked, into the container, thus forming an integral whole akin to a sample card, and given that the Specification does not provide a definition of “biological sample card.” (Ans. 14–16.)

Appellants also argue the container/platform combination of Morrison does not receive, store, or transmit patient data, and Conry does not disclose a biological sample card. (App. Br. 19–20.) This argument is unpersuasive because it focuses on the references individually, whereas the Examiner’s

rejection is based on the teachings of the combination of references. Non-obviousness cannot be established by attacking references individually where, as here, the ground of unpatentability is based upon the teachings of a combination of references. *In re Merck & Co., Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). Rather, the test for obviousness is whether the combination of references, taken as a whole, would have suggested the patentee's invention to a person having ordinary skill in the art. *In re Keller*, 642 F.2d 413, 425 (CCPA 1981).

Accordingly, we sustain the Examiner's rejections of independent claims 1, 13, and 31.

CONCLUSION

For the reasons stated above, we sustain the Examiner's rejection of claims 1–4, 6–18, 22–24, and 27–41 as being directed to patent-ineligible subject matter under § 101.

Also for the reasons stated above, we sustain the Examiner's obviousness rejections of independent claims 1, 13, and 31 over Morrison, Conry, and the Applicant Admitted Prior Art.

We also sustain the obviousness rejection of claims 2–4, 6, 11, 12, 14, 16, 17, 22–24, 27, 32–35, and 38–41 over Morrison, Conry, and the Applicant Admitted Prior Art, of claims 7–10 and 28–30 over Morrison, Conry, Applicant Admitted Prior Art, and Penuela, of claim 14 over Morrison, Conry, Applicant Admitted Prior Art, and Gucciardi, of claim 18 over Morrison, Conry, Applicant Admitted Prior Art, and Finn, and of claims 36 and 37 over Morrison, Conry, Applicant Admitted Prior Art, and

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Cunningham, which rejections are not argued separately with particularity.
(App. Br. 20–21.)

DECISION

We affirm the Examiner’s decision rejecting claims 1–4, 6–18, 22–24, and 27–41.

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