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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JONATHAN GRIER

Appeal 2018-004217
Application 14/059,410
Technology Center 2100

Before KALYAN K. DESHPANDE, CHARLES J. BOUDREAU,
and SHARON FENICK, *Administrative Patent Judges*.

BOUDREAU, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1–37, which are all of the pending claims. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.²

¹ Appellant identifies the inventor, Jonathan Grier, as the real party in interest. App. Br. 2.

² This Decision refers to the Examiner's Final Office Action mailed February 10, 2017 ("Final Act."); Appellant's Appeal Brief filed August 11, 2017 ("App. Br."); the Examiner's Answer mailed January 12, 2018 ("Ans."); Appellant's Reply Brief filed March 12, 2018 ("Reply Br."); and the original Specification filed October 21, 2013 ("Spec").

STATEMENT OF THE CASE

The Claimed Invention

Appellant’s invention “relates generally to copying of electronic files and more particularly to apparatus and methods for selectively locating and replicating, in a forensically sound manner, relevant data from a data source.” Spec. ¶ 2. Specifically, the invention involves “identifying and or locating, accessing and analyzing metadata and using the metadata to find additional data that is relevant to [an] investigation, then duplicating and storing the metadata and the relevant additional data.” *Id.* ¶ 19.

Claims 1, 10, 21, 29, and 34–37 are independent. Claim 1, reproduced below, is illustrative of the subject matter on appeal:

1. A method for forensically imaging at least a portion of a data source, the method comprising:
 - a device selectively communicating with the data source;
 - said device identifying data stored on said data source, wherein said data includes an indication of additional data stored on said data source;
 - said device parsing said data prior to copying said indicated additional data;
 - said device analyzing said parsed data to obtain said indication of said additional data; and,
 - said device copying at least a portion of said additional data to a storage device associated with said device.

App. Br. 18 (Claims App’x).

References and Rejections

The Examiner relies on the following references as evidence of unpatentability:

Spernow et al. ("Spernow")	US 2014/0181975 A1	Pub. June 26, 2014 (Filed Nov. 5, 2013)
Stoakes et al. ("Stoakes")	US 2013/0290275 A1	Pub. Oct. 31, 2013 (Filed Apr. 30, 2012)
Peckover	US 2010/0005509 A1	Pub. Jan. 7, 2010 (Filed June 30, 2009)
Avasarala et al. ("Avasarala")	US 2014/0090061 A1	Pub. Mar. 27, 2014 (Filed Sept. 26, 2013)

Claims 1–37 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Ans. 3–9.³

Claims 1–3, 6–29, and 34–37 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Spernow in view of Stoakes. Final Act. 2–21.

Claims 30–33 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Spernow in view of Stoakes and Peckover. Final Act. 21–24.

Claims 4 and 5 stand rejected under pre-AIA 35 U.S.C. § 103(a) as being unpatentable over Spernow in view of Stoakes and Avasarala. Final Act. 24–25.

ANALYSIS

Rejection Under 35 U.S.C. § 101

An invention is patent-eligible if it claims a “new and useful process, machine, manufacture, or composition of matter, or [a] new and useful improvement thereof.” 35 U.S.C. § 101. However, the Supreme Court has long

³ The rejection of claims 1–37 under 35 U.S.C. § 101 was a new ground of rejection set forth in the Answer.

interpreted § 101 to “contain[] an important implicit exception: Laws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice Corp. v. CLS Bank Int'l*, 573 U.S. 208, 216 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 589 (2013)).

In *Alice*, the Supreme Court reiterated the two-step framework previously set forth in *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 75–77 (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*, 573 U.S. at 217. The first step in this analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts,” e.g., to an abstract idea. *Id.* Concepts determined to be abstract ideas include certain methods of organizing human activity, such as fundamental economic practices (*id.* at 219–20; *Bilski v. Kappos*, 561 U.S. 593, 611 (2010)); mathematical formulas (*Parker v. Flook*, 437 U.S. 584, 594–95 (1978)); and mental processes (*Gottschalk v. Benson*, 409 U.S. 63, 67 (1972)). If it is determined that the claims are directed to a patent-ineligible concept, the second step of the analysis requires consideration of 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*, 573 U.S. at 217 (quoting *Mayo*, 566 U.S. at 78, 79). In other words, the claims must contain an “inventive concept,” or some element or combination of elements “sufficient to ensure that the patent in practice amounts to significantly more than a patent upon the [abstract idea] itself.” *Id.* at 217–18 (quoting *Mayo*, 566 U.S. at 72–73).

The PTO recently published revised guidance on the application of § 101. *2019 Revised Patent Subject Matter Eligibility Guidance*, 84 Fed. Reg. 50 (Jan. 7,

2019) (“Revised Guidance”). 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); and
- (2) additional elements that integrate the judicial exception into a practical application (*see* MPEP § 2106.05(a)–(c), (e)–(h) (9th ed. Rev. 08.2017, Jan. 2018)).

See Revised Guidance, 84 Fed. Reg. at 52–55.

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 is not “well-understood, routine, and 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.

See Revised Guidance, 84 Fed. Reg. at 56.

The Examiner determines that claims 1–37 are directed to an abstract idea and that the claim elements, considered both individually and in combination, do not include additional elements that are sufficient to amount to significantly more than the abstract idea. Ans. 3. In particular, the Examiner finds that “forensically imaging at least a portion of a data source by communicating with the data source, analyzing parsed data to obtain an indication of additional data, and copying a portion of the additional data to a storage device” is an abstract idea. *Id.* The Examiner determines that the claims recite concepts held to be abstract by our reviewing court in *Intellectual Ventures I LLC v. Erie Indemnity Co.*, 850 F.3d 1315 (Fed. Cir. 2017) (hereinafter “*IV v. Erie*”) (concluding that claims reciting creating an index used to search for and retrieve data in U.S. Patent No. 6,510,434

(’434 patent) and claims reciting remotely accessing and retrieving user-specified information in U.S. Patent No. 6,546,002 were directed to abstract concepts)); *Content Extraction & Transmission LLC v. Wells Fargo Bank, National Association*, 776 F.3d 1343 (Fed. Cir. 2014) (data recognition and storage); and *Intellectual Ventures I LLC v. Capital One Financial Corp.*, 850 F.3d 1332 (Fed. Cir. 2017) (collecting, displaying, and manipulating data). Ans. 3–4. According to the Examiner, the claimed invention is “not meaningfully different from practices human beings have long performed.” *Id.* at 4.

Appellant argues that the claims, viewed in light of the Specification, are “directed to practical, non-abstract improvements to computer technology which enables forensic duplication devices to keep pace with advancing storage technology.” Reply Br. 4. For example, Appellant refers to the Specification’s disclosure that “the invention achieves efficiency over conventional imaging by attempting to limit the imaging to relevant data stored on the data source.” *Id.* at 5; Spec. ¶ 19. According to Appellant, the Specification indicates that “the device that is performing the duplication may include a forensic duplicator, bridge or write blocker.” Reply Br. 5 (citing Spec. ¶ 32). Appellant further notes that independent claims 10, 36, and 37 recite an “apparatus . . . including a connector, a processor and a storage device.” *Id.* at 6. Appellant concludes that the claims are thus like those in *Core Wireless Licensing S.A.R.L. v. LG Electronics, Inc.*, 880 F.3d 1356 (Fed. Cir. 2018)—directed to patent-eligible subject matter under the first step of the *Alice* framework such that “the second step need not be reached.” Reply Br. 4.

Under Step 2A, Prong 1 of the Revised Guidance, we agree with the Examiner that the claims recite a judicial exception, i.e., an abstract idea. *See* Ans. 3. In particular, we determine that the claims recite a mental process.

For example, claim 1 recites a “device identifying data stored on [a] data source, wherein said data includes an indication of additional data stored on said data source,” “said device parsing said data prior to copying said indicated additional data,” and “said device analyzing said parsed data to obtain said indication of said additional data.” Under their broadest reasonable interpretation, these “identifying,” “parsing,” and “analyzing” limitations recite steps that can be performed in the mind, but for the recitation of generic components. That is, other than the generic “device” recited in independent claims 1, 21, 29, 34, and 35 (and, likewise, the “processor” recited in independent claims 10, 36, and 37) as performing the recited steps, nothing in the claim limitations precludes the steps from practically being performed in the mind. For example, but for the recitation of a “device,” the claim encompasses a user *mentally* identifying data that includes an indication of additional data, *mentally* parsing the data prior to a copy of the indicated additional data being made, and *mentally* analyzing the parsed data to obtain the indication of additional data.

Accordingly, these limitations recite a mental process as identified in the Revised Guidance, and, thus, an abstract idea.

Under Step 2A, Prong 2 of the Revised Guidance, we next look to whether the claims recite additional elements that integrate the abstract idea into a practical application. We determine that they do not. For example, claim 1 additionally recites the “device selectively communicating with the data source” and “said device copying at least a portion of said additional data to a storage device associated with said device.” The communicating step performed by the device is recited at a high level of generality (i.e., as a general means of establishing a connection between the device and the data source to perform the identifying, parsing, and analyzing steps) and amounts to insignificant extra-solution activity.

The copying step performed by the device merely automates the output of the result obtained in the identifying, parsing, and analyzing steps (i.e., the indication of additional data to be copied), and is, likewise, insignificant extra-solution activity. *See* Revised Guidance, 84 Fed. Reg. at 55; MPEP § 2106.05(g).

As discussed above, independent claims 1, 21, 29, 34, and 35 recite that a “device” performs all of the recited steps. The “device” is recited at a high level of generality, i.e., as a generic component performing generic computer functions of communicating, processing (i.e., identifying, parsing, and analyzing), and copying data. We agree with the Examiner that this generic “device” limitation merely applies the abstract idea using a generic component. *See* Ans. 4; Revised Guidance, 84 Fed. Reg. at 55; MPEP § 2106.05(f). The claim limitations do not include any particular machine that is integral to the claim. *See* Revised Guidance, 84 Fed. Reg. at 55; MPEP § 2106.05(b). Notwithstanding Appellant’s contention that the Specification discloses that “the device that is performing the duplication may include a forensic duplicator, bridge or write blocker” (Reply Br. 5 (citing Spec. ¶ 32)), we note that such elements are not recited in the claims, and, accordingly, do not render the recited “device” any less generic. Similarly, the additional recitation of a “connector” and a “storage device” in claims 10, 36, and 37 does not negate the genericism of the recited “processor.”

We are unpersuaded by Appellant’s argument (Reply Br. 4–5) that the claims are directed to improvements to computer technology and, thus, patent-eligible subject matter under *Alice* step one (i.e., Step 2A of the Revised Guidance), like those in *Core Wireless*. The *Core Wireless* court “ask[ed] whether the claims [were] directed to a specific improvement in the capabilities of computing devices, or, instead, ‘a process that qualifies as an “abstract idea” for which computers are invoked merely as a tool.’” 880 F.3d at 1361–62 (quoting

Enfish, LLC v. Microsoft Corp., 882 F.3d 1327, 1336 (Fed. Cir. 2016)). In that case, the claims were directed to an improved user interface for computing devices. *Id.* at 1362. The court held that the claims were not directed to an abstract idea because the “limitations disclose[d] a specific manner of displaying a limited set of information to the user, rather than using conventional user interface methods to display a generic index on a computer” and the “claims recite[d] a specific improvement over prior systems.” *Id.* at 1363. Here, as noted by the Examiner, the claim limitations do not reflect an improvement in the functioning of a computer, or to any other technology or technical field. *See* Ans. 5; Revised Guidance, 84 Fed. Reg. at 55; MPEP § 2106.05(a). Rather than reciting *specifically* how computer technology is improved, the claims invoke generic elements (e.g., device) and conventional computer components and functions (e.g., processor, connector, storage device) to perform an abstract idea. A claim that is directed to an abstract idea does not become patent-eligible by “merely requir[ing] generic computer implementation” (*Alice*, 573 U.S. at 221) or “limiting the claims to [a] particular technological environment” (*Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1354 (Fed. Cir. 2016)). Furthermore, in *Core Wireless* there was “no analog to th[ose] concepts outside the context of [computers and cell phones].” 880 F.3d at 1360 (internal quotation marks and citation omitted). Here, identifying, parsing, and analyzing data, as well as selectively making copies of data, may be performed without computer technology.

In that regard, the instant claims are more similar to the claims of the ’434 patent in *IV v. Erie*. There, the claims related to the use of an index to locate desired information in a computer database. 850 F.3d at 1325. Although the ’434 patent, much like the invention in this case, aimed to improve the efficiency of prior art database searching methods by using an index constructed of tags and

metadata to return more relevant hits, the court determined that the '434 patent claims were directed to an abstract idea. *Id.* at 1326–27. In particular, the court likened the '434 patent claims to “other patent claims [held] ineligible for reciting similar abstract concepts that merely collect, classify, or otherwise filter data.” *Id.* at 1327 (citing *In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607 (Fed. Cir. 2016); *Content Extraction*; and *Bascom Glob. Internet Servs., Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016)). Likewise, the claims in this case are directed to abstract concepts because the recited steps of “identifying data stored on said data source, wherein said data includes an indication of additional data stored on said data source,” “parsing said data,” and “analyzing said parsed data” to ultimately “copy[] at least a portion of said additional data to a storage device” (*see* claim 1) merely involve collecting and classifying or filtering data (i.e., distinguishing the additional data to be copied from that which will not be copied) and are not integrated into a practical application.

The court in *IV v. Erie* noted:

This type of activity, i.e., organizing and accessing records through the creation of an index-searchable database, includes longstanding conduct that existed well before the advent of computers and the Internet. For example, a hardcopy-based classification system (such as library-indexing system) employs a similar concept as the one recited by the '434 patent. There, classifiers organize and cross-reference information and resources (such as books, magazines, or the like) by certain identifiable tags, e.g., title, author, subject. Here, tags are similarly used to identify, organize, and locate the desired resource.

850 F.3d at 1327. Similarly, identifying, parsing, and analyzing data to determine the relevance of additional data and making copies of relevant portions of the additional data may be done mentally and manually, without computer technology, as discussed above. The data could be analyzed by examining readily observable

characteristics of data that signify relevance or irrelevance, and the relevant additional data could be manually copied, for example.

Furthermore, the *IV v. Erie* court rejected the argument that claims there at issue were drawn to a specific search architecture that improves how computer databases function. *Id.* at 1328. In particular, the court reasoned that, although some claims specifically recited building an index using XML tags, “the claims [were] not focused on *how* usage of the XML tags alters the database in a way that leads to an improvement in the technology of computer databases, as in *Enfish*.” *Id.* Moreover, XML tags were previously known in the art. *Id.* Here, Appellant’s claims similarly lack specificity as to how computer technology in forensic duplication devices is improved, as discussed above. The claims merely recite an abstract idea performed via generic computer implementation.

Thus, even in combination, the additional limitations do not integrate the abstract idea into a practical application because they do not impose any meaningful limits on practicing the abstract idea.

Accordingly, we agree with the Examiner that the claims are directed to an abstract idea.

Under Step 2B of the Revised Guidance, corresponding to the second step of the *Alice* framework, we agree with the Examiner that the additional elements recited in the claims (e.g., “device,” “processor,” “connector,” “storage device”) are “common within the database art” and thus do not amount to significantly more than the abstract idea. Ans. 4; *see also* Ans. 5–9). As discussed above, these additional elements amount to no more than mere instructions to apply the abstract idea using generic computer components. Mere instructions to apply an abstract idea on a generic computer do not provide an inventive concept. *Alice*, 573 U.S. at 223–24. We also agree with the Examiner’s finding that “computing a hash of

said copied data,” as recited in independent claim 29, does not amount to significantly more than the abstract idea “due to the common use of computing a hash of received data in order to preserve the integrity of the data.” *Id.* at 4–5 (citing *Smart Sys. Innovations v. Chi. Transit Auth.*, 873 F.3d 1364, 1374 n.9 (Fed. Cir. 2017) (“A hash identifier is a generic and routine concept that does not transform the claims to a patent eligible application of the abstract idea.”)). Appellant has not shown that the claims on appeal add any specific limitation beyond the judicial exception that is not “well-understood, routine, and conventional” in the field. *See* MPEP § 2106.05(d).

Reevaluating the extra-solution activity of the “device selectively communicating with the data source” and “said device copying at least a portion of said additional data to a storage device associated with said device” (*see* Revised Guidance, 84 Fed. Reg. at 56), we find nothing unconventional in these steps of selectively communicating and copying data. Appellant provides no evidence of how the ordered combination is unconventional or amounts to significantly more than the abstract idea to which the claims are otherwise directed.

Accordingly, considering the claim elements individually and as an ordered combination, we agree with the Examiner that there are no meaningful claim limitations that represent sufficiently inventive concepts to transform the nature of the claims into a patent-eligible application of the abstract idea.

For the foregoing reasons, we sustain the Examiner’s rejection of claims 1–37 under 35 U.S.C. § 101.

Rejections Under 35 U.S.C. § 103

The instant application has a filing date of October 21, 2013, and claims the benefit of U.S. Provisional Patent Application No. 61/769,606, filed on February 26, 2013. *See* Spec. ¶ 1.

Spernow is the primary reference in all of the 35 U.S.C. § 103 rejections. Spernow's filing date of November 5, 2013, is *after* Appellant's October 21, 2013, filing date. Although Spernow on its face claims priority from a provisional application filed November 6, 2012, the Examiner has made no findings relating to the content of that provisional application, and we have no reason to presume that the earlier date applies. Spernow (60); *see Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1382 (Fed. Cir. 2015) ("A provisional application's effectiveness as prior art depends on its written description support for the claims of the issued patent^[4] of which it was a provisional."); *see also id.* at 1380 ("[B]ecause the PTO does not examine priority claims unless necessary, the Board has no basis to presume that a reference patent is necessarily entitled to the filing date of its provisional application.").

Accordingly, on this record, Spernow has not been shown to qualify as prior art to the claimed invention, and we do not sustain the Examiner's rejections of claims 1–3, 6–29, and 34–37 as unpatentable over the combination of Spernow and Stoakes; claims 30–33 as unpatentable over the combination of Spernow, Stoakes, and Peckover; and claims 4 and 5 as unpatentable over the combination of Spernow, Stoakes, and Avasarala, each of which rejections relies in part on Spernow.

⁴ Although *Dynamic Drinkware* addressed an issued patent's entitlement to a provisional filing date, the same also applies to published non-provisional applications claiming priority to a provisional application, like Spernow. *See, e.g., Amgen Inc. v. Sanofi*, 872 F.3d 1367, 1380 (Fed. Cir. 2017).

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DECISION

Because we have affirmed at least one ground of rejection with respect to each claim on appeal, the Examiner's rejection of claims 1–37 is affirmed. *See* 37 C.F.R. § 41.50(a)(1).

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