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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ANDREW HENRY SIEJA and
KEITH LOREN KAMINSKI¹

Appeal 2018-002216
Application 14/091,581
Technology Center 2100

Before MICHAEL J. STRAUSS, ADAM J. PYONIN, and
MICHAEL M. BARRY, *Administrative Patent Judges*.

STRAUSS, *Administrative Patent Judge*.

DECISION ON APPEAL

¹ According to Appellants, the real party in interest is KCURA LLC. *See* App. Br. 4.

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) from a non-final rejection of claims 1–8, 10–17, 19–26, 28–35, 37–44, and 46–53. Claims 9, 18, 27, 36, 45, and 54 are canceled. Non-Final Act. 2. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.²

THE INVENTION

The claims are directed to indexing and searching documents. Spec., Title. Claim 1, reproduced below, is representative of the claimed subject matter:

1. A method of indexing a collection of documents, the method comprising:
 - dividing the collection of documents into a plurality of N batches;
 - receiving, via a user interface, a first number indicative of a first amount of hardware servers;
 - creating a first isolated area on the hardware servers of the first amount of hardware servers, including creating an app domain on each hardware server of the first amount of hardware servers;
 - indexing the plurality of N batches using the respective app domains of the first amount of hardware servers;
 - receiving, via the user interface, a second number indicative of a second amount of hardware servers, the second amount greater than the first amount;
 - creating a second isolated area on the hardware servers of the second amount of hardware servers, wherein at least a portion of the first isolated area is included in the second isolated area,

² We refer to the Specification, filed November 27, 2013 (“Spec.”); the Non-Final Office Action, mailed May 17, 2017 (“Non-Final Act.”); Appeal Brief, filed August 11, 2017 (“App. Br.”); the Examiner’s Answer, mailed November 2, 2017 (“Ans.”) and the Reply Brief, filed December 21, 2017 (“Reply Br.”).

including creating an additional app domain on each hardware server of the second amount of hardware servers that is not included in the first isolated area; and

after creating the second isolated area:

indexing the plurality of N batches using the respective app domains on the first amount of hardware servers, and while indexing the plurality of N batches using the respective app domains on the first amount of hardware servers, indexing the plurality of N batches using the respective additional app domains on the hardware servers of the second amount of hardware servers that are not included in the first isolated area.

REFERENCES

The following prior art is relied upon by the Examiner in rejecting the claims on appeal:

Maloney et al	US 2006/0069672 A1	Mar. 30, 2006
Birdsall et al.	US 2011/0158252 A1	June 30, 2011
York et al.	US 2013/0275429 A1	Oct. 17, 2013
Bushen	US 2014/0019703 A1	Jan. 16, 2014
Raufman	US 2014/0129530 A1	May 8, 2014

REJECTIONS

The Examiner made the following rejections:

Claims 1–8, 10–17, 19–26, 28–35, 37–44, and 46–53 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception without significantly more. Non-Final Act. 3–5.

Claims 1, 10, 19, 28, 37, and 46 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birdsall and York. Non-Final Act. 5–21.

Claims 6–8, 15, 16, 24–26, 33–35, 42–44, and 51–53 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birdsall, York, and Maloney. Non-Final Act. 21–24.

Claims 2, 3, 5, 11, 12, 14, 20, 21, 23, 29, 30, 32, 38, 39, 41, 47, 48, and 50 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birdsall, York, and Bushen. Non-Final Act. 24–28.

Claims 4, 13, 22, 31, 40, and 49 stand rejected under 35 U.S.C. § 103 as being unpatentable over Birdsall, York, Bushen, and Raufman. Non-Final Act. 28–30.

ANALYSIS

We have reviewed the Examiner’s rejections in light of Appellants’ arguments. Arguments Appellants could have made but chose not to make are deemed to be waived. *See* 37 C.F.R. § 41.37(c)(1)(iv); *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential).

A. 35 U.S.C. § 101

Appellants do not separately argue the claims. *See* App. Br. 16–20. We select claim 1 as representative. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants do not persuade us the Examiner errs in determining the claims are patent-ineligible pursuant to the two-part test enumerated in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014)). *See* Non-Final Act. 3–5; Ans. 2–7. We adopt the Examiner’s reasoning with respect to this rejection, to the extent consistent with our analysis; we add the following for emphasis.

Step One

Appellants argue the Examiner errs in determining the claims are directed to an abstract concept because the claims recite particular solutions

to the problems of indexing and searching large databases of documents.

App. Br. 17. Particularly, Appellants contend the claims recite:

- (1) batches of documents are indexed (or searched) on app domains created on distinct hardware servers,
- (2) two isolated areas are created on hardware servers, where at least a portion of a first, smaller isolated area is included in a second, larger isolated area,
- (3) batches of documents are indexed (or searched) on app domains on hardware servers of the first isolated area **after** the second isolated area is created, and
- (4) batches of documents are indexed (or searched) on app domains on hardware servers of the second isolated area that are not included in the first isolated area **while** batches of documents are indexed (or searched) on app domains on hardware servers of the first isolated area.

App. Br. 17–18 (formatting added).

The Examiner determines the claims are directed to the abstract idea of indexing data. Non-Final Act. 3–4; Ans. 3. According to the Examiner, “[t]he instant claims are directed at creating an index to search for and retrieve data; the ‘problem’ that they solve is one of analysis and retrieval of information as the court stated in *Intellectual Ventures I LLC v. Erie Indemnity Co.* [850 F.3d 1315 (Fed. Cir. 2017)].” The Examiner also favorably compares the rejected claims to claims determined by the courts to be abstract as directed to the manipulation of information and to a mental process that “can be performed in the human mind, or by a human using a pen and paper.” Ans. 6, citing *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350 (Fed. Cir. 2016).

We agree with the Examiner’s determination. Independent claims 1, 10, and 19 recite steps for indexing a collection of documents. Although independent claims 28, 37, and 46 instead recite searching a collection of

documents, Appellants neither argue these claims separately nor emphasize any distinction between indexing documents and searching documents that is relevant to the determination of whether the ideas are abstract. Furthermore, we note indexing of documents preparatory to a search and performance of a search of the documents are related activities consistent with, for example, the decision in *Intellectual Ventures I LLC v. Erie Indemnity Co.* (“*Erie*”) as discussed below.

Appellants disclose a problem related to the indexing and searching of large collections of documents using parallel computing resources by allowing a user to “change the number of computing resources dedicated to the indexing [or searching] process without interrupting the indexing [or searching] process.” Spec. ¶ 17. Although directed to the use of “computing” resources, Appellants do not explain why either the problem itself or the solution to the problem is unique to computer technology rather than to the abstract idea itself of indexing and searching. Instead, the claims are directed to the general field of indexing and searching documents by managing resources rather than to addressing a specific technical problem associated with the management and/or use of computer resources in particular.

The Federal Circuit in *Erie* determined “the abstract idea of ‘creating an index and using that index to search for and retrieve data’” is an exemplary activity of “organizing and accessing records through the creation of an index-searchable database, includ[ing] longstanding conduct that existed well before the advent of computer and the Internet.” *Intellectual Ventures I LLC v. Erie Indemnity Co.*, 850 F.3d at 1327. The Federal Circuit in *Erie* held “the claimed creation of an index used to search and retrieve

information stored in a database is [] abstract.” *Id.* The *Erie* court stated the claims were directed to an abstract concept because “the heart of the claimed invention lies in creating and using an index to search for and retrieve data.” *Id.* at 1328. Thus, the *Erie* court determined indexing and searching are abstract ideas.

Moreover, we are not persuaded the claims are any less abstract because they “incorporate specific features of rules as claim limitations that limit the claims to a specific process for indexing (or searching) documents, and therefore do not preempt approaches that use rules of a different structure or different techniques.” App. Br. 18. We instead agree with the Examiner that the idea is no less abstract because it “broadly encompasses network communications depicting the connections between devices.” Ans. 6–7. “An abstract idea does not become nonabstract by limiting the invention to a particular field of use or technological environment, such as the Internet.” *Erie*, 850 F.3d at 1330 (quoting *Intellectual Ventures I LLC v. Capital One Bank (USA)*, 792 F.3d 1363, 1366 (Fed. Cir. 2016)).

Similarly, Appellants’ preemption argument is unpersuasive. App. Br. 18. Although preemption “‘might tend to impede innovation more than it would tend to promote it,’ thereby thwarting the primary object of the patent laws” (*Alice Corp.*, 134 S. Ct. at 2354 (quoting *Mayo*, 566 U.S. at 71)), “the absence of complete preemption does not demonstrate patent eligibility” (*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.”).

Thus, we agree with the Examiner that independent claim 1 together with independent claims 10, 19, 28, 37, and 46, which are not argued separately with particularity, are directed to an abstract idea in accordance with step one of the *Alice* framework. *See* Non-Final Act. 3–4.

Step Two

Appellants argue that “[e]ven if the Examiner were correct in asserting that claims 1, 10, 19, 28, 37, and 46 are directed to ‘indexing data,’ . . . the claims would recite significantly more than that idea.” App. Br. 18. Appellants argue the claimed combination of elements provide the benefits of enabling a user to select amounts of hardware servers on which to index or search batches of documents. According to Appellants, the

elements of the claims, in combination, are arranged in a non-conventional and non-generic manner because (1) the isolated areas are created on hardware servers to accommodate the selected amounts of hardware servers, and (2) the batches of documents are effectively and efficiently indexed (or searched) on the respective isolated areas to accommodate for the respective amounts of hardware servers on the respective isolated areas, a functionality that is not contemplated in the prior art.

App. Br. 19–20.

We are not persuaded of error. Other than broadly directing attention to the language of the claims (App. Br. 18–19), Appellants do not identify an inventive concept that transforms the claims into patent eligible subject matter. For example, Appellants’ argument that the creation of isolated areas on the hardware servers somehow accommodates the selected amounts of hardware servers fails to explain why the creation of the isolated areas is a technological improvement. Instead, under a broad but reasonable

interpretation and in the absence of a narrowing definition, the argued isolated areas encompass conventional server or computer storage. *See, e.g.*, paragraph 20 of the Specification disclosing a server and associated storage: “One web server 106 may interact with a large number of client devices 102. Accordingly, each server 106 is typically a high end computer with a large storage capacity, one or more fast microprocessors, and one or more high speed network connections.” That is, the isolated areas may have been understood as a workspace for performing indexing and/or searching and thereby correspond to pen and paper augmenting what would otherwise be purely mental processing.

Moreover, the argued enhanced effectiveness and efficiency of indexing and searching has not been shown to be the result of a technological improvement. “[T]he fact that the required calculations could be performed more efficiently via a computer does not materially alter the patent eligibility of the claimed subject matter.” *Bancorp Servs., L.L.C. v. Sun Life Assurance Co. of Can. (U.S.)*, 687 F.3d 1266, 1278 (Fed. Cir. 2012)). That is, relying on a “processor” to “perform routine tasks more quickly or more accurately is insufficient to render a claim patent eligible.” *OIP Techs.*, 788 F.3d at 1363.

We are also unpersuaded by Appellants’ argument the claimed functionality is not contemplated in the prior art. App. Br. 20. Although novelty may be a factor to be considered when determining “whether the claims contain an ‘inventive concept’ to ‘transform’ the claimed abstract idea into patent-eligible subject matter” (*Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715 (Fed. Cir. 2014)), a finding of novelty or nonobviousness does not necessarily lead to the conclusion that subject matter is patentable

eligible. “Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry.” *Ass’n for Molecular Pathology v. Myriad Genetics, Inc.*, 569 U.S. 576, 591 (2013). Here, Appellants have not identified any novel features that transform the abstract idea into patent-eligible subject matter.

Thus, we agree with the Examiner the claims do not recite significantly more than the abstract idea, pursuant to step two of the *Alice* framework. *See* Non-Final Act. 4–5. Therefore, we sustain the rejection of claims 1–8, 10–17, 19–26, 28–35, 37–44, and 46–53 under 35 U.S.C. § 101 as directed to a judicial exception without significantly more.

B. 35 U.S.C. § 103

Appellants argue that York fails to disclose “indexing (or searching) the plurality of N batches using respective app domains on a first amount of hardware servers . . . **after creating a second isolated area.**” App. Br. 21. Appellants further argue York also fails to disclose “that indexing (or searching) the plurality of N batches using respective additional app domains on the hardware servers of the second amount of hardware servers is performed **while indexing (or searching) the plurality of N batches using separate app domains on the first amount of hardware servers.**” *Id.* According to Appellants “York is silent on a temporal consideration between indexing (or searching) documents using distinct app domains created on hardware components.” *Id.* The Examiner responds, directing attention to and quoting portions of York alleged to teach or suggest the disputed limitations. Ans. 7–16. Appellants reply, arguing the Examiner’s mapping of the disputed second isolated area to York’s social

network graphs is deficient because “the social network graph of York is neither an isolated area on hardware servers nor created using app domains on respective hardware servers.” Reply Br. 5. In connection with the requirement for concurrent indexing or searching on both the first and second amount of hardware servers, Appellants argue “York does not disclose that both the indexing engine 120 and expanded social network database 121 are concurrently used to index batches of documents.” Reply Br. 6.

We agree with Appellants. We are unable to ascertain from the cited portions of York any disclosure of the recited temporal relationships required by the disputed limitations and the Examiner has failed to explain where or how those limitations are disclosed. At most we observe York discloses “[p]rocessing by indexing engine 120 and expanded social network database 121 typically proceeds in parallel for each input content object.” Ans. 9, citing York ¶ 88. However it is not clear how the disclosed parallel processing of each input content object teaches or suggests the disputed temporal relationships with respect to indexing (or searching) *after* creation of the second isolated area or indexing (or searching) performed on the second amount of hardware servers *while* indexing (or searching) on the first amount of hardware servers, and we decline to speculate.

We note, in an *ex parte* appeal, “[t]he Board's primary role is to review the adverse decision as presented by the Examiner, and not to conduct its own separate examination of the claims.” MPEP § 1213.02. Although the Board has discretion to enter a new ground of rejection (see 37 C.F.R. § 41.50(b)), no inference should be drawn when that discretion is not exercised. Because we are a board of review, and not a place of initial

examination, we will not engage in the *de novo* examination that would be required to supplement the Examiner's findings in connection with the disputed temporal relationships. Therefore, we are constrained not to sustain the rejection of dependent claims 1, 10, 19, 28, 37, and 46 under 35 U.S.C. § 103 together with the rejections of claims 2–8, 11–17, 20–26, 29–35, 38–44, and 47–53 depending therefrom.

DECISION

The Examiner's decision rejecting 1–8, 10–17, 19–26, 28–35, 37–44, and 46–53 under 35 U.S.C. § 101 is affirmed.

The Examiner's decision rejecting claims 1–8, 10–17, 19–26, 28–35, 37–44, and 46–53 under 35 U.S.C. § 103(a) is reversed.

The Examiner's decision is affirmed because we have affirmed at least one ground of rejection with respect to each claim on appeal. *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