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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
11/744,090 05/03/2007 Daniel D. Leroux CA920070025US1 8131

45544 7590 09/01/2016
HOFFMAN WARNICK LLC
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EXAMINER

CASANOVA, JORGE A

ART UNIT PAPER NUMBER

2159

NOTIFICATION DATE DELIVERY MODE

09/01/2016

ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte DANIEL D. LEROUX, KIM D. LETKEMAN,
DUC N. LUU, and TAO WENG

Appeal 2015-004752
Application 11/744,090
Technology Center 2100

Before RICHARD E. SCHAFER, DEBORAH KATZ, and HUNG H. BUI,
Administrative Patent Judges.

BUI, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants¹ seek our review under 35 U.S.C. § 134(a) of the Examiner's Non-Final Rejection of claims 1–22. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.²

¹ According to Appellants, the Real Party in Interest is International Business Machines Corporation. App. Br. 1.

² Our Decision refers to Appellants' Appeal Brief, filed December 9, 2014 ("App. Br."); Reply Brief, filed March 19, 2015 ("Reply Br."); Examiner's Answer, mailed January 23, 2015 ("Ans."); Non-Final Office Action, mailed July 18, 2014 ("Non-Final Act."); and original Specification, filed May 3, 2007 ("Spec").

STATEMENT OF THE CASE

Appellants' Invention

Appellants' invention relates to a model identity realignment algorithm designed to align models, i.e., allow models with similar structures but substantial identity differences to be aligned such that all similar elements have the same identity. Spec. ¶ 4. According to Appellants, the algorithm allows any two models to be aligned and causes these models to appear to have come from a common ancestor. Once the two models are aligned, these models can merge and participate in a normal development work flow to eliminate trivial differences. *Id.* and Abstract.

Claims 1, 8, 15, and 22 are independent. Claim 1 is illustrative of Appellants' invention and is reproduced with disputed limitations emphasized below:

1. A method for performing version control for a model, comprising:
 - selecting, using a processor device, a descendant model to be aligned;
 - selecting, using the processor device, an ancestor model to serve as a baseline set of identities;
 - changing, using the processor device, an identifier of the descendant model to match an identifier of the ancestor model such that the descendant model will be subsequently treated to have been derived from the ancestor model;
 - creating, using the processor device, a database of matching keys with new identities by iterating the ancestor model, wherein the database includes an entry for each element in the ancestor model, and wherein each matching key is generated based on a type of the element; and
 - aligning, using the processor device, elements of the descendant model with corresponding elements of the ancestor model using the database, wherein the aligning includes:

iterating the descendant model and generating a matching descendant key for each element of the descendant model;
searching the database for the matching descendant key for each element of the descendant model; and
changing the identifier of each element of the descendant model to match the identifier of a corresponding similar element in the ancestor model.

App. Br. 11 (Claims App).

Examiner's Rejection

Claims 1–22 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject. Non-Final Act. 3.

ANALYSIS

With respect to independent claims 1, 15, and 22, the Examiner finds these process claims are directed to an abstract idea of “performing version control for a model by aligning an ancestor and descendant model.” Non-Final Act. 3. The Examiner also finds additional elements recited in these claims do not amount to significantly more than the abstract idea itself. *Id.* According to the Examiner, any reference to “computer-implemented” using a “processor” to implement the abstract idea does not transform the abstract idea into a patent eligible subject matter under 35 U.S.C. § 101. *Id.*

Appellants contend “the claimed invention is directed to more than that broad concept [of performing version control for a model by aligning an ancestor and descendant model], but to a novel and nonobvious approach to performing version control.” App. Br. 7. Appellants also argue “the claimed invention is not trying to preclude others from performing version control” but instead “only seeks to obtain protection for a unique approach

to performing version control” and, as such, is not an abstract idea because “it does not seek a monopolization of the concept of performing version control.” *Id.* at 8 (citing USPTO’s memorandum on preliminary examination instructions issued on June 25, 2014, in view of the Supreme Court decision in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347 (2014)).

Appellants further argue the additional elements or steps recited in the process claims 1, 15, and 22, such as “changing an identifier of the descendant model to match an identifier of the ancestor model” and “creating a database of matching keys with new identities by iterating the ancestor model” constitute “significantly more” than an abstract idea because these steps add “a specific limitation other than what is well-understood, routine and conventional in the field” or “unconventional steps that confine the claim to a particular useful application.” Reply Br. 2–3. Finally, Appellants argue “the claimed invention [also] qualifies as patentable subject matter as being directed to a process that is tied to a particular machine or apparatus.” *Id.* at 3 (citing *In re Bilski*,³ 545 F.3d 943, 954 (Fed. Cir. 2008) (en banc)).

³ In *In re Bilski*, the Federal Circuit adopted a “machine-or-transformation” (MoT) test to determine whether a process claim is eligible under 35 U.S.C. § 101. However, the Supreme Court held, in *Bilski v. Kappos*, 130 S. Ct. 3218, 3227 (2010), that the “MoT” test, while a “useful and important clue,” is no longer the sole test for determining the patent-eligibility of process claims under § 101. Since *Bilski v. Kappos*, the Supreme Court has created a two-step framework in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S. Ct. 2347, 2354 (2014) to address whether a claim falls outside of § 101, which we will discuss herein.

We are not persuaded by Appellants' arguments. The Supreme Court has long held that “[l]aws of nature, natural phenomena, and abstract ideas are not patentable.” *Alice*, 134 S. Ct. at 2354 (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks omitted)). The “abstract ideas” category embodies the longstanding rule that an idea, by itself, is not patentable. *Alice Corp.*, 134 S.Ct. at 2355 (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 (citing *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 132 S. Ct. 1289, 1296–97 (2012)). 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*, 132 S. Ct. at 1298, 1297). 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.* (brackets in original) (quoting *Mayo*, 132 S. Ct. at 1294).

Turning to the first step of the *Alice* inquiry, we agree with the Examiner that claims 1, 15, and 22 are directed to a patent-ineligible abstract concept of “performing version control for a model by aligning an ancestor

and descendant model.” Non-Final Act. 3. All the steps recited in Appellants’ claims 1, 15, and 22, including, for example: (i) “selecting” an ancestor model and a descendant model, (ii) “changing . . . an identifier of the descendant model,” (iii) “creating . . . a database of matching keys” and (iv) “aligning” elements of the descendent model with corresponding elements of the ancestor model, are abstract processes of collecting, storing, and analyzing information of a specific content. Information as such is an intangible. *See Microsoft Corp. v. AT & T Corp.*, 550 U.S. 437, 451 n.12 (2007). Information collection and analysis, including when limited to particular content, is within the realm of abstract ideas. *See, e.g., 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); and *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1370 (Fed. Cir. 2011).

Turning to the second step of the *Alice* inquiry, we find nothing in claims 1, 15, and 22 that adds anything “significantly more” to transform the abstract concept of collecting, storing, and analyzing information into a patent-eligible application. *Alice*, 134 S. Ct. at 2357. Appellants do not argue each of the steps of (i) “selecting” an ancestor model and a descendant model, (ii) “changing . . . an identifier of the descendant model,” (iii) “creating . . . a database of matching keys” and (iv) “aligning” elements of the descendent model with corresponding elements of the ancestor model, is individually inventive. None of Appellants’ arguments show that some inventive concept arises from the ordered combination of these steps, which, even if true, would be unpersuasive given that they are ordinary steps in data analysis and are recited in the ordinary order. Instead, claims 1, 15, and 22

simply incorporate a general-purpose computer to perform the abstract concept of “performing version control for a model by aligning an ancestor and descendant model,” i.e., collecting, storing, and analyzing information.

As recognized by the Federal Circuit in *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014), *Bilski*’s “machine-or-transformation” (MoT) test can provide a “useful clue” in the second step of the *Alice* framework. Under *Bilski*’s “MoT” test, a claimed process is patent-eligible under § 101 if: (1) it is tied to a particular machine or apparatus; or (2) it transforms a particular article into a different state or thing. *Bilski*, 545 F.3d at 954 (citing *Gottschalk*, 409 U.S. at 70). However, Appellants’ process claims 1, 15, and 22 are neither sufficiently “tied to a particular machine or apparatus” nor involved in any type of transformation of any particular article.⁴

For example, limiting such an abstract concept of “performing version control for a model by aligning an ancestor and descendant model” to a general purpose computer recited in Appellants’ claims 1, 15, and 22 does not make the abstract concept patent-eligible under 35 U.S.C. § 101. Ans. 3. As recognized by the Supreme Court, “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 2359 (concluding claims “simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a generic computer” not patent eligible); *see*

⁴ *Alice* also confirmed that if a patent’s systems claims are no different in substance from its method claims, they will rise and fall together. 134 S. Ct. at 2360. The same was true of the *Alice* patent’s media claims. 135 S. Ct. at 2360.

also Ultramercial, 772 F.3d at 715–16 (claims merely reciting abstract idea of using advertising as currency as applied to particular technological environment of the Internet not patent eligible); *Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (claims reciting “generalized software components arranged to implement an abstract concept [of generating insurance-policy-related tasks based on rules to be completed upon the occurrence of an event] on a computer” not patent eligible); and *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (“Simply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible” (internal citation omitted)).

Because Appellants’ process claims 1, 15, and 22 are directed to a patent-ineligible abstract concept, we sustain the Examiner’s rejection of these claims and corresponding system claim 8 as well as respective dependent claims 2–7, 9–14, and 16–21 under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

CONCLUSION

On the record before us, we conclude Appellants have not demonstrated the Examiner erred in rejecting claims 1–22 under 35 U.S.C. § 101.

DECISION

As such, we AFFIRM the Examiner’s § 101 rejection of claims 1–22.

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).

Appeal 2015-004752
Application 11/744,090

AFFIRMED