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BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte BRENT BACKHAUS, LORNA BAKCHAUS,
DEAN EBESU, TOM J. GLEESON, and DEKE WEINBLATT

Appeal 2017-005310
Application 14/079,284
Technology Center 3600

Before ELENI MANTIS MERCADER, LINZY T. McCARTNEY, and
JOHN P. PINKERTON, *Administrative Patent Judges*.

PINKERTON, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's Final Rejection of claims 2–9, 11–16, 18–23, and 25–27. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ Appellants identify Virtual Radiologic Corporation as the real party in interest. App. Br. 2. Virtual Radiologic Corporation identifies that it is wholly owned by American Radiology, LLC, which is wholly owned by MEDNAX Services, Inc., which is wholly owned by MEDNAX, Inc. *Id.*

STATEMENT OF THE CASE

Introduction

Appellants describe the disclosed and claimed invention as follows:

Enhanced techniques for the extraction and use of metadata from medical images are disclosed herein. Based on the information in the metadata, specific processing may be performed within an image order management system, radiology information system (RIS), or like system. A radiology read order may be created, pre-populated, and transmitted via a processing system (e.g., a teleradiology image order management system) based on the metadata within the radiology image. For example, this metadata may exist within the header of a DICOM-formatted image data file or a DICOM communication protocol transmission. The processing system may then provide the prepopulated read order back to the source of the medical images for verification and submission. Other processing actions may also occur based on information extracted from the image metadata, such as custom workflows and handling based on an originating facility, or transferring the images to a particular radiologist or location.

Abstract.²

Claim 18 is representative and reproduced below:

18. A method for processing medical data in a workflow through use of a data processing system, the data processing system comprising at least one hardware processor performing electronic operations, the electronic operations including:

processing electronic imaging data, wherein the electronic imaging data includes metadata and a plurality of digital medical images that originate from a medical imaging

² Our Decision refers to the Final Office Action mailed June 9, 2016 (“Final Act.”); Appellants’ Appeal Brief filed Nov. 9, 2016 (“App. Br.”) and Reply Brief filed Feb. 13, 2017 (“Reply Br.”); the Examiner’s Answer mailed Dec. 12, 2016 (“Ans.”); and the original Specification filed Nov. 13, 2013 (“Spec.”).

procedure performed by a medical imaging modality, wherein the plurality of digital medical images provide digital representations of at least a portion of a human subject captured by the medical imaging modality;

processing electronic order data, wherein the electronic order data is correlated to the plurality of digital medical images based on the metadata in the electronic imaging data, and wherein the electronic order data specifies characteristics of a diagnostic evaluation of the plurality of digital medical images to be performed;

processing medical imaging procedure characteristics included in the electronic order data, to determine at least one requirement of an evaluator for the diagnostic evaluation of the plurality of digital medical images to be performed, wherein the determination of the at least one requirement of the evaluator is based on the medical imaging procedure characteristics included in the electronic order data;

maintaining electronic worklists associated with respective evaluators of a plurality of evaluators, the electronic worklists for the respective evaluators providing a listing of one or more pending diagnostic evaluations designated for performance by the respective evaluators, wherein the electronic worklists for the respective evaluators include an electronic worklist for a particular evaluator;

designating the particular evaluator for performance of the diagnostic evaluation, the particular evaluator designated from among the plurality of evaluators, and the particular evaluator designated based on a corresponding match of at least one qualification of the particular evaluator with the at least one requirement of the evaluator for the diagnostic evaluation;

updating the electronic worklist for the particular evaluator in response to designating the particular evaluator, wherein the electronic worklist for the particular evaluator is updated to

include a pending evaluation for the performance of the diagnostic evaluation of the plurality of digital medical images in the listing of the one or more pending diagnostic evaluations designated for performance by the particular evaluator; and

transmitting the plurality of digital medical images to a computing device associated with the particular evaluator, wherein the plurality of digital medical images are viewable at the computing device associated with the particular evaluator in response to acceptance of the diagnostic evaluation of the plurality of digital medical images from the electronic worklist for the particular evaluator.

App. Br. 36–37 (Claims App’x).

Rejections on Appeal

Claims 2–9, 11–16, 18–23, and 25–27 stand rejected on the ground of nonstatutory double patenting over claims 1–24 of US 8,515,778 B2.³

Claims 2–9, 11–16, 18–23, and 25–27 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to patent-ineligible subject matter.

Claims 2, 5–9, 11, 13–16, 18, and 20–23⁴ stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinsky et al. (US 5,469,353;

³ Appellants state that the Examiner’s nonstatutory double patenting rejection of claims 2–9, 11–16, 18–23, and 25–27 “is not being appealed.” App. Br. 13 (emphasis omitted); Reply Br. 1. Because Appellants are required to present arguments with respect to each ground of rejection, but do not do so with respect to the nonstatutory double patenting rejection, we summarily sustain the rejection of claims 2–9, 11–16, 18–23, and 25–27 on the ground of nonstatutory double patenting over claims 1–24 of U.S. Patent 8,515,778 B2. *See* 37 C.F.R. § 41.37(c)(1)(iv).

⁴ Although there is no pending claim 24, the Examiner erroneously includes claim 24 in this rejection.

issued Nov. 21, 1995) (“Pinsky”) and Gropper et al. (US 2003/0126148 A1; published July 3, 2003) (“Gropper”).

Claim 4 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Pinsky, Gropper, Rothschild et al. (US 2002/0016718 A1; Feb. 7, 2002) (“Rothschild”), and Official Notice.⁵

ANALYSIS

We have reviewed the Examiner’s rejection in light of Appellants’ arguments in the Briefs and are not persuaded the Examiner erred. Unless otherwise noted, we adopt as our own the findings and reasons set forth by the Examiner in the Office Action from which this appeal is taken (Final Act. 2–25) and in the Examiner’s Answer (Ans. 2–21), and we concur with the conclusions reached by the Examiner. For emphasis, we consider and highlight specific arguments as presented in the Briefs.

Rejection of Claims 2–9, 11–16, 18–23, and 25–27 under § 101

Applicable Law

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.” 35 U.S.C. § 101. The Supreme Court, however, has long interpreted 35 U.S.C. § 101 to include an implicit exception: “Laws of nature, natural phenomena, and abstract ideas” are not patentable. *See, e.g., Alice Corp. Pty. Ltd. v. CLS Bank Int’l*, 134 S.Ct. 2347, 2354 (2014) (citation omitted).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus*

⁵ The Examiner takes Official Notice that the HL-7 communication format is old and well known. Final Act. 19–20.

Laboratories, 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*, 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.” *Id.* For example, abstract ideas include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Id.* at 2355–57. The “directed to” inquiry asks not whether “the claims *involve* a patent-ineligible concept,” but instead whether, “considered in light of the specification, . . . ‘their character as a whole is directed to excluded subject matter.’” *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016) (citations omitted). In that regard, we determine whether the claims “focus on a specific means or method that improves the relevant technology” or are “directed to a result or effect that itself is the abstract idea and merely invoke generic processes and machinery.” *McRO, Inc. v. Bandai Namco Games Am. Inc.*, 837 F.3d 1299, 1314 (Fed. Cir. 2016) (citation omitted).

If, at the first stage of the *Alice* analysis, we conclude that the claim is not directed to a patent-ineligible concept, it is considered patent eligible under § 101 and the inquiry ends. *Rapid Litig. Mgmt. Ltd. v. CellzDirect, Inc.*, 827 F.3d 1042, 1047 (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 (quoting *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.* (brackets in original) (quoting *Mayo*, 566 U.S. at 72–73). 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).

Appellants’ Arguments⁶

Appellants argue the Examiner failed to establish a *prima facie* case of subject matter ineligibility because the Examiner (1) did not fully articulate the abstract idea, (2) did not establish that the respective elements of the claims are directed to an abstract idea, and (3) “failed to provide proper evidence that the claims do not amount to significantly more than an abstract idea.” App. Br. 21. According to Appellants, even assuming that the claims are directed to a judicial exception, the elements of the claims “amount to significantly more” than an abstract idea or an ineligible method of doing business under the principles confirmed in the *Enfish*, *BASCOM*, *McRO*, and *Amdocs* cases. *Id.* at 21–22.

In particular, Appellants argue the Examiner failed to articulate how the claimed invention is directed to a judicial exception by identifying certain claim elements or concepts individually and not in the context in

⁶ Appellants argue claims 2–9, 11–16, 18–23, and 25–27 as a group. *See* App. Br. 17–25; Reply Br. 2–8. We consider method claim 18 to be representative of the claimed subject matter on appeal and, therefore, we decide the § 101 rejection of claims 2–9, 11–16, 18–23, and 25–27 on the basis of representative claim 18. *See* 37 C.F.R. § 41.37(c)(1)(iv).

which these operations are conducted in the claims. *Id.* at 22. Appellants also argue the Examiner erred in finding the claims recite the concept of “designating an evaluator based on a match between the evaluator’s qualifications and a requirement for diagnostic evaluation” because this ignores multiple computer-implemented claim elements and actions. *Id.* at 23 (emphasis omitted). Appellants further argue that the combination of elements in the claims is not directed to any ineligible concept and “[s]imply because the claims have a relationship to information, rules and tasks does not prove the claims are directed to abstract business methods or concepts.” *Id.* In the Reply Brief, Appellants further argue the Examiner oversimplified the claims into seven features, failed to cite any authority for why each feature is well-understood, routine, or conventional, and failed to consider the claims as a whole. Reply Br. 5–6. Appellants also argue that the Examiner’s finding that the ordered combination of steps is “an abstract ‘method of organizing human activity’ assumes [] the claim can be rewritten and recharacterized to remove the actual technical context and limitations.” *Id.* at 6. Appellants also argue the Examiner’s oversimplification and comparison of the claims to those in *SmartGene*, *Cyberfone*, *In re Meyer*, and *Accenture* “might be relevant if the appealed claims actually recited any of these concepts[,]” but “[t]hey do not.” *Id.* at 6–7.

Regarding Appellants’ contention that the Examiner failed to establish that the claimed subject matter is abstract, Appellants argue that based on the decisions in *Enfish* and *Amdocs*,⁷ the Examiner’s findings of abstractness cannot be sustained as a matter of law. App. Br. 24–26. Appellants also

⁷ *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1300, 1302 (Fed. Cir. 2016).

argue “[t]he involvement of specific computer elements and data processing, transmission, and actions in the claims to achieve this designation [of an evaluator] calls the entire premise of abstractness into question.” *Id.* at 26. Appellants further argue that the “claims are directed to an improvement in computer technology; the claims result in an improvement to the functioning of the computer network and computer system itself even before an interpretation (e.g., a radiological read) is performed.” *Id.* Appellants dispute the characterization that the claims might be “a method of organizing human activity.” *Id.* In that regard, Appellants argue “[t]he recited operations are performed electronically and in a computer, excluding any possibility that the claims are directed to human activities or mental ideas by themselves.” *Id.* Appellants also argue that the Examiner’s characterization of the claims as a “distributed architecture” ignores the point of *Amdocs*, which held that claims, which even involve “generic components [that] operate in an unconventional manner to achieve an improvement in computer functionality” are non-abstract and patent-eligible. Reply Br. 8. Appellants further argue that “[e]ven the Examiner recognizes that ‘the specification describes improving the speed or efficiency of known manual or automated image routing systems’ but errs in concluding that this is performed [] ‘using generic computers and known transmission networks.’” *Id.* (citing Ans. 18).

Regarding Appellants’ contention that the Examiner failed to establish the claimed subject matter is not “significantly more” than a judicial exception, Appellants argue the Examiner’s conclusion is based on the oversimplification of individual claim elements, rather than an evaluation of elements in the claim as a whole. App. Br. 27. Appellants also argue that,

“[e]ven so, the remaining claims are significantly more than the alleged judicial exception, and invoke elements that are not well-understood, routine, or conventional in the art.” *Id.* Citing *McRO*, Appellants argue that “the use of a computer-driven mechanism to automatically transfer data in a network, manage an electronic worklist, and process medical data characteristics cannot be excluded from subject matter eligibility even if they are simplified down to ‘tasks.’” *Id.* at 27–28. Appellants further argue *BASCOM*⁸ held that “a claim can recite ‘known, conventional pieces’” but still result in “‘significantly more’ than an abstract idea” and that the claims here “provide meaningful limits, with anything but a conventional or generic arrangement.” *Id.* at 28. In the Reply Brief, Appellants argues the Examiner erred by not considering “all claim elements as a whole for significantly more.” Reply Br. 9. Appellants also argue that the Examiner errs in finding the claims involve only “one rule” and dispute that the rules, as applied in the present claims, were “widely known.” *Id.* at 10.

Prima Facie Case

Before substantively analyzing claim 18 under the two-step *Alice* test, we address Appellants’ contention that the Examiner failed to establish a prima facie case of subject matter ineligibility. *See* App. Br. 21. Here, the Examiner stated the statutory basis for the rejection, namely, “under 35 U.S.C. [§] 101 because the claimed invention is directed to a judicial exception . . . without significantly more.” Final Act. 4. The Examiner also performed the two-step *Alice* test. *Id.* at 4–7; Ans. 9–16. Thus, we conclude the Examiner provided an adequate explanation of the rejection under § 101

⁸ *BASCOM Global Internet Services, Inc. v. AT&T Mobility LLC*, 827 F.3d 1341 (Fed. Cir. 2016).

and met the notice requirement of 35 U.S.C. § 132. *See In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011).

In view of the Examiner’s findings and conclusions in the Answer and Final Office Action, we also are not persuaded by Appellants’ argument that the Examiner did not fully articulate the abstract idea (*see* App. Br. 21), particularly in view of the Examiner’s finding that “[t]he plain focus of the claims, when considered as a whole, is on ‘a method of organizing human activity.’” Ans. 13 (emphasis omitted). Furthermore, we are not persuaded by Appellants’ argument the Examiner failed to establish a prima facie case of ineligibility because the Examiner “failed to provide proper evidence” or citation to any authority in the record that the claims do not amount to significantly more than an abstract idea. *See* App. Br. 21; Reply Br. 5. We disagree that the Examiner failed to provide evidence or authority in the record because the Examiner cited portions of the Specification as evidence that the claims amount to no more than a recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities. *See* Final Act. 4–7; Ans. 10–14. Appellants have not persuasively rebutted the Examiner’s findings in this regard. We also find that Appellants’ argument is conclusory and fails to identify any device, component, system or process recited in the claims that Appellants contend is not well-understood, routine, and conventional in the art, much less present any arguments in support of such contention. Thus, although our reviewing court recently held that “[t]he patent eligibility inquiry may contain underlying issues of fact” (*see Berkheimer v. HP Inc.*, 881 F.3d 1360, 1365 (Fed. Cir. 2018)), we determine that Appellants’ argument is insufficient to raise an issue of fact requiring

the Examiner to present additional evidence showing that any aspect of the claims is well-understood, routine, and conventional in the art.

Step One of *Alice*

Regarding claim 18, the preamble recites “[a] method for processing medical data in a workflow through use of a data processing system,” comprising at least one hardware processor performing 7 operations or steps. Claim 18 then recites the following 7 steps (which are described in the cited portions of the Specification): (1) processing electronic image data, including metadata, that originate from an imaging modality, wherein the images provide digital representations of at least a portion of a human subject (*see* Spec. ¶¶ 33, 51–55); (2) processing electronic order data that is correlated to the medical images and specifies characteristics of a diagnostic evaluation of the images to be performed (*see* Spec. ¶¶ 27–29, 33); (3) processing medical image procedure characteristics included in the electronic order data to determine at least one requirement of an evaluator for the diagnostic evaluation of the medical images to be performed (*see* Spec. ¶¶ 11, 68); (4) maintaining worklists associated with evaluators, wherein the worklists include a worklist for a particular evaluator (*see* Spec. ¶¶ 136, 149, 182); (5) designating an evaluator for performance of the evaluation based on a match between an evaluator qualification and a diagnostic evaluation requirement (*see* Spec. ¶¶ 145–146); (6) updating the worklist for the evaluator in response to designating the particular evaluator (*see* Spec. ¶ 149); and (7) transmitting the digital images to a computing device associated with the particular evaluator, wherein the images are viewable in response to acceptance of the diagnostic evaluation from the worklist for the particular evaluator (*see* Spec. ¶¶ 30, 147–148).

Considering the focus of claim 18 as a whole, in view of Appellants' Specification, we agree with the Examiner that claim 18 is directed to an abstract idea—a method of organizing human activity, i.e., managing the performance of diagnostic evaluations by assigning them to qualified evaluators, as well as maintaining and updating worklists. *See* Ans. 13. As discussed *infra*, claim 18 is directed to a combination of features that we conclude are similar or analogous to claims in other cases that courts have found are directed to an abstract idea. *See Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014) (“The concept of data collection, recognition, and storage is undisputedly well-known.”); *Electric Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) (claims focus on the abstract idea of collecting information, analyzing it, and displaying certain results of the collection and analysis); *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1341 (Fed. Cir. 2017) (holding that the claimed invention is directed “to the abstract idea of collecting, displaying, and manipulating data of particular documents”); *SmartGene, Inc. v. Advanced Biological Labs., SA*, 555 F. App'x 950, 954 (Fed. Cir. 2014) (claims recite comparing new and stored information and using rules to identify options).

In particular, we determine step (1) of “processing electronic image data, including metadata, that originate from an imaging modality,” step (2) of “processing electronic order data that is correlated to the medical images and specifies characteristics of a diagnostic evaluation of the images to be performed,” and step (3) of “processing medical image procedure characteristics included in the electronic order data to determine at least one requirement of an evaluator for the diagnostic evaluation of the medical

images to be performed” are directed to collecting and analyzing information, which courts have held are in the realm of abstract ideas. *See Electric Power*, 830 F.3d at 1353–54. We also conclude that step (4) of “maintaining worklists associated with evaluators, wherein the worklists include a worklist for a particular evaluator,” step (5) of “designating an evaluator for performance of the evaluation based on a match between an evaluator qualification and a diagnostic evaluation requirement,” and step (6) of “updating the worklist for the evaluator in response to designating the particular evaluator,” could be performed by a human with pen and paper. In that regard, our reviewing court has held that “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.” *Electric Power*, 830 F.3d at 1354; *see also Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1146 (Fed. Cir. 2016). “[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).

We also conclude that step (5) of “designating an evaluator. . . based on a match” of a qualification of the evaluator and a diagnostic evaluation requirement is directed to “using rules to identify options as in *SmartGene*.” Ans. 14 (emphasis omitted). We further conclude that step (7) of “transmitting the digital images to a computing device associated with the particular evaluator” where they are viewable in response to acceptance of the diagnostic evaluation from the worklist “is an ancillary part of such

collection and analysis” of information as set forth in steps (1)–(6) of claim 18. *See Electric Power*, 830 F.3d at 1354.

Appellants argue the Examiner failed to articulate how the claimed invention is directed to a judicial exception by identifying certain claim elements or concepts individually and not in the context in which these operations are conducted in the claims. *See App. Br. 22*. We do not agree. As reflected in the foregoing analysis of claim 18, it is directed to a combination of features, as set forth in steps (1)–(7). Thus, it was necessary for the Examiner to consider these various features, individually or as groups, and in doing so, the Examiner properly considered all of the limitations of claim 18. For these same reasons, we are not persuaded by Appellants’ arguments that the Examiner oversimplified the claims and failed to consider the claims as a whole. *See Reply Br. 5–6*. We also are not persuaded by Appellants’ argument that the Examiner’s finding that the combination of steps of claim 18 is directed to “an abstract method of organizing human activity” assumes the claim can be rewritten to remove “the actual technical context and limitations” because claim 18 recites generic components and functions, without reciting technical details and limitations. *See id.* at 6.

As discussed *supra*, we conclude, as does the Examiner, that the various features of claim 18 are directed to abstract ideas. *See Final Act. 4–6*. In that regard, we note that merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co., Ltd.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea . . . to another abstract idea . . . does not render the claim non-abstract.”); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089,

1094 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas). Thus, for these same reasons, we also are not persuaded by Appellants' argument that the Examiner did not establish that the respective elements of claim 18 are directed to an abstract idea. *See* App. Br. 23.

We also are not persuaded by Appellants' arguments that the Examiner failed to establish that the claimed subject matter is abstract. *See* App. Br. 24–26. First, we are not persuaded by Appellants' argument that based on *Enfish* and *Amdocs*, the Examiner's finding of abstractness cannot be sustained as a matter of law because Appellants have not shown that the claims in these cases are similar or analogous to claim 18. Regarding *Enfish*, Appellants have not demonstrated that claim 18 “improve[s] the way a computer stores and retrieves data in memory,” as the claims in *Enfish* did via a “*self-referential* table for a computer database.” *See Enfish*, 822 F.3d at 1336, 1339. With respect to *Amdocs*, and contrary to Appellants' argument that even claims with “generic components [that] operate in an unconventional manner” are non-abstract (*see* Reply Br. 8), Appellants have not demonstrated that claim 18 provides an “unconventional technological solution . . . to a technological problem” that “improve[s] the performance of the system itself,” as explained in *Amdocs*. *See Amdocs*, 841 F.3d at 1300, 1302.

Second, we are not persuaded by Appellants' argument that the claims are directed to an improvement in computer technology. App. Br. 26. Although Appellants argue that the claims are directed to “an improvement to the functioning of the computer network and computer system itself,” even before a radiological read is performed (*see id.*), this argument is not

convincing because it is conclusory and unsupported by the claim language. *See Accenture Global Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1345 (Fed. Cir. 2013) (admonishing that “the important inquiry for a § 101 analysis is to look to the claim”; “the complexity of the implementing software or the level of detail in the specification does not transform a claim reciting only an abstract concept into a patent-eligible system or method”). As the Examiner finds, “Appellant[s] do[] not indicate what basic computer function is improved, or how it is improved.” *See* Ans. 18. Nor have Appellants identified any portion of the Specification, or provided any evidence or technical reasoning, demonstrating that claim 18 achieves a technical advance or improvement to the computer network and computer system. Regarding the Specification, the Examiner finds, and we agree, that “the specification is devoid of any disclosure, or even a suggestion, that the claimed invention improves any basic computer function. Rather, the specification describes improving the speed or efficiency of known manual or automated image routing systems, as disclosed in the Background, using generic computers and known transmission networks.” *Id.*; *see also id.* at 20. Thus, we agree with the Examiner’s finding that “the claims do not recite an asserted improvement to the functioning of the computer itself, but rather recite using a computer to lend speed and efficiency to an abstract idea.” *Id.* at 18; *see also id.* at 21.

Step Two of *Alice*

Regarding step two of the *Alice* analysis, based on the Examiner’s findings and reasons, we agree with the Examiner’s determination that the elements of the claims do not provide “significantly more” than the abstract

idea. *See* Final Act. 6–7; *see also* Ans. 2–9, 20–24. We also are not persuaded by Appellants’ arguments that the Examiner erred.

First, we are not persuaded by Appellants’ argument that the remaining claims are “significantly more” than the alleged judicial exception and “invoke elements that are not well-understood, routine, or conventional in the art” because it is conclusory and unsupported by any citation to the Specification, claims, or other evidence. App. Br. 27. Second, Appellants’ arguments that *McRO* involved the “use of rules” and shows that the use of a computer-driven mechanism to automatically transfer data, manage an electronic worklist, and process medical data characteristics cannot be excluded from subject matter eligibility are unpersuasive because Appellants have failed to show that claim 18 recites a “technological improvement” as Appellants assert. App. Br. 27–28. Unlike the claims in *McRO*, claim 18 does not “focus on a specific means or method that improves the relevant technology,” but is “directed to a result or effect that itself is the abstract idea and merely invoke[s] generic processes and machinery.” *McRO*, 837 F.3d at 1314 (citation omitted). This is not enough to transform an abstract idea into patent-eligible subject matter. *See, e.g., Alice*, 134 S. Ct. at 2360 (explaining that claims that “amount to ‘nothing significantly more’ than an instruction to apply the abstract idea . . . using some unspecified, generic computer” “is not ‘enough’ to transform an abstract idea into a patent-eligible invention” (quoting *Mayo*, 566 U.S. at 77, 79)); *Intellectual Ventures*, 850 F.3d at 1342 (“[T]he claim language here provides only a result-oriented solution, with insufficient detail for how a computer accomplishes it. Our law demands more.”). Furthermore, we are unpersuaded by Appellants’ arguments that the Examiner erred by finding

the claims involve only “one rule” and that the claimed rules were “widely known” (*see* Reply Br. 10) because they are conclusory and unsupported by any reference to the claims, the Specification, or other evidence.

Third, Appellants’ arguments that *BASCOM* held that a claim can recite “known, conventional pieces” and still result in “significantly more” and that the claims here “provide meaningful limits, with anything but a conventional or generic arrangement” are unpersuasive. App. Br. 28. In *BASCOM*, the court held that an inventive concept can be found in a non-conventional and non-generic arrangement of known, conventional pieces. *See BASCOM*, 827 F.3d at 1350. Here, as the Examiner finds, the claims are distinguishable from those in *BASCOM*. Ans. 20–21. In *BASCOM*, the system claims were directed to a “content filtering system for filtering content retrieved from an Internet computer network,” which the court held were directed to an abstract idea. *Id.* at 1348–49. The court further held the claims included an inventive concept in the ordered combination of system components, including a local client computer and a remote ISP server connected to the client computer and Internet computer network providing for “the installation of a filtering tool at a specific location, remote from the end-users, with customizable filtering features specific to each end user.” *Id.* at 1350. Appellants have failed to show that claim 18 includes a similar or analogous arrangement or “ordered combination” of components. Instead, Appellants make only the conclusory statement that Appellants “ha[ve] referred to numerous technical advantages that occur in processing and bandwidth resources of computer networks, data processing, and computer systems as a result of the claimed invention.” Reply Br. 10 (citing App. Br. 24–26).

Thus, we see nothing in the limitations of claim 18, considered both “individually and ‘as an ordered combination,’” that transforms the claimed abstract idea into patent-eligible subject matter.

Accordingly, we sustain the Examiner’s rejection of claim 18 under § 101. For the same reasons, we sustain the rejection of independent claims 2 and 11, and dependent claims 3–9, 12–16, 19–23, and 25–27, which are not separately argued, under § 101.

*Rejection of Claims 2, 5–9, 11, 13–16, 18, and 20–23 under § 103(a)*⁹

First, Appellants contend that Pinsky does not teach “processing medical imaging procedure characteristics included in the electronic order data” or “determination of the at least one requirement[] based on the diagnostic evaluation characteristics included in the electronic order data,” as recited in claim 18. App. Br. 16. In particular, Appellants argue that the claimed “order data” is separate from the claimed “imaging data,” even if they have some overlapping data fields or characteristics, and under the Examiner’s interpretation, any distinction between them is erased. *Id.* at 16–17. According to Appellants, the cited portions of Pinsky refer to processing “study routing parameters” independent of any electronic order data, and Pinsky does not process characteristics *included in the electronic order data*, as claimed. *Id.* at 17 (citing Pinsky 2:29–33 and 42–51; 4:5–26).

⁹ Appellants argue claims 2, 5–9, 11, 13–16, 18, and 20–24 as a group. See App. Br. 16–19; Reply Br. 2–4. We consider method claim 18 to be representative of the claimed subject matter on appeal and, therefore, we decide the § 103(a) rejection of claims 2, 5–9, 11, 13–16, 18, and 20–24 on the basis of representative claim 18. See 37 C.F.R. § 41.37(c)(1)(iv).

We are not persuaded by Appellants' arguments that the Examiner erred. The Examiner finds, and we agree, that Pinsky teaches both "imaging data" and "associated study information." Ans. 6 (citing Pinsky 3:54–4:4). The Examiner also finds, and we agree for the reasons stated by the Examiner, that it is reasonable to interpret the "associated study information" as the claimed "electronic order data." *Id.* In addition, the Examiner finds, and we agree, that Pinsky teaches or at least suggests processing characteristics included in the electronic order data because Pinsky teaches processing of the study information, such as the suspected pathology, the modality, the anatomy, and patient-identifying data, to determine a set of parameters, which characterize the study. *Id.*; *see also* Pinsky 3:58–4:8.

Second, Appellants contend that Gropper does not teach "maintaining electronic worklists associated with respective evaluators of a plurality of evaluators," as recited in claim 18. App. Br. 17. Appellant argues that Gropper refers to a worklist shared among an entire group of users and the worklist in Gropper "does not provide the ability to differentiate 'pending' diagnostic evaluations, or having such evaluations being 'designated for performance' as claimed." *Id.* at 17–18. We are not persuaded by Appellants arguments. The Examiner finds, and we agree, that Gropper teaches maintaining "both worklists unique to an individual and worklists that may overlap individuals" because Gropper discloses that "[e]ach worklist is associated with one or more user[s]." Ans. 4 (citing Gropper ¶ 8). The Examiner also finds, and we agree, that Gropper teaches "worklist items are 'assigned' to a radiologist or a group of radiologists." Ans. 4 (citing Gropper ¶¶ 67, 68). Thus, we agree with the Examiner that the

claimed “evaluations designated for performance by the respective evaluators” reads on Gropper’s teaching of the worklist item being “assigned to a radiologist.” *Id.*; see Gropper ¶ 67.

Third, Appellants contend that Groper does not teach “updating the electronic worklist for the particular evaluator in response to designating the particular evaluator,” as recited in claim 18. App. Br. 18. We are not persuaded by this argument because, as discussed *supra*, Gropper teaches worklists are maintained for a particular evaluator and worklist items are assigned to a radiologist. Ans. 4 (citing Gropper ¶¶ 18, 67); see also *id.* at 7 (citing Gropper ¶¶ 67, 114–119). Furthermore, the Examiner finds, and we agree, that “Gropper provides ‘real-time updates’ of the worklist sent immediately after the worklist is assembled.” *Id.* at 7 (citing Gropper ¶¶ 11, 46).

Fourth, Appellants argue Gropper does not teach or suggest “‘acceptance of the diagnostic evaluation’ from a worklist” or “‘transmitting the plurality of digital medical images’ in any way that would make the images ‘viewable . . . in response to acceptance.’” App. Br. 19; Reply Br. 2–3. This argument is not persuasive because it is not commensurate with the scope of claim 18. The Examiner concludes, and we agree, claim 18 and the Specification makes it clear “that the images are transmitted to the doctor computer without any interaction of the doctor with the worklist.” Ans. 3. That is, contrary to Appellants’ argument, claim 18 does not require that the medical images are transmitted to a doctor’s computing device “in response to acceptance of the diagnostic evaluation.” Instead, as the Examiner also concludes, and we agree, claim 18 is properly construed to mean that the “images are viewable at the computing device associated with the particular

evaluator in response to acceptance of the diagnostic evaluation of the . . . images from the electronic worklist.” *Id.* (emphasis omitted). The Examiner also concludes, and we agree, the term “acceptance” means “selection.” Ans. 4. The Examiner further finds, and we agree, that Gropper teaches or suggests that “the plurality of . . . images are viewable at the computing device associated with the particular evaluator in response to acceptance [or selection] of the diagnostic evaluation of the plurality of digital medical images from the electronic worklist for performance by the particular evaluator.” *See* Final Act. 13 (citing Gropper ¶¶ 11, 12, 18–20, 22, 68, 94–96) (emphasis omitted); Ans. 4 (citing Gropper ¶¶ 67–68).

Accordingly, we sustain the Examiner’s rejection of claim 18 under § 103(a). For the same reasons, we also sustain the Examiner’s rejection of independent claims 2 and 11, as well as dependent claims 5–9, 13–16, and 20–23, under § 103(a).

Rejection of Claims 3, 12, and 19 under § 103(a)¹⁰

Appellants contend that Rothschild does not teach all the limitations of “electronically transmitting the electronic order data to a medical facility that performed the medical imaging procedure for verification of an evaluation order indicated in the electronic order data, and electronically receiving the verification of the evaluation order from the medical facility,” as recited in claim 19. App. Br. 19–20. In particular, Appellants argue that

¹⁰ Appellants argue claims 3, 12, and 19 as a group. *See* App. Br. 19–20; Reply Br. 4–5. We consider method claim 19 to be representative of the claimed subject matter on appeal and, therefore, we decide the § 103(a) rejection of claims 3, 12, and 19 on the basis of representative claim 19. *See* 37 C.F.R. § 41.37(c)(1)(iv).

“Rothschild does not teach verification of an ‘evaluation order indicated in the electronic order data’ or transmission of the order data ‘to a medical facility for verification’ as claimed.” *Id.* at 20. We agree with Appellants’ arguments regarding Rothschild.

The Examiner finds, however, that Appellants’ Specification discloses it is old and well known for radiology read orders to be validated by the imaging center. Final Act. 19 (citing Spec. 6, 10, 21, 34, 43, 50, 54–58, 72); *see also* Ans. 8. The Examiner also finds that the “[v]alidation or verification is described as a manual process—a technician or doctor reviews the populated order for accuracy.” Final Act. 19; Ans. 9. The Examiner further finds that “it appears that the limitation is automating a known manual process.” Final Act. 19. We agree with the Examiner.

A claimed invention is not patentable if it merely automates a prior art process. Broadly providing an automatic way to replace a manual activity accomplishing the same result is not sufficient to distinguish an automated process over the prior art. *In re Venner*, 262 F.2d 91, 95 (CCPA 1958) (“it is well settled that it is not ‘invention’ to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result”). An improved product in the art is obvious if that “product [is] not [one] of innovation but of ordinary skill and common sense.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007). Here, the Examiner has shown that it would have been obvious to automate the manual validation or verification process disclosed in the Specification to accomplish the claimed result. Appellants do not dispute the Examiner’s findings that the process is “old and well known,” but merely assert this is proof of hindsight used to create a missing element in the prior art. We do not agree with Appellants’

hindsight assertion because the Examiner's obviousness finding is based on the prior art manual process, even though it is disclosed in the Specification, rather than Appellants' invention. Thus, we sustain the Examiner's rejection of claim 19, as well as claims 3 and 12, under 35 U.S.C. § 103(a).

Rejection of Claim 4 under § 103(a)

Appellants' contend that the rejection of claim 4 is in error because none of the references, including Rothschild, or the Examiner's Official Notice, teach "electronic order data being transmitted to the medical facility for verification." App. Br. 20. This is the same argument made by Appellants with respect to claim 19. Thus, for the same reasons stated *supra* regarding the rejection of claim 19, we sustain the Examiner's rejection of claim 4.

DECISION

We *pro forma* affirm the rejection of claims 2–9, 11–16, 18–23, and 25–27 on the ground of nonstatutory double patenting over claims 1–24 of US 8,515,778 B2.

We affirm the Examiner's decision rejecting claims 2–9, 11–16, 18–23, and 25–27 under 35 U.S.C. § 101.

We affirm the Examiner's decision rejecting claims 2–9, 11–16, 18–23, and 25–27 under 35 U.S.C. § 103(a).

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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). *See* 37 C.F.R. § 1.136(a)(1)(iv)(2016).

AFFIRMED