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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte PATRICK FAITH, AYMAN HAMMAD, and
JACK COYNE

Appeal 2017-001155
Application 12/581,753
Technology Center 3600

Before ROBERT E. NAPPI, JOYCE CRAIG, and PHILLIP A. BENNETT,
Administrative Patent Judges.

CRAIG, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants¹ appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 27–31, 33–48, and 51–54. Claims 1–26, 32, 49, and 50 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

¹ According to Appellants, the real party in interest is Visa International Service Association. App. Br. 2.

INVENTION

Appellants' invention relates to processing enrollment requests.

Abstract. Claim 27 is illustrative and reads as follows:

27. A computer implemented enrollment method comprising:

receiving an enrollment request from a user access device, by an enrollment server computer, the enrollment request requesting enrollment in a notification service, and including information identifying a requestor, wherein the information identifying the requestor comprises a name of the requestor, a transaction account identifier, and a cellular telephone number of the requestor;

sending, by the enrollment server computer, at least a first portion of the identifying information to a first verifying entity computer, wherein the first verifying entity computer is an account issuer computer, and wherein the first portion of the identifying information comprises the transaction account identifier;

sending, by the enrollment server computer, at least a second portion of the identifying information to a second verifying entity computer, wherein the second verifying entity computer is a telecommunications carrier computer, and wherein the second portion of the identifying information comprises the name of the requestor and the cellular telephone number of the requestor;

receiving, by the enrollment server computer, from the first verifying entity computer a first indication of the first portion of identifying information matching identifying information stored by the first verifying entity computer;

receiving, by the enrollment server computer, from the second verifying entity computer a second indication of the second portion of identifying information matching identifying information stored by the second verifying entity computer;

comparing, by the enrollment server computer, the enrollment request with a requestor's transaction history;

determining, by the enrollment server computer, based on comparing the enrollment request with the requestor's transaction history, that the enrollment request fits within a profile of the requestor based on the requestor's transaction history; and

after comparing, allowing, by the enrollment server computer, the enrollment request based on the first indication, the second indication, and the comparison of the requestor's transaction history, wherein, after allowing, a notification is sent to a cellular telephone associated with the cellular telephone number after a transaction.

REJECTIONS

Claims 27–31, 33–48, and 51–54 stand rejected under 35 U.S.C. § 101 because the claimed invention is directed to a judicial exception, without significantly more. Final Act. 2–3.

Claims 27, 29–31, 33, 34, 38, 39, 44, 45, 48, and 51–54 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Zarin et al. (US 2002/0138418 A1; published Sept. 26, 2002) (“Zarin”) and Clower et al. (US 7,529,710 B1; issued May 5, 2009) (“Clower”). Final Act. 4–11.

Claims 28 and 40 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Zarin, Clower, and Kala et al. (US 8,688,503 B2; issued Apr. 1, 2014) (“Kala”). Final Act. 12–13.

Claims 35–37, 46, and 47 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Zarin, Clower, and Skowronek (US 2010/0114773 A1; published May 6, 2010). Final Act. 13–15.

Claims 41–43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over the combination of Zarin, Clower, and Golan (US 2005/0097320 A1; published May 5, 2005). Final Act. 16–17.

ANALYSIS

Rejection of Claims 27–31, 33–48, and 51–54 under 35 U.S.C. § 101

We have reviewed the rejections of claims 27–31, 33–48, and 51–54 in light of Appellants’ arguments that the Examiner erred. We have considered in this decision only those arguments Appellants actually raised

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in the Briefs. Any other arguments Appellants could have made, but chose not to make, in the Briefs are waived. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Appellants' arguments are not persuasive of error. We agree with and adopt as our own the Examiner's findings of facts and conclusions as set forth in the Answer (Ans. 2–10) and in the Action from which this appeal was taken (Final Act. 2–3). We provide the following explanation for emphasis.

As an initial matter, we note that Appellants refer to the identified abstract idea as “verifying enrollment process.” *See id.* (citing Final Act. 3). Nowhere, however, does the Examiner identify the abstract idea as “verifying enrollment process.” *See* Final Act. 3. In the Reply Brief, Appellants acknowledge that “[f]or brevity, the Appellant summarized the alleged abstract idea as a ‘verifying enrollment process.’” Reply Br. 2. Thus, throughout the appeal brief, Appellants refer to an abstract idea of their own making, not to the abstract idea identified by the Examiner.

Appellants contend the Examiner did not make a *prima facie* case of patent ineligibility because the Examiner failed to provide “evidence to establish that a ‘verifying enrollment process’ is a ‘certain method of organizing human activity,’ and/or an ‘abstract idea.’” App. Br. 12.

We disagree. Patent eligibility under 35 U.S.C. § 101 is a question of law that is reviewable *de novo*. *See Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333 (Fed. Cir. 2012). We are aware of no controlling authority that requires the Office to provide factual evidence under step one of the *Alice* framework to support a determination that a claim is directed to an abstract idea. Instead, the Federal Circuit has repeatedly noted that “the *prima facie* case is merely a procedural device that enables an appropriate shift of the

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burden of production.” *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007) (citing *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992)).

The Examiner satisfies the burden of establishing a *prima facie* case under 35 U.S.C. § 132 by setting forth a rejection in a sufficiently articulate and informative manner. *In re Jung*, 637 F.3d 1356, 1363 (Fed. Cir. 2011). If the Examiner “adequately explain[s] the shortcomings . . . the burden shifts to the applicant to rebut the *prima facie* case with evidence and/or argument.” *Hyatt*, 492 F.3d at 1370. The Final Office Action adequately explains the § 101 rejection. *See* Final Act. 2–3. The Examiner’s statements satisfy § 132(a) because they apply the *Alice* analytical framework and apprise Appellants of the reasons for the § 101 rejection under that framework. Appellants have not responded by alleging a failure to understand the rejection. To the contrary, Appellants clearly identify the abstract idea identified by the Examiner. *See* Reply Br. 2.

For these reasons, we are not persuaded that the Examiner failed to make a *prima facie* case of patent invalidity under § 101.

Alice Step One: Abstract Idea

Appellants contend the claims are not directed to an abstract idea because “the claimed solution is necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of online computing.” App. Br. 10 (citing *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1259 (Fed. Cir. 2014)). Appellants argue claim 27 provides “an enrollment server computer that can identify and separate different sets of consumer information and communicate with different verifying entity computers to validate that the different sets of consumer information are valid.” *Id.* Appellants further argue “there is no ‘pre-computer’ business practice directly analogous to the steps in independent claim 27.” *Id.* at 11.

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Appellants also argue the claims “do not preempt every application of some abstract idea.” *Id.*

We are not persuaded that the Examiner erred. In *DDR Holdings*, the Federal Circuit determined that certain claims satisfied *Alice* step two because “the claimed solution amount[ed] to an inventive concept for resolving [a] particular Internet-centric problem,” i.e., a challenge unique to the Internet. *DDR Holdings*, 773 F.3d at 1257–59; see *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (noting that “[i]n *DDR Holdings*, we held that claims ‘directed to systems and methods of generating a composite web page that combines certain visual elements of a ‘host’ website with content of a third-party merchant’ contained the requisite inventive concept”). The Federal Circuit explained that the patent-eligible claims specified “how interactions with the Internet are manipulated to yield a desired result . . . that overrides the routine and conventional sequence of events ordinarily triggered by the click of a hyperlink.” *DDR Holdings*, 773 F.3d at 1258. The court reasoned that those claims recited a technological solution “necessarily rooted in computer technology” that addressed a “problem specifically arising in the realm of computer networks.” *Id.* at 1257.

The claims here do not address a similar problem and do not contain a similar inventive concept as the patent-eligible claims in *DDR Holdings*. Instead, as the Examiner points out, the claims are directed to the abstract concept of verifying the identity of a requestor by comparing identification with a third party database and comparing the requested action with past actions of facilitating a purchase. Ans. 4. That the claim uses two computers, rather than one, to accomplish this is not sufficient to persuade us that the claims are “necessarily rooted in computer technology.”

Moreover, Appellants have not persuaded us of error in the Examiner's reliance on cases finding similar concepts abstract. *See* Ans. 4; Reply Br. 4. Abstract ideas include the concepts of collecting data, recognizing certain data within the collected data set, and storing the data in memory. *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). Additionally, the collection of information and analysis of information (e.g., recognizing certain data within the dataset) are also abstract ideas. *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016). Similarly, “collecting, displaying, and manipulating data” is an abstract idea. *Intellectual Ventures I LLC v. Capital One Fin. Corp.*, 850 F.3d 1332, 1340 (Fed. Cir. 2017). Further, a process that employs mathematical algorithms to manipulate existing information to generate additional information is abstract. *Digitech Image Techs., LLC v. Elec. for Imaging, Inc.*, 758 F.3d 1344, 1351 (Fed. Cir. 2014). Also, more recently, our reviewing court has also concluded that acts of parsing, comparing, storing, and editing data are abstract ideas. *Berkeimer v. HP Inc.*, No. 2017-1437, 2018 WL 774096, at *5 (Fed. Cir. 2018). Further, merely combining several abstract ideas does not render the combination any less abstract. *RecogniCorp, LLC v. Nintendo Co.*, 855 F.3d 1322, 1327 (Fed. Cir. 2017) (“Adding one abstract idea (math) to another abstract idea . . . does not render the claim non-abstract.”); *see also FairWarning IP, LLC v. Iatric Sys., Inc.*, 839 F.3d 1089, 1093-94 (Fed. Cir. 2016) (determining the pending claims were directed to a combination of abstract ideas).

Appellants' argument that the abstract idea underlying the claims cannot be performed in the human mind or with a pen and paper is not persuasive of error. As the Examiner stated, the claims verify whether

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persons enrolling in an existing notification service are authorized by sending two portions of the identifying information of the requesting user to two verifying entities to determine if they match the identifying information stored in each of them. Ans. 3–4 (citing Spec. ¶¶ 8–10). The claims also compare the enrollment request with the requestor’s transaction history, the comparison indicating a degree to which the enrollment request matches the requestor’s transaction history profile. *Id.* Based on the above verification steps, the claims either allow or deny the enrollment request based on the first indication, the second indication, and the comparison of the requestor’s transaction history. Appellants have not persuaded us that a computer is needed to perform the above steps. Indeed, the steps could have been performed with pen and paper before the advent of computers. *See* Ans. 7–8.

Moreover, Appellants’ argument that the claims do not preempt “every application of some abstract idea” is also not persuasive. *See* App. Br. 11. Preemption is not the sole test for patent eligibility, and any questions on preemption in the instant case have been resolved by the Examiner’s *Alice* analysis. As our reviewing court has explained: “questions on preemption are inherent in and resolved by the § 101 analysis,” and, although “preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility.” *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015); *cf. 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.”).

For these reasons, we are not persuaded the Examiner erred in concluding the claims are directed to the abstract idea of “verifying the identify of a requestor by comparing identification with a third party database and comparing the requested action with past actions.” Ans. 4. Because we determine the claims are directed to an abstract idea, we analyze the claims under step two of *Alice* to determine if there are additional limitations that individually, or as an ordered combination, ensure the claims amount to “significantly more” than the abstract idea. *Alice*, 134 S. Ct. at 2355. The implementation of the abstract idea involved must be “more than [the] performance of ‘well-understood, routine, [and] conventional activities previously known to the industry.’” *Content Extraction*, 776 F.3d at 1347–48 (quoting *Alice*, 134 S. Ct. at 2359) (alteration in original).

Alice Step Two: Significantly More

Turning to *Alice* step two, Appellants argue the Examiner erred because the recited claim elements apply the abstract idea with, or by use of, a particular machine, as the claims recite the use of an enrollment server computer, as well as additional computer terminals (a first verifying entity computer, a second verifying entity computer, a user access device, and a cellular telephone). App. Br. 16. Appellants also argue in a conclusory manner that “the recited claim elements clearly ‘add[] a specific limitation other than what is well-understood, routine and conventional in the field’ or ‘add[] unconventional steps that confine the claim to a particular useful application.’” *Id.* Appellants further argue that, because not all limitations in the claims are in the prior art, the invention cannot simply relate to conventional practices. *Id.*

We disagree with Appellants. Considering the recited elements of the claims in light of Appellants’ Specification, we agree with the Examiner’s

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findings that the additional elements are generic computer components recited as performing generic computer functions that are well-understood, routine and conventional activities, and amount to no more than implementing the abstract idea with a computerized system. *See* Ans. 5–8. The Examiner determined the elements of claim 27, when considered individually or in combination, do not recite substantially more than the abstract idea. *See* Final Act. 3; *see also* Ans. 5–8. The Examiner further found claim 27 recites additional elements that amount to no more than: (i) mere instructions to implement the idea on a computer; and (ii) a recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry. *See* Final Act. 3. We agree with the Examiner that the additional claim elements do not provide meaningful limitations to transform the abstract idea into a patent eligible application of the abstract idea because the claim does not effect an improvement to another technology or technical field, the claim does not amount to an improvement to the functioning of a computer itself, and the claim does not move beyond a general link of the use of an abstract idea to a particular technological environment. *See* Ans. 5–8. For the reasons stated by the Examiner, we agree with the Examiner’s findings and conclusions.

We are not persuaded by Appellants’ argument that claim 27 is similar to the claims in *DDR Holdings*. *See* App. Br. 17–19. In *DDR Holdings*, the disputed claims solved an Internet-specific problem with an Internet-based solution that was “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks.” *DDR Holdings*, 773 F.3d at 1257–58. That is not the case here. Instead, consistent with the Examiner’s findings, the problem of validating

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different sets of consumer information provided for enrolling in a notification service is not a problem specifically arising in the realm of computer networks, and users previously had, and currently can, provide such information for validation and authorization without the use of a computer. *See* Ans. 4, 7–8.

Appellants’ argument that claim 27 does not recite functionality that is well-understood, routine, and conventional is also not persuasive. *See* App. Br. 13. Appellants’ Specification provides evidence that the claimed “computer” is a general-purpose computer processor that performs functions that are routine, conventional, and well-understood to one of ordinary skill in the relevant art. *See, e.g.*, Spec. ¶ 74. The Specification also describes the recited “cellular telephone” (*see* Spec. ¶ 76–80) and “database” (*see* Spec. ¶ 21) in a generic manner. Courts have recognized receiving or transmitting data over a network as well-understood, routine, and conventional functions when they are claimed in a merely generic manner or as insignificant extra-solution activity. *Intellectual Ventures I LLC v. Symantec*, 838 F.3d 1307 (Fed. Cir. 2016) (utilizing an intermediary computer to forward information); *TLI Communications LLC v. AV Auto. LLC*, 823 F.3d 607, 610 (Fed. Cir. 2016) (using a telephone for image transmission); *OIP Techs., Inc., v. Amazon.com, Inc.*, 788 F.3d 1359, 1363 (Fed. Cir. 2015) (sending messages over a network); *buySAFE, Inc. v. Google, Inc.*, 765 F.3d 1350, 1355 (Fed. Cir. 2014) (computer receives and sends information over a network). MPEP 2106.05(d). Courts have also found storing and retrieving information in memory well-understood, routine, and conventional. *Versata Dev. Group, Inc. v. SAP Am., Inc.*, 793 F.3d 1306, 1334 (Fed. Cir. 2015); *OIP Techs.*, 788 F.3d at 1363.

We also are not persuaded by Appellants' argument that claim 27 improves the functionality of a general-purpose computer. *See* App. Br. 14. Appellants have not identified any portion of the Specification, nor provided any evidence or technical reasoning, persuasively demonstrating claim 27 is directed to a technical advance or improvement to computer functionality.

In view of Appellants' Specification, and consistent with the Examiner's determinations, we determine the claims do not recite:

- (i) an improvement to the functioning of a computer;
- (ii) an improvement to another technology or technical field;
- (iii) an application of the abstract idea with, or by use of, a particular machine;
- (iv) a transformation or reduction of a particular article to a different state or thing;
- (v) other meaningful limitations beyond generally linking the use of the abstract idea to a particular technological environment; or
- (vi) a specific limitation other than what is well-understood, routine, conventional activity in the field or unconventional steps that confine the claim to a particular useful application.

See Manual of Patent Examining Procedure ("MPEP") § 2106.05. Thus, the claims are not directed to something significantly more than the abstract idea.

Moreover, an abstract idea is not transformed into an inventive concept just because the Examiner has not found prior art that discloses or suggests it, as Appellants argue here. "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2117 (2013). Indeed, "[t]he 'novelty' of any element or steps in a process, or even of the process itself, is of no relevance in determining whether the subject matter of

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a claim falls within the § 101 categories of possibly patentable subject matter.” *Diamond v. Diehr*, 450 U.S. 175, 188–89 (1981).

For these reasons, we are not persuaded of error in the Examiner’s conclusion that the claims are not directed to patentable subject matter. Accordingly, we sustain the Examiner’s rejection of independent claim 27. For similar reasons, we also sustain the Examiner’s rejection of independent claims 39 and 52, which recite similar limitations and were not argued separately. *See* App. Br. 20. Additionally, we sustain the Examiner’s rejection of claims 28–31, 33–38, 40–48, 51, 53, and 54, which depend therefrom and were not argued separately. *See* App. Br. 20; 37 C.F.R. § 41.37(c)(1)(iv)(2015).

Rejection of Claims 27–31, 33–48, and 51–54 under 35 U.S.C. § 103(a)

Appellants contend the Examiner erred because the combination of Zarin and Clower fails to teach the two “sending” steps of claim 27. App. Br. 24. In particular, Appellants argue that Clower does not teach sending a “first portion” of identifying information to a “first verifying entity computer” and a “second portion” of identifying information to a “second verifying entity computer.” *Id.* Appellants argue that communication with only one third party identity verification data store is used to verify all of the identity data is mentioned in Clower. *Id.* Appellants further argue that Clower does not teach or suggest verifying identifying information at an “account issuer computer” or a “telecommunications carrier computer,” as claim 27 requires. *Id.* at 25.

We agree with Appellants that the Examiner erred. The Examiner concluded, without documentary support, that it would have been obvious to select as a verification service, a provider that services and possesses data about the customer (e.g., bank, card issuer, phone/internet/television

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provider, utility company, etc.) and use customer information stored in the database (e.g., name, account number or phone number) to verify the identity of the customer. Final Act. 8–9. The Examiner also concluded, again without documentary support, that it would have been obvious to use two or more external verification entities that could independently perform user authentication. Ans. 14.

We are persuaded that the Examiner erred. The Federal Circuit has repeatedly warned that references to “common sense”—whether to supply a motivation to combine or a missing limitation—cannot be used as a wholesale substitute for reasoned analysis and evidentiary support, especially when dealing with limitations missing from the cited prior art, as is the case here. *See Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1362 (Fed. Cir. 2016). To the extent the Examiner intended to take “official notice” of the facts underlying the above conclusions, official notice unsupported by documentary evidence should only be taken where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known. *In re Ahlert*, 424 F.2d 1088, 1091 (CCPA 1970); *see* MPEP § 2144.03. This is not the case here, as the Examiner did not officially notice a fact, let alone a fact capable of instant and unquestionable demonstration, but instead officially noticed a legal conclusion of obviousness. Moreover, we find the underlying facts are not “capable of such instant and unquestionable demonstration as to defy dispute.” *See In re Ahlert*, 424 F.2d at 1091.

Because we agree with at least one of the dispositive arguments advanced by Appellants, we need not reach the merits of Appellants’ other arguments. Accordingly, on the record before us, we do not sustain the Examiner’s § 103(a) rejection of independent claim 27, as well as the

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Examiner's § 103(a) rejection of independent claims 39 and 52, which contain similar limitations and which Appellants argue are patentable for similar reasons. App. Br. 31. We also reverse the Examiner's rejection of dependent claims 28, 35–37, 40–43, 46, and 47, which stand with the independent claims from which they depend.

DECISION

We affirm the Examiner's decision rejecting claims 27–31, 33–48, and 51–54 under 35 U.S.C. § 101.

We reverse the Examiner's decision rejecting claims 27–31, 33–48, and 51–54 under 35 U.S.C. § 103(a).

Because we affirm at least one ground of rejection with respect to each claim on appeal, the Examiner's decision rejecting claims 27–31, 33–48, and 51–54 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). *See* 37 C.F.R. § 41.50(f).

AFFIRMED