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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte KYLE M. DIXON and STEPHEN M. DEARING

Appeal 2016-002842¹
Application 13/773,099²
Technology Center 3600

Before BIBHU R. MOHANTY, BRUCE T. WIEDER, and
ALYSSA A. FINAMORE, *Administrative Patent Judges*.

FINAMORE, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellants appeal from the Examiner's decision to reject claims 77–94. We have jurisdiction under § 6(b). We AFFIRM.

¹ Our Decision references Appellants' Specification ("Spec.," filed Feb. 21, 2013), Appeal Brief ("Appeal Br.," filed June 22, 2015), and Reply Brief ("Reply Br.," filed Dec. 31, 2015), as well as the Examiner's Final Office Action ("Final Act.," mailed Jan. 21, 2015) and Answer ("Ans.," mailed Nov. 2, 2015).

² Appellants identify United States Postal Service as the real party in interest. Appeal Br. 3.

SUBJECT MATTER ON APPEAL

The invention “relates generally to data processing systems and, more particularly, to a method and system for providing a barcode image over a network.” Spec. ¶ 2. Claims 77, 83, and 89 are the independent claims on appeal. Independent claim 77, reproduced below, is illustrative of the claimed subject matter:

77. A computer-implemented method, comprising:
- receiving, at a server, a request for a delivery barcode from a device associated with a user, the request identifying a delivery address of a delivery item, the request comprising first data to be converted to the delivery barcode and second data identifying the user, and the first data comprising an indication of a delivery barcode format specified by the user;
 - generating, by a processor, a delivery code based on address information associated with the user, wherein the address information is retrieved from a memory after the request is received at the server;
 - generating, by the processor, a dynamic image comprising the delivery barcode generated in accordance with the delivery barcode format specified by the user, wherein the delivery barcode comprises information converted from the first data and the generated delivery code, and the generated dynamic image comprising an encoded portion of the second data; and
 - providing the dynamic image comprising the delivery barcode to the user device for application to the delivery item, the dynamic image verifying an authenticity of the user.

REFERENCES

The Examiner relies on the following prior art in rejecting the claims on appeal:

Whitehouse	US 6,005,945	Dec. 21, 1999
Spiegel	US 2003/0120505 A1	June 26, 2003

Salafia, III et al. (“Salafia”)	US 2005/0108164 A1	May 19, 2005
Alleshouse	US 7,025,268 B2	Apr. 11, 2006

REJECTIONS

The Examiner rejects the claims on appeal as follows:

claims 77–94 under 35 U.S.C. § 101 as non-statutory subject matter;
and

claims 77–94 under 35 U.S.C. § 103(a) as unpatentable over
Alleshouse, Whitehouse, Spiegel, and Salafia.

ANALYSIS

Non-Statutory Subject Matter

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 § 101 to include implicit exceptions: “[l]aws 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). To “distinguish[] patents that claim laws of nature, natural phenomena, and abstract ideas from those that claim patent-eligible applications of those concepts,” the Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289 (2012), which, in the first step, considers whether a claim is directed to a patent-ineligible concept, e.g., an abstract idea, and, if so, considers, in the second step, whether the elements the claim, individually and as an ordered combination, recite an

inventive concept—an element or combination of elements sufficient to ensure the claim amounts to significantly more than the abstract idea and transform the nature of the claim into a patent-eligible concept. *Alice*, 134 S. Ct. at 2355 (citing *Mayo*, 132 S. Ct. at 1294, 1296–98).

In rejecting claims 77–94 under 35 U.S.C. § 101 as non-statutory subject matter, the Examiner applies this two-step analysis. Final Act. 2–3; Ans. 4–6. Under the first step, the Examiner finds the claims are directed to the abstract idea of “generating [an] image.” Final Act. 2. According to the Examiner, the claims describe gathering, combining, and outputting data and employing mathematical relationships to manipulate existing information to generate additional information in the form of a dynamic image, which is similar to the abstract idea of converting numerical representation in *Gottschalk v. Benson*, 93 S. Ct. 253 (1972). Ans. 4.

Under the second step, the Examiner finds the claims do not recite additional elements amounting to significantly more than the abstract idea because the recited computing elements are known and conventional and offer no meaningful limitation beyond generally linking the use of the method to the technological environment of computers. Final Act. 3; Ans. 5–6. The Examiner also finds the claim elements, considered separately and as an ordered combination: do not provide an improvement to another technology or technical field; do not provide an improvement to the functioning of the computer itself; do not apply the abstract idea by use of a particular machine; do not effect a transformation or reduce a particular article to a different state or thing; and do not add anything apart from what is well-understood, routine, and conventional in the operation of a generic computer. Ans. 5–6.

Turning to Appellants' arguments, initially, we find unpersuasive Appellants' argument that the claims would not monopolize every substantial application of "generating [an] image." Appeal Br. 11–13; Reply Br. 4. We similarly find unpersuasive Appellants' contention that the claims are entitled to the streamlined eligibility analysis set forth in the Office's guidance. Appeal Br. 14 (citing 2014 Interim Guidance on Patent Subject Matter Eligibility, 79 Fed. Reg. 74618, 74625 (Dec. 16, 2014)).

The Office's guidance explains that "a streamlined eligibility analysis *can be used* for a claim that may or may not recite a judicial exception but, when viewed as a whole, clearly does not seek to tie up any judicial exception such that others cannot practice it." 2014 Interim Guidance, 79 Fed. Reg. at 74625 (emphasis added). As such, the Office's guidance does not require a streamlined eligibility analysis, but rather states that the streamlined analysis can be used. Moreover, although preemption may be the concern driving the exclusion of abstract ideas from patent-eligible subject matter, preemption is not the test for eligibility. "The Supreme Court has made clear that the principle of preemption is the basis for the judicial exceptions to patentability. For this reason, questions on preemption are inherent in and resolved by the § 101 analysis." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015) (citation omitted). Accordingly, we consider Appellants' arguments under the two-step analysis for determining patent-eligibility under § 101.

Pursuant to the first step of the patent-eligibility analysis, Appellants argue the Examiner merely concludes that claims are directed to the abstract idea of "generating [an] image" without providing any meaningful analysis of the actual language of the independent claims, much less the language of

the dependent claims. Appeal Br. 11; Reply Br. 2. Appellants' argument is not persuasive of error.

As set forth in the Answer, the Examiner considers the steps recited in each of the independent claims and determines that the steps further describe the abstract idea but do not make it any less abstract. Ans. 4–5. We agree with the Examiner. Rather than distinguishing the claimed invention from the abstract idea of “generating [an] image,” the recited steps are tied to the abstract idea and simply suggest that the Examiner’s characterization is at a high level of abstraction, which is not persuasive of error. *See Apple, Inc. v. Ameranth, Inc.*, 842 F.3d 1229, 1240–41 (Fed. Cir. 2016) (“An abstract idea can generally be described at different levels of abstraction.”).

Apart from the claimed steps, the independent claims recite computing components, such as a user device, a processor, a server, and a memory. It is well-established, however, that the mere recitation of generic computing components as tools to carry out the abstract idea does not distinguish the claimed invention from the abstract idea. *See, e.g., In re TLI Commc’ns LLC Patent Litig.*, 823 F.3d 607, 612 (Fed. Cir. 2016) (determining claims simply directed to the use of conventional or generic technology in a nascent but well-known environment are directed to an abstract idea under the first step of the patent-eligibility analysis). Here, the Examiner finds, and we agree, that the recited computing components are generic and conventional. Ans. 5; Spec. ¶¶ 28–31, 36–39. Given that recited computing components are generic components for performing the recited steps, which, as set forth above, do not separate the claimed invention from the abstract idea, Appellants do not apprise us of error in the

Examiner’s finding that the independent claims are directed to the abstract idea of “generating [an] image.”

With regard to the dependent claims, although the Examiner’s rejection takes the steps recited in the independent claims as exemplary, the Examiner explains that limitations further narrowing the abstract idea do not make the claims any less abstract. Ans. 4–5. Indeed, the dependent claims further describe the abstract idea of “generating [an] image.” Said differently, the dependent claims do not include limitations that separate the claimed invention from the abstract idea of “generating [an] image.” As such, like the independent claims, Appellants similarly do not apprise us of error in the Examiner’s finding that the dependent claims are directed to the abstract idea of “generating [an] image.”

Appellants also assert that the claims are not directed to an abstract idea because, like the claims in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014), the claimed invention overcomes a problem specifically arising in computer networks using a solution necessarily rooted in computer technology. Appeal Br. 12–13. According to Appellants, prior techniques for generating and printing computer-readable barcodes required installation of common, barcode-specific software on each employee device to ensure consistent and uniform performance. *Id.* (citing Spec. ¶ 7). Appellants allege that the claimed invention solves this problem in a technical manner via computer technology. *Id.* at 12–13. Appellants’ argument is not persuasive of error.

Unlike the problem presented in *DDR Holdings*, namely retaining visitors to a website (*DDR Holdings*, 773 F.3d at 1257), de-centralization is not a problem unique to computer technologies. To the contrary,

de-centralization is a business concern that arises with a growing workforce. As such, we fail to see how the claimed invention is something other than the performance of an improved business practice via conventional computing components, which is not patent-eligible. *Id.* at 1256 (“[T]hese claims [of prior cases] in substance were directed to nothing more than the performance of an abstract business practice on the Internet or using a conventional computer. Such claims are not patent-eligible.”).

After considering Appellants’ arguments pursuant to the first step of the patent-eligibility analysis, we are not persuaded the Examiner erred in finding the claims are directed to the abstract idea. Accordingly, we turn to Appellants’ arguments under the second step.

Appellants contend that the claims recite significantly more than the abstract idea because they include features that exceed well-understood, routine, conventional activities already known in the industry. Appeal Br. 15. Per Appellants, the claims embody a technologically rooted solution to a de-centralized computer network-centric problem for generating a particularly recited delivery barcode at distributed devices. Reply Br. 3. Appellants’ contention does not apprise us of error.

Notwithstanding that “‘the § 101 patent-eligibility inquiry and, say, the § 102 novelty inquiry might sometimes overlap’ . . . a claim for a *new* abstract idea is still an abstract idea.” *Synopsys, Inc. v. Mentor Graphics Corp.*, 839 F.3d 1138, 1151 (Fed. Cir. 2016) (quoting *Mayo*, 132 S. Ct. at 1304). The question in the second step of the patent-eligibility analysis is not whether a claimed element is novel, but rather, as set forth above, whether the implementation of the abstract idea involves “more than performance of ‘well-understood, routine, [and] conventional activities

previously known to the industry.” *Content Extraction & Transmission LLC v. Wells Fargo Bank, N.A.*, 776 F.3d 1343, 1347–48 (Fed. Cir. 2014) (quoting *Alice*, 134 S. Ct. at 2359).

Here, the recited computing components are generic and conventional, and there is no indication that the implementation of the recited steps requires something apart from the routine and conventional computer functions, such as receiving, processing, and displaying data. Furthermore, the fact that the claims address the problem of de-centralization does not establish that the implementation of the abstract idea involves something other than well-understood, routine, and conventional computer functions because, as set forth above, de-centralization is not an issue unique to computer technologies. Accordingly, Appellants do not apprise us of error in the Examiner’s finding that the claims do not recite significantly more than the abstract idea.

In view of the foregoing, Appellants do not apprise us of error in the Examiner’s determination that the claims are patent-ineligible subject matter. Accordingly, we sustain the rejection of claims 77–94 under 35 U.S.C. § 101.

Obviousness

Appellants argue that the Examiner erred in rejecting independent claim 77 under 35 U.S.C. § 103 as unpatentable over Alleshouse, Whitehouse, Spiegel, and Salafia because Salafia does not teach a “dynamic image verifying an authenticity of the user,” as claimed. Appeal Br. 15–17; Reply Br. 5–6. According to Appellants, although Salafia teaches including an account number and a unique transaction

number in a barcode, Salafia does not disclose that the barcode could be used to verify an authenticity of the user. Appeal Br. 17; Reply Br. 5–6. Appellants’ argument is not persuasive of error.

Independent claim 77 does not recite verifying an authenticity of the user as a step of the method. Instead, as part of the step of providing the dynamic image, independent claim 77 recites the “dynamic image verifying an authenticity of the user,” which provides an intended use for the dynamic image and defines the dynamic image in terms of function. Consequently, the absence of a disclosure of the recited function does not defeat the Examiner’s finding that Salafia’s barcode teaches a “dynamic image verifying an authenticity of the user.” *In re Schreiber*, 128 F.3d 1473, 1477 (Fed. Cir. 1997). Rather, if the Examiner has a reason to believe the function of verifying an authenticity is an inherent characteristic of Salafia’s barcode, the burden shifts to Appellants to show otherwise. *Id.* at 1478 (“[W]here the Patent Office has reason to believe that a functional limitation . . . may, in fact, be an inherent characteristic of the prior art, it possesses the authority to require the applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic.”).

As the Examiner finds, Salafia teaches that the disclosed electronic deposit ticket system returns a deposit document including a two dimensional (“2D”) barcode containing all of the detailed deposit information the depositor entered, depositor profile information, and a unique transaction number. Salafia ¶ 102; Ans. 9. In addition to the barcode, the deposit document includes other printed information, such as the bank logo, depositor name, and bank name. Salafia ¶ 102; Ans. 9. According to the Examiner, the barcode could be used to verify the

authenticity of the user by comparing the information included in the barcode, such as the depositor profile information and the unique transaction number, to the other printed information. Ans. 9. The Examiner, therefore, has provided a basis for finding that verifying the authenticity of the user is an inherent characteristic of Salafia's barcode, which Appellants do not refute. As such, Appellants do not apprise us of error in the Examiner's finding that Salafia teaches a "dynamic image verifying an authenticity of the user," as recited in independent claim 77.

Appellants further argue that because the cited references do not disclose or suggest all of the limitations of independent claim 77, the only basis for the Examiner's rejection is Appellants' disclosure such that the rejection is based on impermissible hindsight. Appeal Br. 17–18. We disagree. The Examiner finds each limitation of independent claim 77 in the prior art, and the Examiner provides reasons for combining the teachings of the cited references. Final Act. 3–7. Appellants do not address these reasons, and we fail to see how they rely on Appellants' disclosure.

In view of the foregoing, Appellants do not apprise us error in the Examiner's rejection of independent claim 77. Appellants rely on the same arguments as independent claim 77 for independent claims 83 and 89 (Appeal Br. 18), and these arguments are unpersuasive for the same reasons discussed above. Furthermore, Appellants do not separately argue the dependent claims. *Id.* Accordingly, we sustain the rejection of claims 77–94 under 35 U.S.C. § 103(a).

Appeal 2016-002842
Application 13/773,099

DECISION

The Examiner's decision to reject claims 77–94 under 35 U.S.C. § 101 is affirmed.

The Examiner's decision to reject claims 77–94 under 35 U.S.C. § 103(a) is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED