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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* DAVID L. ARMITAGE

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Appeal 2017-008824  
Application 14/286,676  
Technology Center 2400

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Before: ELENI MANTIS MERCADER, JOHNNY A. KUMAR, and  
NORMAN H. BEAMER, *Administrative Patent Judges*.

KUMAR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

This is an appeal under 35 U.S.C. § 134(a) from the Examiner’s final rejection<sup>1</sup> of claims 1–12 and 14–20. Claim 13 has been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

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<sup>1</sup> See Specification, filed May 23, 2014 (“Spec.”); Final Office Action, mailed March 9<sup>th</sup>, 2016 (“Final Rejection”); Appeal Brief, filed October 5, 2016 (“Br.”); and Examiner’s Answer, mailed January 11, 2017 (“Answer”).

*The Invention*

Appellant's invention relates to "configurable, encrypted, secure QR code creation and use." Abstract.

Claims 1, 10, and 17 are independent claims and are illustrative of the claimed subject matter, as reproduced below:

*Independent Claim 1*

A monitoring method, comprising;  
receiving authorization information from a user device at a quick response ("QR") creation system;  
determining authorized data based at least in part on the authorization information by the QR creation system;  
encrypting the authorized data by the QR creation system;  
creating a quick response code using the encrypted authorized data, by the QR creation system;  
recording the quick response code by the user device;  
transmitting the recorded quick response code to a server by the user device; and  
decrypting the transmitted recorded quick response code by the server.

*Independent Claim 10*

A non-volatile computer readable medium, having stored thereon instructions, which if executed by a processor, cause the processor to:  
receive an encrypted quick response code at a user device;  
reading the quick response code to identify encrypted information within the encrypted quick response code;

decrypting the encrypted information; and  
transmitting a communication comprising the decrypted information  
by the user device,

wherein the communication comprises a dynamic report, and wherein  
the decrypted information comprises information about an asset.

*Independent Claim 17*

A method for encrypted secure quick response ("QR") code creation,  
comprising:

receiving identification information generally related to a user at a  
computing system;

determining asset information about monitored assets, based at least in  
part on the identification information generally related to a user by the  
computing device;

creating an encrypted QR code comprising the determined asset  
information; and

presenting the created encrypted QR code capable of being received  
by a user device.

*Rejections*

Claims 1–12 and 14–20 are rejected under 35 U.S.C. § 112(b) or  
35 U.S.C. § 112 (pre-AIA), second paragraph, as being indefinite for failing  
to particularly point out and distinctly claim the subject matter which the  
inventor or a joint inventor, or for pre-AIA the applicant regards as the  
invention.

Claims 1–12 and 14–20 are rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter.

Claims 1–6, 8–12, and 14–19 are rejected under 35 U.S.C. § 103 as being unpatentable over LaFrance et al. (US 2013/0176141 A1, published July 11, 2013 (filed Jan. 5, 2012)) (hereinafter “Lafrance”) in view of Tolba et al. (US 2013/0179692 A1, published July 11, 2013 (filed Jan. 11, 2012)) (hereinafter “Tolba”).

Claim 7 is rejected under 35 U.S.C. § 103 as being unpatentable over Lafrance and Tolba, further in view of Mori et al. (US 2001/0025272 A1, published Sept. 27, 2001 (filed Jan. 30, 2001)) (hereinafter “Mori”).

Claim 20 is rejected under 35 U.S.C. § 103 as being unpatentable over Lafrance and Tolba, further in view of Nelson et al. (US 2013/0290416 A1, published Oct. 31, 2013 (filed April 27, 2012)) (hereinafter “Nelson”).

## ISSUES

Did the Examiner err in rejecting claims 1–12 and 14–20 as indefinite under 35 U.S.C. § 112?<sup>2</sup>

Did the Examiner err in rejecting claims 1–12, and 14–20 as being directed to judicially excepted subject matter?

Did the Examiner err in rejecting claims 1–6, 8–12, and 14–19 as obvious because LaFrance and Tolba fail to teach or suggest the argued limitations?

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<sup>2</sup> Because Appellant does not contest the merits of the indefiniteness rejections, we *pro forma* sustain the Examiner’s rejections on the grounds of indefiniteness.

Did the Examiner err in rejecting claim 7 as obvious because LaFrance, Tolba, and Mori fail to teach or suggest the argued limitations?

Did the Examiner err in rejecting claim 20 as obvious because LaFrance, Tolba, and Nelson fail to teach or suggest the argued limitations?

### ANALYSIS

We have considered all of Appellant’s arguments and any evidence presented. We disagree with Appellant’s arguments and we adopt as our own the findings, legal conclusions, and explanations, as set forth in the Answer (5–19) in response to Appellant’s arguments. (Br. 10–22). We highlight and address specific findings and arguments for emphasis in our analysis below.

#### *Rejection of Claims 1–12, and 14–20 under § 101*

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.” The Supreme Court, however, has long interpreted § 101 to include an implicit exception: “[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) (quoting *Assoc. for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013) (internal quotation marks omitted)). In *Alice*, the Supreme Court set 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 that analysis is to determine whether the claims at issue are directed to a patent-ineligible concept, such as an abstract idea. *See Alice*, 134 S. Ct. at 2355. If the claims are directed to a patent-ineligible concept, the second step in that analysis is to “consider the elements of each claim both 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 1297–98). 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).

*Alice/Mayo – Step 1*

In rejecting claims 1–12, and 14-20 under 35 U.S.C. § 101, the Examiner finds

the claim is directed to an abstract idea of converting authorized data into a QR code for use in authorization, which is an abstract idea involving mathematical relationships/formulas.

Ans. 6.

As to the first step of the *Alice* inquiry, Appellant contends “these claims cover improving an technological process as indicated by the Federal Circuit in *Enfish*.” Br. 13 (citing *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016)). According to Appellant,

[c]laim 1 requires a method for encrypting and transmitting authorized data, where the authorized data is determined by user information. The encrypted QR code is recorded by a user device and later the authorized, encrypted data is transmitted to a server and decrypted for use.

...

[T]he claim elements of claim 1 relate to a method for determining information that a user is authorized to receive, encrypting the authorized information and putting it into a QR code for the user to read or copy, then sending that information to a server to be decrypted and used. Such an idea is not abstract, because it requires a computing device specially configured to receive user authorization information, determine what information can be presented to the user, encrypting that information into a QR code to be read by a user device, the user device sending the encrypted QR code to another computing device to be decrypted and used.

Br. 13–14.

In other words, Appellant argues, like *Enfish*, the claims are directed to a specific implementation of a solution to using QR codes, as such, are not directed to an “abstract idea.”

We are unpersuaded by Appellant’s arguments. Contrary to Appellant’s assertion, we conclude the character of claim 1 as a whole is directed to a mathematical operation of converting authorized data into a QR code. Such claimed subject matter is similar to subject matter found by our reviewing courts to be abstract. *See Gottschalk v. Benson*, 409 U.S. 63, 67 (1972) (“a scientific truth, or the mathematical expression of it, is not [a] patentable invention” (citation omitted)); *see also Parker v. Flook*, 437 U.S. 584, 595 (1978) (“if a claim is directed essentially to a method of calculating, using a mathematical formula, even if the solution is for a specific purpose, the claimed method is nonstatutory” (citation omitted)); *Diamond v. Diehr*, 450 U.S. 175, 191 (1981) (“[a] mathematical formula . . . is not accorded the protection of our patent laws, and this principle cannot be circumvented by attempting to limit the use of the formula to a particular technological environment” (citation omitted)); *In re Grams*, 888 F.2d 835,



837 (Fed. Cir. 1989) (“mathematical algorithms join the list of non-patentable subject matter not within the scope of section 101”).

Appellant argues claim 1 is not directed to a mathematical formula because

it requires a computing device specially configured to receive user authorization information, determine what information can be presented to the user, encrypting that information into a QR code to be read by a user device, the user device sending the encrypted QR code to another computing device to be decrypted and used.

Br. 13–14.

To the extent that Appellant is arguing that claim 1 recites additional elements that amount to “significantly more” than the abstract idea, that issue is distinct from whether claim 1 is directed to a mathematical operation of converting authorized data into a QR code. Appellant’s arguments that claim 1 is directed to “significantly more” are addressed *infra*.

### *Alice/Mayo – Step 2*

As to the second step of the *Alice* inquiry, Appellant contends the claim elements of claim 1 of the subject application recite real world input (e.g., user authorization), transformative processing (determining authorized data based on the user authorization, encrypting the authorized information, creating a QR code of the encrypted, authorized information, recording of the QR code by a user device, transmitting the recorded QR code to a server), and real world output (decrypting the QR code for use). ... Further, this transformative processing provides a potential benefit over prior solutions, as was important in *Diehr*, by enabling only authorized data to be presented to a user, encrypting it, and transmitting the encrypted data from a user device to a server, thereby keeping authorized information secure, through a user device, to a use at a server for various purposes.

Br. 14.

The Examiner determines claim 1 does not include additional elements that are sufficient to amount to significantly more than an abstract idea. The Examiner finds

the authorized data is encrypted and used to generate a QR code, however the authorized data is not really being transformed - it is merely being hidden in a form that unauthorized persons cannot access. When the authorized data is decrypted, it will still be the same authorized data. In addition, the claim does not recite an improvement to another technology or technical field, an improvement to the functioning of the computer itself, or any meaningful application of the claimed process (i.e. simply decrypting the QR code is well-known and generic). Final Act. 4.

The Examiner also finds that:

The additional claim elements comprising recording the QR code, transmitting the recorded QR code and decrypting the QR code comprise generic computer functions that are well-understood, routine and conventional activities known in the field of QR codes.

Ans. 6–7.

We are not persuaded by Appellant’s arguments. Contrary to Appellant’s arguments, the Specification does not describe, and Appellant does not present evidence to establish how any of the steps recited in Appellant’s claims 1, 10, and 17 provides a specific improvement to the computer. *See Enfish*, 822 F.3d at 1336. Likewise, Appellant has not demonstrated how these claims improve the way a computer uses QR codes, as the claims in *Enfish* did via a “self-referential table for a computer database.” *See Enfish*, 822 F.3d at 1336, 1337, 1339. In fact, none of the

steps recited in Appellant’s claims 1, 10, and 17 provides, and nowhere in the Specification can we find, any description or explanation as to how these steps are intended to provide: (1) a “solution . . . necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks,” as explained by the Federal Circuit in *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1257 (Fed. Cir. 2014); (2) “a specific improvement to the way computers operate,” as explained in *Enfish*, 822 F.3d at 1336; or (3) an “unconventional technological solution . . . to a technological problem” that “improve[s] the performance of the system itself,” as explained in *Amdocs (Israel) Ltd. v. Openet Telecom, Inc.*, 841 F.3d 1288, 1306, 1302 (Fed. Cir. 2016).

Further to the second step of the *Alice* inquiry, we find nothing in claims 1, 10, and 17 that adds anything “significantly more” to transform the abstract concept of “converting authorized data into a QR code” into a patent-eligible application. *Alice*, 134 S. Ct. at 2357.

To the extent that *Bilski*’s “machine-or-transformation” test may be applicable, such a test can only be “useful” in the second step of the *Alice* inquiry. See *Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014). However, limiting the abstract concept of “converting authorized data into a QR code” to a general purpose computer as recited in Appellant’s claims 1, 10, and 17, does not transform the abstract idea into a patent eligible invention under 35 U.S.C. § 101. 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 2358, 2359 (concluding claims “simply instruct[ing] the practitioner to implement the abstract idea of intermediated settlement on a

generic computer” are not patent eligible); *see also Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d 709, 715–16 (Fed. Cir. 2014) (concluding claims merely reciting abstract idea of using advertising as currency as applied to particular technological environment of the Internet are not patent eligible); *Accenture Glob. Servs., GmbH v. Guidewire Software, Inc.*, 728 F.3d 1336, 1344–45 (Fed. Cir. 2013) (concluding 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” are not patent eligible); *Dealertrack, Inc. v. Huber*, 674 F.3d 1315, 1333–34 (Fed. Cir. 2012) (“[s]imply adding a ‘computer aided’ limitation to a claim covering an abstract concept, without more, is insufficient to render [a] claim patent eligible”).

Because Appellant’s claims 1–21 are directed to a patent-ineligible abstract concept and do not recite something “significantly more” under the second prong of the *Alice* analysis, we sustain the Examiner’s rejection of these claims under 35 U.S.C. § 101 as being directed to non-statutory subject matter in light of *Alice* and its progeny.

*Prior Art rejections under 35 U.S.C. § 103(a)*

Appellant has presented several arguments (Br. 19–22) as to why the combination of the references does not teach or suggest the features recited in independent claims 1, 10, and 17, and dependent claims 7 and 20.

We have reviewed the Examiner’s response to Appellants’ arguments. The Examiner has provided a comprehensive response to each argument presented by the Appellant on pages 12 through 19 of the Answer. We have reviewed this response and concur with the Examiner’s findings and conclusions. We adopt as our own (1) the findings and reasons set forth by

the Examiner in the action from which this appeal is taken and (2) the reasons set forth by the Examiner in the Examiner's Final Action and Answer in response to Appellant's Appeal Brief. Final Act. 18–32; Ans. 12–19. We observe that no Reply Brief is of record to rebut such findings, including the Examiner's responses to Appellant's arguments.

#### DECISION

We summarily sustain the Examiner's § 112 indefiniteness rejection of claims 1–12 and 14–20.

We affirm the Examiner's decision rejecting claims 1–12 and 14–20 under 35 U.S.C. § 101.

We affirm the Examiner's § 103(a) rejections of claims 1–12 and 14–20.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

AFFIRMED