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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MARK McIVER and RICHARD A. FORBES

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Appeal 2017-002873  
Application 13/717,482<sup>1</sup>  
Technology Center 3600

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Before JOHN A. JEFFERY, LARRY J. HUME, and SCOTT B. HOWARD,  
*Administrative Patent Judges.*

HUME, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) of the Final Rejection of claims 1–12, 21, and 23–28, which are all claims pending in the application. Appellants have canceled claims 13–20, and 22. We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

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<sup>1</sup> According to Appellants, the real party in interest is III Holdings 1, LLC. App. Br. 3.

## STATEMENT OF THE CASE<sup>2</sup>

### *The Invention*

Appellants' disclosed embodiments and claimed invention relate to a method, system, and computer program product for electronic transmission of messages (Spec. ¶ 1) and, are particularly related to:

A browser-based simulator [that] may be used to create and send test messages to one or more transaction processing facilities (TPFs) to determine the response of the TPF system. It allows a user or plurality of users to create ISO 8583 messages, send the messages to the TPF systems, receive a response, and display the results to the users. Messages created by the simulator are stored within an ANSI queryable SQL database to make test selection simple. The TPF test messages and results are thus available worldwide. Further, the simulator is server-based, so desktop licenses are not required. The simulator allows a user to either select a preformatted message or derive a new message by selecting the data of interest.

Spec. 21 (Abstract).

### *Exemplary Claim*

Claim 1, reproduced below, is representative of the subject matter on appeal:

1. A method, comprising:  
receiving, by a computing device, a user selection of a message type from a plurality of available message types for testing transaction processing functionality of an electronic transaction processing facility;

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<sup>2</sup> Our decision relies upon Appellants' Appeal Brief ("App. Br.," filed Sept. 21, 2016); Reply Brief ("Reply Br.," filed Dec. 19, 2016); Examiner's Answer ("Ans.," mailed Oct. 28, 2016); Final Office Action ("Final Act.," mailed Apr. 22, 2016); and the original Specification ("Spec.," filed Dec. 17, 2012).

retrieving, by the computing device, a message shell from a plurality of message shells corresponding to the plurality of available message types, wherein the plurality of stored message shells are stored in a queryable database, wherein the message shell comprises previously-specified values for one or more fields corresponding to the selected message type, wherein the previously-specified values correspond to at least one of a transaction authorization message type, a security key exchange message type, a transaction reversal message type, or a settlement message type;

causing, by the computing device, a display of available user-selectable fields corresponding to the selected message type;

receiving, by the computing device, user input for the available user-selectable fields corresponding to the selected message type, wherein the user input selects a subset of the available user-selectable fields to include in a particular test message having the selected message type and wherein the user input specifies one or more values for one or more of the available fields to include in the particular test message;

generating, by the computing device, the particular test message based on one or more of the previously-specified values of the message shell and the user input such that the particular test message includes the subset of available user-selectable fields, at least a portion of the one or more values specified by the user input, and at least a portion of the previously-specified values;

sending, by the computing device via a communications network, the test message to the transaction processing facility to test the transaction processing facility response to the message type; and storing, by the computing device, a response to the particular test message received from the transaction processing facility via the communications network.

*Rejection on Appeal*

Claims 1–12, 21, and 23–28 stand rejected under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter. Final Act. 2.

CLAIM GROUPING

Based on Appellants' arguments (App. Br. 13–16), we decide the appeal of patent-ineligible subject matter Rejection R1 of claims 1–12, 21, and 23–28 on the basis of representative claim 1.<sup>3</sup>

ISSUE

Appellants argue (App. Br. 13–16; Reply Br. 2–4) the Examiner's rejection of claim 1 under 35 U.S.C. § 101 as being directed to patent-ineligible subject matter is in error. These contentions present us with the following issue:

Under our governing case law concerning 35 U.S.C. § 101, did the Examiner err in concluding claim 1 is directed to a judicial exception, i.e., an abstract idea, without significantly more?

ANALYSIS

Based upon our review of the record, we find a preponderance of the evidence supports particular arguments advanced by Appellants with respect to claims 1–12, 21, and 23–28 for the specific reasons discussed below. We

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<sup>3</sup> "Notwithstanding any other provision of this paragraph, the failure of appellant to separately argue claims which appellant has grouped together shall constitute a waiver of any argument that the Board must consider the patentability of any grouped claim separately." 37 C.F.R. § 41.37(c)(1)(iv). In addition, when Appellants do not separately argue the patentability of dependent claims, the claims stand or fall with the claims from which they depend. *In re King*, 801 F.2d 1324, 1325 (Fed. Cir. 1986).

highlight and address specific findings, conclusions, and arguments regarding claim 1 for emphasis as follows.

*Alice Framework*

Section 101 provides that anyone who "invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof" may obtain a patent. 35 U.S.C. § 101. The Supreme Court has repeatedly emphasized that patent protection should not extend to claims that monopolize "the basic tools of scientific and technological work." *Gottschalk v. Benson*, 409 U.S. 63, 67 (1972); *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 71 (2012); *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014). Accordingly, laws of nature, natural phenomena, and abstract ideas are not patent-eligible subject matter. *Id.*

The Supreme Court's two-part *Mayo/Alice* framework guides us in distinguishing between patent claims that impermissibly claim the "building blocks of human ingenuity" and those that "integrate the building blocks into something more." *Id.* (internal quotation marks, citation, and bracketing omitted). First, we "determine whether the claims at issue are directed to [a] patent-ineligible concept[]." *Id.* at 2355. If so, we "examine the elements of the claim to determine whether it contains an 'inventive concept' sufficient to 'transform' the claimed abstract idea into a patent-eligible application." *Id.* at 2357 (quoting *Mayo*, 566 U.S. at 72, 79). While the two steps of the *Alice* framework are related, the "Supreme Court's formulation makes clear that the first-stage filter is a meaningful one, sometimes ending the § 101 inquiry." *Elec. Power Grp., LLC v. Alstom S.A.*, 830 F.3d 1350, 1353 (Fed. Cir. 2016). We note the Supreme Court "has not established a definitive rule

to determine what constitutes an 'abstract idea'" for the purposes of step one. *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1334 (Fed. Cir. 2016) (citing *Alice*, 134 S. Ct at 2357).

However, our reviewing court has held claims ineligible as directed to an abstract idea when they merely collect electronic information, display information, or embody mental processes that could be performed by humans. *Elec. Power Grp.*, 830 F.3d at 1353–54 (collecting cases). At the same time, "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. Abstract ideas may include, but are not limited to, fundamental economic practices, methods of organizing human activities, an idea of itself, and mathematical formulas or relationships. *Alice* 134 S. Ct. at 2355–57. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Id.* at 2354 ("[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.").

Under the "abstract idea" step we must evaluate "the 'focus of the claimed advance over the prior art' to determine if the claim's 'character as a whole' is directed to excluded subject matter." *Affinity Labs of Texas, LLC v. DIRECTV, LLC*, 838 F.3d 1253, 1257 (Fed. Cir. 2016) (internal citation omitted). If the claims are not directed to a patent-ineligible concept, the inquiry ends. See *Visual Memory LLC v. NVIDIA Corp.*, 867 F.3d 1253, 1262 (Fed. Cir. 2017). If the concept is directed to a patent-ineligible concept, we proceed to the "inventive concept" step. For that second step we must "look with more specificity at what the claim elements add, in order to determine 'whether they identify an "inventive concept" in the application

of the ineligible subject matter' to which the claim is directed." *Affinity Labs*, 838 F.3d at 1258 (quoting *Elec. Power Grp.*, 830 F.3d at 1353).

*Alice Step 1 — Abstract Idea*

Our reviewing court has held claims ineligible as being directed to an abstract idea when they merely collect electronic information, display information, or embody mental processes that could be performed by humans. *Elec. Power Grp.*, 830 F.3d at 1353–54 (collecting cases). At the same time, "all inventions at some level embody, use, reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas." *Mayo*, 566 U.S. at 71. Under this guidance, we must therefore ensure at step one that we articulate what the claims are directed to with enough specificity to ensure the step one inquiry is meaningful. *Alice*, 134 S. Ct. at 2354 ("[W]e tread carefully in construing this exclusionary principle lest it swallow all of patent law.").

Appellants initially contend, "testing computing systems using one or more test messages is a technical field directed to improving the function of the computing systems, e.g., by improving reliability and detecting faulty hardware." App. Br. 13. Appellants cite *Enfish*,<sup>4</sup> and further argue:

[T]he fact that the claims are directed to improvements in computer-related technology is relevant to the first step of the *Alice* inquiry . . . . Appellant submits that the improvements to testing technology embodied in the claims further show that the claims are not directed to an abstract idea. In fact, the Examiner has admitted that the claims are directed to "an improvement of a 'process' for testing TPF." Advisory Action at 2. Appellant

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<sup>4</sup> See *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327 (Fed. Cir. 2016) (The court found the claims directed to "a specific improvement to the way computers operate.").

submits that various types of testing operations are understood to be technical in nature (consider build-in-self-test (BIST) techniques, for example), and that improvements to testing processes are improvements to computer-related technology.

App. Br. 14.

In response, the Examiner concluded:

The claimed invention is similar to *Cyberfone* and *SmartGene* as recited in the 101 analysis by the Examiner. All the steps in the claims perform generic computer functions that do not improve another technology or technical field, improve the functioning of the computer itself, nor move beyond a general link of the use of an abstract idea to a particular technological environment. Using a generic computer to perform the steps of the claim does not make the claim eligible for patent. The claimed invention is directed to an improvement of a "process" for testing TPF using well-understood, routine and conventional functions of computer components. The claimed invention uses generic computer performing generic computer functions to achieve this. This is similar to using a generic computer to perform generic computer functions in *Alice* and *Bilski*. There is no underlining improvement to the TPF or the computer itself. The invention is simply electronic messaging and response. The claimed invention is not patent eligible.

Ans. 2–3.

We disagree with the Examiner's analysis. We disagree because we find the claims in *Cyberfone* (using categories to organize, store and transmit information was determined to be an abstract idea) and *SmartGene* (comparing new and stored information and using rules to identify options was determined to be an abstract idea), cited by the Examiner, are not sufficiently analogous to the claimed subject matter, which is generally directed to, e.g., a simulator used to create and send test messages to one or

more transaction processing facilities (TPFs) to determine the response of the TPF system utilizing messages and protocols of the ISO 8583 standard.

Thus, under step one, we disagree with the Examiner's conclusion that the inventions claimed in each of independent claims 1, 21, and 25 are directed to an abstract idea.<sup>5</sup> Because we conclude the claims are directed to a patent-eligible concept, we need not proceed to the *Alice/Mayo* Step 2 "inventive concept" analysis.

### CONCLUSION

The Examiner erred with respect to patent-ineligible subject matter Rejection R1 of claims 1–12, 21, and 23–28 under 35 U.S.C. § 101, and we do not sustain the rejection.

### DECISION

We reverse the Examiner's decision rejecting claims 1–12, 21, and 23–28.

### REVERSED

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<sup>5</sup> "Moreover, our conclusion that the claims are directed to an improvement of an existing technology is bolstered by the specification's teachings that the claimed invention achieves other benefits . . . ." *Enfish, LLC*, 822 F.3d at 1337 (citing *Openwave Sys., Inc. v. Apple Inc.*, 808 F.3d 509, 513–14 (Fed. Cir. 2015) (finding that a specification's disparagement of the prior art is relevant to determine the scope of the invention)). *See, e.g.*, Spec. ¶ 48.