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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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*Ex parte* MICHAEL P. CASTELLI, DONALD WHITEMAN, and  
SCOTT WALKER

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Appeal 2018-004493  
Application 11/364,440  
Technology Center 3600

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Before JOSEPH A. FISCHETTI, CYNTHIA L. MURPHY, and  
TARA L. HUTCHINGS, *Administrative Patent Judges*.

HUTCHINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant<sup>1</sup> appeals under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1, 3–8, 10–12, 14–17, 19, and 20. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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<sup>1</sup> We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Our decision references Appellant's Appeal Brief (“Appeal Br.,” filed Sept. 28, 2017), and the Examiner's Answer (“Ans.,” mailed Jan. 22, 2018) and Final Office Action (“Final Act.,” mailed Aug. 30, 2016). Appellant identifies American International Group, Inc. as the real party in interest. Appeal Br. 1.

### CLAIMED INVENTION

Appellant's claimed invention "relates, in general, to enterprise software applications and more particularly, to tools and techniques for accounting and providing for shared services within such applications" (Spec. ¶ 3).

Claims 1 and 12 are the independent claims on appeal. Claim 1, reproduced below with bracketed notations added, is illustrative of the claimed subject matter:

1. A method of generating quantitative indicators for a performance assessment of a safety program, comprising:

[(a)] operating an application server, the application server being programmed to present a safety program performance assessment questionnaire having a plurality of sections each having a plurality of questions, each section being directed to one area of performance assessment of the safety program;

[(b)] presenting, by the application server through an electronic user interface, the safety program performance assessment questionnaire;

[(c)] receiving, through the electronic user interface, answers for respective questions in the safety program performance assessment questionnaire, wherein the step of receiving includes presenting through the electronic user interface a set of possible answers for a question for selection by a user, and wherein each one of said plurality of possible answers has a pre-defined score associated therewith;

[(d)] assigning, by the application server, scores to the questions in the safety program performance assessment questionnaire based on received answers for the respective questions;

[(e)] applying, by the application server, a pre-assigned question weight to the score of each question, each pre-assigned question weight adapted to reflect a degree of contribution the respective question provides to the safety performance in the area

of performance assessment of the section containing said question;

[(f)] for each section, summing, by the application server, weighted scores for questions in each section to provide a section score;

[(g)] normalizing, by the application server, each section score on a scale in which a maximum score of each section is a common value;

[(h)] applying, by the application server, a pre-assigned section weight to each normalized section score, each pre-assigned section weight adapted to reflect a degree of contribution the respective section provides to an overall performance of the safety program;

[(i)] summing, by the application server, the weighted section scores to provide an overall score; and

[(j)] performing, by the application server, a statistical regression analysis to identify a correlation between the overall score and a loss factor using a set of past performance assessments and associated loss factor data.

## REJECTIONS

Claims 1, 3–8, 10–12, 14–17, 19, and 20 are rejected under 35 U.S.C. § 101 as directed to patent-ineligible subject matter.

Claims 1, 3–8, 10–12, 14–17, 19, and 20 are rejected under 35 U.S.C. § 103(a) as unpatentable over Nagan (US 2003/0126049 A1, pub. July 3, 2003), Rodrigue (US 2006/0259338 A1, pub. Nov. 16, 2006), and Schaf (US 2005/0065754 A1, pub. Mar. 24, 2005).

## ANALYSIS

### *Patent-Ineligible Subject Matter*

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 § 101 to include an implicit exception: “[l]aws of nature, natural phenomena, and abstract ideas” are not patentable. *Alice Corp. v. CLS Bank Int’l*, 573 U.S. 208, 216 (2014).

The Supreme Court, in *Alice*, reiterated the two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 566 U.S. 66 (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 Corp.*, 573 U.S. at 217. The first step in that analysis is to “determine whether the claims at issue are directed to one of those patent-ineligible concepts.” *Id.* If the claims are not directed to a patent-ineligible concept, e.g., an abstract idea, the inquiry ends. Otherwise, the inquiry proceeds to the second step where the elements of the claims are considered “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*, 566 U.S. at 79, 78). This is “a 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.* at 217–18 (alteration in original).

In rejecting the claims under 35 U.S.C. § 101, the Examiner determined that claim 1 recites steps for presenting an assessment questionnaire, receiving answers to questions on the assessment, assigning scores and weights to each question, summing weighted scores for questions in each section, normalizing each section score, applying a weight to each normalized section score, summing the section scores, and identifying a

correlation between the overall score and a loss factor. Final Act. 10. The Examiner found that the claim 1, thus, recites steps for performing assessments, which is related to concepts that have been held by the courts to be directed to abstract ideas, such as organizing information through mathematical correlation. *Id.* The Examiner also determined that performing assessments is an application of a mathematical concept, which is an abstract idea. *Id.* The Examiner further determined that these claims do not include additional elements that provide significantly more beyond linking the abstract idea to a technological environment. *Id.* at 10–11.

The U.S. Patent and Trademark Office (the “USPTO”) published revised guidance for use by USPTO personnel in evaluating subject matter eligibility under 35 U.S.C. § 101. That guidance “extracts and synthesizes key concepts identified by the courts as abstract ideas to explain that the abstract idea exception includes” the following three groupings:

(1) mathematical concepts; (2) certain methods of organizing human activity, e.g., fundamental economic principles or practices, commercial or legal interactions; and (3) mental processes. 2019 REVISED PATENT SUBJECT MATTER ELIGIBILITY GUIDANCE, 84 Fed. Reg. 50, 52 (Jan. 7, 2019) (the “Revised Guidance”).

Under the Revised Guidance, in determining whether a claim is patent-eligible, we first look to whether the claim recites a judicial exception, including one of the enumerated groupings of abstract ideas (“Step 2A, Prong One”). *Id.* at 54. If so, we next consider whether the claim includes additional elements, beyond the judicial exception, “that integrate the [judicial] exception into a practical application,” i.e., apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit

on the judicial exception, such that the claim is more than a drafting effort designed to monopolize the judicial exception. (“Step 2A, Prong Two”). *Id.* at 54–55.

Only if the claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application do we then look to whether the claim “[a]dds a specific limitation or combination of limitations” that is not “well-understood, routine, conventional activity in the field” or simply “appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception” (“Step 2B”). *Id.* at 56.

*Step One of the Mayo/Alice Framework (Revised Guidance, Step 2A, Prong One)*

Here, Appellant’s Specification is titled “METHOD AND SYSTEM FOR PERFORMING BEST PRACTICE ASSESSMENTS OF SAFETY PROGRAMS,” and states that the disclosure relates “generally relates to evaluation of safety programs implemented at business facilities, and more particularly to a method and system for computer-assisted best practice assessments of safety programs.” Spec. ¶ 1. The Background of the Invention section of Appellant’s Specification describes an “interest of a business entity to implement an effective safety program.” *Id.* ¶ 2. But, “[h]aving a well-implemented and functional safety program is . . . not an easy task.” *Id.* ¶ 3. For example, business management must consider numerous related issues, such as enforcing compliance with governmental rules, as well as allocation of resources and safety management. *See id.* Often, businesses retain outside consultants to provide a safety program

assessment that helps indicate whether the business entity complies with various best practices for safety management. *See id.* ¶ 4.

During this best practice assessment, a reviewer typically visits a client's facility to discuss with pertinent personnel and review documents to gather relevant information, and prepares a written report based on the information collected from the site survey. *Id.* However, there is no standardized algorithm for the analysis, and the report often has a narrative description that makes it it is hard to tell from the report whether meaningful improvements have been made since the previous review. *Id.* For example, “[i]t is extremely difficult to compare . . . the safety performance of one client with other clients or the industry as a whole” and “it is also difficult to derive from the report a useful prediction of the losses the client might expect in the future.” *Id.* To address these shortcomings, the claimed invention performs best practice assessments for safety programs in a manner that facilitates clear and easy comparison with past performance of the client, with other clients, and with the industry as a whole. *Id.* ¶ 5.

Consistent with this disclosure, claim 1 recites a method for monitoring a process on a data processing system by: (1) “operating . . . to present a safety program performance assessment questionnaire having a plurality of sections each having a plurality of questions, each section being directed to one area of performance assessment of the safety program” (step (a)); (2) “presenting . . . the safety program performance assessment questionnaire” (step (b)); (3) “receiving . . . answers for respective questions in the safety program performance assessment questionnaire, wherein the step of receiving includes presenting . . . a set of possible answers for a question for selection by a user, and wherein each one of said plurality of

possible answers has a pre-defined score associated therewith” (step (c)); (4) “assigning . . . scores to the questions in the safety program performance assessment questionnaire based on received answers for the respective questions” (step (d)); (5) “applying . . . a pre-assigned question weight to the score of each question, each pre-assigned question weight adapted to reflect a degree of contribution the respective question provides to the safety performance in the area of performance assessment of the section containing said question” (step (e)); (6) “for each section, summing . . . weighted scores for questions in each section to provide a section score” (step (f)); (7) “normalizing . . . each section score on a scale in which a maximum score of each section is a common value” (step (g)); (8) “applying . . . a pre-assigned section weight to each normalized section score, each pre-assigned section weight adapted to reflect a degree of contribution the respective section provides to an overall performance of the safety program” (step (h)); “summing . . . the weighted section scores to provide an overall score” (step (i)); and “performing . . . a statistical regression analysis to identify a correlation between the overall score and a loss factor using a set of past performance assessments and associated loss factor data” (step (j)). These limitations, given their broadest reasonable interpretation, recite steps for performing a safety program performance assessment. Although claim 1 recites that the steps are performed by an “application server” the underlying steps recited in the claim are all acts that, could be performed by a human mentally or manually, using pen and paper, without the use of a computer or any other machine. For example, a person could present a safety program performance assessment questionnaire, receive answers for the respective answers in the questionnaire, and assign scores to the questions. The person

could perform calculations in his or her head, or using pen and paper, to apply a pre-assigned question weight to the score of each question, sum the weighted scores for each section, normalize each section score, apply a pre-assigned section weight to each normalized section score, sum the weighted section score, and perform a statistical regression analysis to identify a correlation between the overall score and a loss factor. Simply put, claim 1 recites a concept, including an observation, evaluation, or judgment, that can be performed in the human mind, which is a mental process and, therefore, an abstract idea. *See Revised Guidance*, 84 Fed. Reg. at 52. *See also CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1373 (Fed. Cir. 2011) (holding that method steps that can be performed in the human mind, or by a human using a pen and paper, are unpatentable mental processes). Claim 1 also recites mathematical relationships, formulas, questions or calculations, which is a mathematical concept and, thus, an abstract idea. *See Revised Guidance*, 84 Fed. Reg. at 52.

*Step One of the Mayo/Alice Framework (Revised Guidance, Step 2A, Prong Two)*

Having concluded that claim 1 recites a judicial exception, i.e., an abstract idea (Step 2A, Prong One), we next consider whether the claim recites “additional elements that integrate the judicial exception into a practical application” (Step 2A, Prong Two).

Beyond the abstract idea, claim 1 recites an “application server” that is “programmed” to present a safety program performance assessment questionnaire, and an “electronic user interface.” Appellant argues that claim 1 satisfies the machine-or-transformation test by requiring an application server programmed to present the safety program performance assessment program and perform the claimed steps. Appeal Br. 7 (“claim 1

require[s] a particularly-programmed machine to perform the steps relating to generating quantitative indicators for the performance assessment of the safety program.”) Appellant also claims that these elements confine the judicial exception to a particular useful application. *Id.* at 9.

However, we find no indication in the Specification, nor does Appellant direct us to any indication, that the operations recited in claim 1 invoke any assertedly inventive programming, require any specialized computer hardware or other inventive computer components, i.e., a particular machine, or that the claimed invention is implemented using other than generic computer components to perform generic computer functions (e.g., “operating” (step (a)), sending data (step (b)), receiving data (step (c)), and processing data (steps (d)–(j))). And “after *Alice*, there can remain no doubt: recitation of generic computer limitations does not make an otherwise ineligible claim patent-eligible.” *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014).

Appellant also asserts that claim 1 “provides a claimed solution that is rooted in computer technology in order to satisfy persistent needs specifically arising in the field of safety program assessments.” Appeal Br. 8; *see also id.* at 9 (contending claim 1 advances the technology in existence at the time of the invention by a new process.”) However, we are not persuaded that claim 1 provides a technological improvement, as opposed to an improvement in a process that is itself the abstract idea.

Appellant similarly asserts that the claimed approach “improves the operation and use of the claimed ‘electronic user interface.’” *Id.* at 9. However, Appellant does not identify how claim 1 purportedly improves the operation and use of an electronic user interface. We see no indication that

claim 1 requires more than using an electronic user interface in its ordinary capacity to present and receive data.

We also find no indication in the Specification that the claimed invention effects a transformation or reduction of a particular article to a different state or thing. Nor do we find anything of record that attributes an improvement in computer technology and/or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the Revised Guidance.<sup>2</sup>

We find nothing of record, that attributes an improvement in technology and/or a technical field to the claimed invention or that otherwise indicates that the claimed invention integrates the abstract idea into a “practical application,” as that phrase is used in the Revised Guidance. *See* Revised Guidance, 84 Fed. Reg. at 55. At best, the additional elements recited in claim 1, considered individually and as an ordered combination, do no more than implement the abstract idea using generic computer components.

Accordingly, we are not persuaded that the Examiner erred in determining that claim 1 is directed to an abstract idea.

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<sup>2</sup> The Revised Guidance references the MANUAL OF PATENT EXAMINING PROCEDURE (“MPEP”) §§ 2106.05(a)–(c) and (e)–(h) in describing the considerations that are indicative that an additional element or combination of elements integrates the judicial exception, e.g., the abstract idea, into a practical application. Revised Guidance, 84 Fed. Reg. at 55. If the recited judicial exception is integrated into a practical application, as determined under one or more of these MPEP sections, the claim is not “directed to” the judicial exception.

*Step Two of the Mayo/Alice Framework (Revised Guidance, Step 2B)*

Having determined under step one of the *Mayo/Alice* framework that claim 1 is directed to an abstract idea, we next consider under Step 2B of the Revised Guidance, the second step of the *Mayo/Alice* framework, whether claim 1 adds any additional element or combination of elements that provides an “inventive concept,” i.e., whether the additional elements amount to “significantly more” than the judicial exception itself or simply appends well-understood, routine, conventional activities previously known to the industry to the judicial exception. Revised Guidance, 84 Fed. Reg. at 56.

As described above, the only additional elements recited in claim 1 beyond the abstract idea is an “application server” that is “programmed,” and an “electronic user interface.”

Appellant asserts that claim 1 recites “unconventional steps and limitations that improve the operation and use of the claimed ‘electronic user interface.’” Appeal Br. 9. Yet, claim 1 requires the electronic user interface to “present” the questionnaire and “receive” answers for respective questions in the questionnaire. But this element is described in the Specification at a high level of generality, i.e., as a generic computer components used to perform generic computer functions (e.g., receiving and processing data). *See, e.g.*, Spec. ¶¶ 17, 38. The Federal Circuit, in accordance with *Alice*, has “repeatedly recognized the absence of a genuine dispute as to eligibility” where claims have been defended as involving an inventive concept based “merely on the idea of using existing computers or the Internet to carry out conventional processes, with no alteration of computer functionality.” *Berkheimer v. HP, Inc.*, 890 F.3d 1369, 1373 (Fed. Cir. 2018) (Moore, J.,

concurring) (citations omitted); *see also BSG Tech. LLC v. BuySeasons, Inc.*, 899 F.3d 1281, 1291 (Fed. Cir. 2018) (“BSG Tech does not argue that other, non-abstract features of the claimed inventions, alone or in combination, are not well-understood, routine and conventional database structures and activities. Accordingly, the district court did not err in determining that the asserted claims lack an inventive concept.”).

Here, Appellant has not identified, and we do not find, any additional elements recited in claim 1 that, individually or in combination, provide significantly more than the abstract idea. Instead, the additional elements are conventional) computer elements, arranged in a conventional manner, for executing the abstract idea. We are not persuaded, on the present record, that the Examiner erred in rejecting independent claim 1 under 35 U.S.C. § 101.

Appellant’s arguments regarding the remaining claims are similar to those presented for independent claim 1. We are not persuaded that the Examiner erred in rejecting these claims under 35 U.S.C. § 101 for the same reasons described above with respect to claim 1.

#### *Obviousness*

We are persuaded by Appellant’s argument that the Examiner erred in rejecting independent claims 1 and 12 under 35 U.S.C. § 103(a) because Rodrigue does not teach or suggest “applying, by the application server, a pre-assigned section weight to each normalized section score, each pre-assigned section weight adapted to reflect a degree of contribution the respective section provides to an overall performance of the safety program” (limitation (h)), as recited in independent claim 1, and similarly recited in independent claim 12. The Examiner finds that Rodrigue at paragraphs 29,

36, 37, and claim 3 teaches limitation (h). Final Act. 15. However, we have reviewed the portions of Rodrigue cited by the Examiner, and we agree with Appellant that none of the cited passages discloses limitation (h), as recited in claim 1.

Rodrigue relates to assisting businesses organize resources and develop operations plans based on desired outcomes. Rodrigue ¶ 3. More particularly, a business status indication and improvement planning system is provided that enables manufacturers to obtain a quantifiable indication of the state of the business, such as where weaknesses exist, time relationships among business actions and events, and the business' ability to target improvements. *Id.* ¶ 28. Rodrigue's method includes identifying one or more groups of people having some association with the business. *Id.* ¶ 33. The groups include business customers, business strategists, business operations personnel, and business financial personnel. *Id.* Information from members of the group is gathered in terms of identifiable and measurable "outcomes." *Id.* Outcomes are specific activities events, actions, results or the like that may be of importance to any of the groups. *Id.* There are 134 outcomes of importance for most groups of most businesses. *Id.* ¶ 33.

Each outcome is associated with two parameters: importance and satisfaction. *Id.* ¶ 35. For each listed outcome, each member of the groups surveyed assigns a value (e.g., 1–5) for importance, and a value (e.g., 1–5) for satisfaction. *Id.* The raw numbers of each group of people is normalized with respect to that specific group to establish a single importance value and a single satisfaction number for each outcome for the group. *Id.* An opportunity score is determined for each outcome from its respective

importance and satisfaction numbers, e.g., opportunity = importance + (importance – satisfaction). *Id.* ¶ 37. Other formulas may be used to calculate opportunity, such as one that “weight[s] satisfaction more heavily.” *Id.* A reporting function provides a listing of the results of the survey in order of business importance. *Id.* ¶ 29. The list preferably includes a normalization of the results and the extent of the importance of each outcome for each of the identified groups. *Id.*

Claim 1 of Rodrigue recites a method to enable a business to generate a representation of operations status and identify operations to improve. The method includes a step (c) for “normalizing the outcome rankings and ratings values for each of the one or more outcomes for each of the one or more groups.” Claim 3 of Rodrigue further recites a step of weighting the normalized outcome rankings and ratings values as a function of the identity of a particular group.

Thus, Rodrigue teaches calculating and normalizing (approximately 134) outcomes for each group. However, Rodrigue does not teach a section score, where a section has a plurality of questions and is directed to an area of performance assessment of the safety program, much less applying a pre-assigned section weight to each normalized section score, as required by limitation (h) of claim 1. At best, Rodrigue teaches weighting each of the normalized outcomes for a particular group. But Rodrigue’s group is based on the identity of the people taking the survey (e.g., customers, financial personnel), and does not have a plurality of questions directed to an area of performance assessment of the safety program, as recited in claim 1.

In view of the foregoing, we do not sustain the Examiner's rejection of independent claims 1 and 12, and dependent claims 3-8, 10, 14-17, 19, and 20 under 35 U.S.C. § 103.

### CONCLUSION

In summary:

<b>Claims Rejected</b>	<b>35 U.S.C. §</b>	<b>Basis</b>	<b>Affirmed</b>	<b>Reversed</b>
1, 3-8, 10-12, 14-17, 19, 20	101	Eligibility	1, 3-8, 10-12, 14-17, 19, 20	
1, 3-8, 10-12, 14-17, 19, 20	103	Nagan, Rodrigue, Schaf		1, 3-8, 10-12, 14-17, 19, 20
<b>Overall Outcome</b>			1, 3-8, 10-12, 14-17, 19, 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)(1)(iv).

AFFIRMED