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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/664,249	10/30/2012	Abhijit Deshmukh	IN920120116US1	9092

84986 7590 05/18/2018

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EXAMINER
HALE, TIM B

ART UNIT	PAPER NUMBER
3685	

NOTIFICATION DATE	DELIVERY MODE
05/18/2018	ELECTRONIC

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ABHIJIT DESHMUKH and ANURAG SRIVASTAVA

Appeal 2016-005053[1]
Application 13/664,249[2]
Technology Center 3600

Before ANTON W. FETTING, NINA L. MEDLOCK and
BRADLEY B. BAYAT, *Administrative Patent Judges*.

BAYAT, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134(a) from the Examiner's final rejection of claims 1–20, which are all the pending claims in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

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[1] Our Decision references Appellants' Appeal Brief ("App. Br.," filed Aug. 19, 2015), Reply Brief ("Reply Br.," filed Apr. 8, 2016), the Examiner's Answer ("Ans.," mailed Feb. 10, 2016), and the Final Office Action ("Final Act.," mailed Jan. 5, 2015).

[2] Appellants identify "International Business Machines Corporation" as the real party of interest. App. Br. 4.

STATEMENT OF THE CASE

Claimed Subject Matter

Appellants' invention provides for evaluations of a subscriber transaction or expenditure including receiving and considering measured real-time physiological metrics of the subscriber, evaluating received physiological metrics of the subscriber, receiving financial metrics related to the transaction or the expenditure, and the subscriber, and determining whether the transaction or expenditure should be assigned a full or partial authorized status. Spec., Abstract. Claim 1, reformatted and reproduced below, is illustrative of the claimed subject matter.

> 1. A nontransient computer readable medium containing instructions thereon, the instructions, which when executed by a processor, cause the processor to perform a process comprising:
>
> receive a request to evaluate a proposed subscriber financial transaction or expenditure;
>
> receive one or more real-time measured physiological metrics of the subscriber;
>
> evaluate one or more received physiological metrics of the subscriber;
>
> receive two or more financial metrics, one of the financial metrics related to the proposed transaction or the expenditure, and one of the financial metrics related to the subscriber;
>
> determine whether the proposed subscriber financial transaction or expenditure should be assigned a full or partial authorized status after
>
> evaluating one or more of the received physiological metrics of the subscriber,
>
> evaluating one or more metrics related to the proposed financial transaction or expenditure and
>
> evaluating previously submitted personal targets or thresholds of the subscriber; and
>
> report the determined authorization status.

Prior Art Relied Upon

The Examiner relies on the following prior art as evidence of unpatentability:

Shoham	US 2004/0177030 A1	Sept. 9, 2004
Labrou et al.	US 2007/0022058 A1	Jan. 25, 2007
Fisher et al.	US 2007/0192245 A1	Aug. 16, 2007
Guo et al.	US 2009/0006188 A1	Jan. 1, 2009
Rapaport et al.	US 2010/0205541 A1	Aug. 12, 2010
Mele et al.	US 2011/0202474 A1	Aug. 18, 2011

Rejections on Appeal[3]

I. Claims 1–20 stand rejected under 35 U.S.C. § 101 as not directed to patent-eligible statutory subject matter.

II. Claims 1–20 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite.

III. Claims 1, 2, 6–8, 12–14, and 18–20 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rapaport, Guo, and Shoham.

IV. Claims 3, 9, and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rapaport, Guo, Shoham, and Mele.

V. Claims 4, 10, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rapaport, Guo, and Fisher.

VI. Claims 5, 11, and 17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Rapaport, Guo, Shoham, and Labrou.

[3] The rejection of claims 7 and 13 under 35 U.S.C. § 112, second paragraph, is withdrawn. Advisory Action 1 ("Advisory Act.," mailed Apr. 2, 2015).

ANALYSIS

Rejection I—Non-Statutory Subject Matter

Section 35 U.SC. § 101 defines patent-eligible subject matter as "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof," subject to the other limitations of the Patent Act. 35 U.S.C. § 101. Apart from the Patent Act, the Supreme Court has created exceptions to the literal scope of 35 U.S.C. § 101. "Laws of nature, natural phenomena, and abstract ideas are not patentable." *Alice Corp. v. CLS Bank Int'l*, 134 S. Ct. 2347, 2354 (2014) (quoting *Ass'n for Molecular Pathology v. Myriad Genetics, Inc.*, 133 S. Ct. 2107, 2116 (2013)).

In *Alice*, the Court reaffirmed a two-step framework previously set forth in *Mayo Collaborative Services v. Prometheus Laboratories, Incorporated*, 566 U.S. 66 (2012), for analyzing whether a claim is patent eligible. *Alice*, 134 S. Ct. at 2355. The first step in that framework is to "determine whether the claims at issue are directed to one of those patent-ineligible concepts," such as an abstract idea. *Id.* If so, the inquiry proceeds to step two to look at the claim for "something more" by "examin[ing] 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 2354, 2357 (quoting *Mayo*, 566 U.S. at 66, 79). This inventive concept must do more than simply recite "well-understood, routine, conventional activity." *Mayo*, 566 U.S. at 66, 79.

Applying the framework in *Alice*, and as the first step of that analysis, the Examiner determines that "[t]he claim(s) is/are directed to the abstract idea of a fundamental economic practice of profiling in transaction (e.g.,

evaluating the emotional state of a transaction participant)." Final Act. 5. According to the Examiner, "[t]he claims broadly recite receiving and evaluating a real-time psychological metric and subsequently analyzing them. Collecting and analyzing psychological metrics to determine a fraud risk is routinely preformed without the use of a computer by non-machine entities, e.g., an attorney or loan agent analyzing a client's veracity." Advisory Act. 2. The Examiner further elaborates:

> Claims 1, 7 and 13 are directed to a series of steps to determine whether the proposed subscriber financial transaction or expenditure should be assigned a full or partial authorized status after evaluating one or more of the received physiological metrics of the subscriber, evaluating one or more metrics related to the proposed financial transaction or expenditure and evaluating previously submitted personal targets or thresholds of the subscriber; "[sic]Thus, the claims describe an abstract idea of a fundamental economic practice (e.g., the claims read on determining subscriber eligibility to a financial transactions, such as determining the credit worthiness of a regular customer).

Ans. 4–5. Proceeding to the second step in the analysis, the Examiner determines:

> The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: 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. Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself.

Id.

Appellants contest *Rejection I* by arguing claims 1–20 as a group. App. Br. 8–13; Reply Br. 4–6. We select claim 1 as the representative claim for this group. Therefore, claims 2–20 stand or fall with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv).

Alice Step One

Appellants' "invention relates to management of personal finance and more specifically to real-time evaluation of personal expenditures and transactions." Spec. ¶ 1. According to Appellants, "[t]he appropriateness of certain personal expenditures and transactions can depend on many variables and circumstances" (e.g., the timing of the transaction, cost of the transaction in relation to an individual's net worth, cash on hand, salary, and the emotional state of the individual at the time of the transaction), that can influence and trigger initiation of detrimental and unwanted transactions that lead to financial hardships. *Id.* ¶ 2. Appellants' invention solves these problems by evaluating "certain real-time metrics and purchase transaction metrics" prior to completion of the transaction to determine if the transaction is appropriate and should be allowed. *Id.* ¶ 4.

Appellants argue that the claims are not directed to an abstract idea because "[t]he claims here include a physiological real-time measurement, receiving that measurement, and then action based on receipt of that measurement." App. Br. 9. We find this argument unpersuasive at least because it is not commensurate with the scope of claim 1. As the Examiner observes, claim 1 broadly recites receiving and evaluating metrics and subsequently analyzing them, but fails to include real-time "'specific' measurements." Final Act. 3 ("Applicant has read specific terms from the [S]pecification into the claims . . . [and] argued terms not present in the

claims."). In other words, claim 1 only requires receiving a real-time "measured" physiological metric of the subscriber, rather than including a physiological real-time measurement of the subscriber.

Appellants next argue that the rejection under 35 U.S.C. § 101 should not be upheld because the Final Office Action and Advisory Action "confuse physiological, which is in the claims, with psychological, which is not in the claims." App. Br. 9. In response to this argument, the "Examiner maintains that the claims are ineligible in either case. The operative step is 'receiving and evaluating . . . a metric'. Since as far as 101 eligibility is concerned, whether or not the claimed system receives a psychological metric or physiological metric is immaterial to patentability." Ans. 6.

We agree with the Examiner because claims directed to collecting information, analyzing it, and displaying certain results of the collection and analysis are directed to an abstract idea. *Electric Power Group, LLC v. Alstom S.A.*, 830 F.3d 1350, 1353–54 (Fed. Cir. 2016) ("[W]e have treated analyzing information by steps people go through in their minds, or by mathematical algorithms, without more, as essentially mental processes within the abstract-idea category."). Regarding claim 1's recitation of specific data types (i.e., physiological metric), the Federal Circuit has recognized that limiting information to particular content does not change its character as information and is within the realm of abstract ideas. *Id.* at 1353 ("Information as such is an intangible.").

We also are not persuaded of reversible error under step one of *Alice* because the claim calls for receipt of measured real-time physiological metrics but the Examiner has not accounted for this explicit language. App. Br. 10. Appellants' reasoning for distinguishing claim 1 from the

Examiner's parallel abstract concept appears to be focused on the particular type of content received (*id.* ("[T]he hypothetical does not include the *receipt* of measured *physiological* metrics in *real-time*."), which as discussed above, does not change its character as information to fall outside the realm of abstract ideas. Under our precedents, the "directed to" inquiry applies a stage-one filter to the claims considered in light of the Specification, based on whether the character of the claim "as a whole is directed to excluded subject matter," instead of a piecemeal itemization of each of the claim limitations. *See Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015); *see also Genetic Techs. Ltd. v. Merial L.L.C.*, 818 F.3d 1369, 1376 (Fed. Cir. 2016); *Enfish, LLC v. Microsoft Corp.*, 822 F.3d 1327, 1335 (Fed. Cir. 2016).

Appellants have not shown how providing an alternative method for determining the authorization status of a transaction, which results in fewer inappropriate and unwanted transactions, is an improvement to computer capability or functionality. Indeed, like the abstract idea of hedging risk in *Bilski v. Kappos*, 561 U.S. 593 (2010), the concept of evaluating certain criteria to assess the authorization status of a financial transaction is a fundamental economic and business practice long prevalent in our system of commerce, and beyond the scope of 35 U.S.C. § 101. *See Alice*, 134 S. Ct. at 2356.

Alice Step Two[4]

In step two, we consider the elements of the claim, both individually and as an ordered combination, to assess whether the additional elements

[4] Appellants' introduction of new arguments as to claims 4, 5, 10, 11, 16, and 17 are not considered. *See* Reply Br. 6. "Any bases for asserting error,

transform the nature of the claim into a patent-eligible application of the abstract idea. *Content Extraction & Transmission LLC v. Wells Fargo Bank, Nat'l Ass'n*, 776 F.3d 1343, 1347 (Fed. Cir. 2014). This is the search for an inventive concept, which is something sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. *Id.* For example, merely reciting the use of a generic computer cannot convert a patent-ineligible abstract idea into a patent-eligible invention. *Alice*, 134 S. Ct. at 2358; *Versata Dev. Group, Inc. v. SAP Am.*, Inc., 793 F.3d 1306, 1332 (Fed. Cir. 2015).

Appellants argue that

> even if the first prong of the judicial exception is allegedly triggered, the receipt and use of real-time and measured physiological metrics of a subscriber amounts to significantly more - placing the claims into a class of statutory subject matter under 35 U.S.C. §103. It is significantly more because doing so is not well understood, is not routine, and is not conventional in the field as demonstrated by the absence of citation in the FOA to a reference disclosing or suggesting the *receipt* and subsequent use of *real time* and *measured* physiological metrics of a subscriber (e.g., applicant, purchaser, etc.) ahead of providing authorization for a financial transaction involving the subscriber.

App. Br. 13. We disagree.

To the extent that Appellants maintain that the elements of the claim necessarily amount to "significantly more" than the abstract idea because the claim is allegedly patentable over the cited prior art, Appellants

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whether factual or legal, that are not raised in the principal brief are waived." *Ex parte Borden*, 93 USPQ2d 1473, 1474 (BPAI 2010) (informative); *see also Optivus Tech., Inc. v. Ion Beam Applications. S.A.*, 469 F.3d 978, 989 (Fed. Cir. 2006).

misapprehend the controlling precedent. Although the second step in the *Alice* framework is termed a search for an "inventive concept," the analysis is not an evaluation of novelty or nonobviousness, but rather, a search for "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.'" *Alice*, 134 S. Ct. at 2355. A novel and nonobvious claim directed to a purely abstract idea is, nonetheless, patent ineligible. *See Mayo*, 566 U.S. at 1289. "Groundbreaking, innovative, or even brilliant discovery does not by itself satisfy the § 101 inquiry." *Ass'n for Molecular Pathology*, 133 S. Ct. at 2117.

We agree with the Examiner that the elements of the claim—both individually and when combined—do not transform the claimed abstract idea into a patent-eligible application of the abstract idea. The claimed invention can readily be understood as adding conventional computer components to well-known business practices. *See, e.g.*, Spec. ¶ 17 ("authorizations to finalize a transaction or expenditure using a credit card or debit card, ACH authorization, and by using mobile NFC (Near Field Communication) payment methodologies"), ¶ 26 ("sensors can include commercially available devices"), ¶ 28 (transactions may be executed on a processor or computer). For instance, claim 1 merely requires implementation on a generic processor. Similar to the claims in *Electric Power*, claim 1 here gathers, analyzes, and displays, including in "real-time," but it does not include any requirement for performing the claimed functions of receiving, determining, evaluating, and reporting by use of anything but entirely conventional, generic technology. *See Elec. Power Grp.*, 830 F.3d at 1356; *see also Ultramercial, Inc. v. Hulu, LLC*, 772 F.3d

709, 717 (Fed. Cir. 2014). It is not enough to point to conventional applications and say "do it on a computer." *Cf. Alice*, 134 S. Ct. at 2358 ("Stating an abstract idea while adding the words 'apply it with a computer'" is not enough for patent eligibility) (quoting *Mayo*, 566 U.S. at 66, 79).

For the foregoing reasons, we are not persuaded of Examiner error and sustain the rejection of independent claim 1 under 35 U.S.C. § 101, including claims 2–20, which fall with claim 1.

Rejection II—Indefiniteness

We are persuaded of Examiner error by Appellants' arguments, and for the reasons advanced by Appellants (App. Br. 13–16), we reverse the Examiner's indefiniteness rejection of claims 1–20, "as being incomplete for omitting essential steps, such omission amounting to a gap between the steps." *See* Final Act. 6–7; Ans. 8–9.

Rejection III—Obviousness

Independent claims 1, 7, and 13

Independent claims 1, 7, and 13 require, *inter alia*, "determin[ing] whether the proposed subscriber financial transaction or expenditure should be assigned a full or partial authorized status after evaluating one or more of the received physiological metrics of the subscriber." *See* App. Br. 27–30 (Claims App'x).

In rejecting claims 1, 7, and 13 as obvious over Rapaport, Guo, and Shoham, the Examiner finds that neither Rapaport nor Guo teaches this disputed limitation. Final Act. 9. To cure this deficiency, the Examiner relies on paragraph 49 and Figure 2 of Shoham. *Id.*

We are persuaded by Appellants' arguments, and find the Examiner's reliance on Shoham fails to cure the deficiency in Rapaport and Guo. App. Br. 17–20.

Shoham is directed to an automated system for evaluating the creditworthiness of an organization by utilizing the responses of organization managers to psychometric interview questions. Shoham, Abstract. A series of personality type questions are administered via a secure internet interface and the answers provided by interviewees are combined with credit application information to output a score as to creditworthiness, and used by the lender to make a credit decision. *Id.* ¶¶38, 49.

Although the Examiner acknowledges that "Shoham teaches that a psychometric[5] interview administration process is utilized," the Examiner nevertheless presumes "the interviewer would take into account various physiological responses to questions during the psychometric interview to evaluate the psychological state of the Applicant, such an interview would read on both a psychological and physiological metric." Ans. 9–10. The Examiner does not cite to any disclosure in Shoham in which an interviewer is personally "evaluating one or more of the *received physiological metrics*" of an Applicant, as required by each of the independent claims. A rejection based on 35 U.S.C. § 103 clearly must rest on a factual basis. The Examiner has the initial duty of supplying the factual basis for the rejection and may not resort to speculation, unfounded assumptions, or hindsight reconstruction to supply deficiencies in its factual basis. *In re Warner*,

[5] Merriam Webster online dictionary defines "psychometrics as 'the psychological theory or technique of mental measurement.'" Reply Br. 8.

379 F.2d 1011, 1017 (CCPA 1967). Even though we acknowledge that during an in-person interview an interviewer could possibly evaluate certain physiological characteristics of an interviewee, we find this interpretation unreasonably broad in light of the plain language of the claims and the Specification, which require "the processor to perform a process comprising . . . determine whether the proposed subscriber financial transaction or expenditure should be assigned a full or partial authorized status after evaluating one or more of the received physiological metrics of the subscriber." For instance, the Specification at paragraph 21 provides that real-time physiological metrics like body temperature and heart rate are evaluated by a wrist or chest sensor. Moreover, Shoham is directed to an automated system, in which questions are administered over an Internet interface, and Appellants' invention is similarly performed in a computing environment, wherein all the recited claim steps are performed by a processor. We find the Examiner's reasoning as to the above disputed limitation of claims 1, 7, and 13 is unsupported by the record before us.

Therefore, we do not sustain the rejection of independent claims 1, 7, and 13, including dependent claims 2, 6, 8, 12, 14, and 18–20. *Cf. In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992) ("dependent claims are nonobvious if the independent claims from which they depend are nonobvious").

Rejections IV–VI

We also do not sustain the obviousness rejections of claims 3–5, 9–11, and 15–17 for the same reasons, because each of these claims depends from either claim 1, 7, or 13, and the Examiner has not relied on the additional cited references to cure the deficiency in Shoham.

DECISION

The Examiner's rejection under 35 U.S.C. § 101 is affirmed.

The Examiner's rejections under 35 U.S.C. §§ 112 and 103 are reversed.

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