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15/027,893	04/07/2016	Akio TANIUCHI	Q226193	5597
23373	7590	12/12/2019	EXAMINER	
SUGHRUE MION, PLLC 2000 PENNSYLVANIA AVENUE, N. W. SUITE 900 WASHINGTON, DC 20006			ANDREI, RADU	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No. 15/027,893	Applicant(s) TANIUCHI et al.	
Examiner RADU ANDREI	Art Unit 3682	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 2/12/2019.
 A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on ____.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

- 5) Claim(s) 9,11-14 and 16-19 is/are pending in the application.
 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) Claim(s) ____ is/are allowed.
- 7) Claim(s) 9,11-14 and 16-19 is/are rejected.
- 8) Claim(s) ____ is/are objected to.
- 9) Claim(s) ____ are subject to restriction and/or election requirement

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) The specification is objected to by the Examiner.
- 11) The drawing(s) filed on ____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) All b) Some** c) None of the:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
 Paper No(s)/Mail Date _____.
- 3) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____.
- 4) Other: _____.

DETAILED ACTION

The present application, filed on 4/7/2016, is being examined under the AIA first inventor to file provisions.

The following is a final Office Action in response to Applicant's amendments filed on 12/2/2019.

- a. Claims 9, 11, 13-14, 16-19 are amended
- b. Claims 1-8, 10, 15, 20 are cancelled

Overall, **Claims 9, 11-14, 16-19** are pending and have been considered below.

Claim Rejections - 35 USC § 101

35 USC 101 reads as follows:

Whoever 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 therefor, subject to the conditions and requirements of this title.

Claims 9, 11-14, 16-19 are rejected under 35 USC 101 because the claimed invention is not directed to patent eligible subject matter. The claimed matter is directed to a judicial exception (i.e. an abstract idea not integrated into a practical application) without significantly more.

Per Step 1 and Step 2A of the two-step eligibility analysis, independent Claim 9, Claim 14 and Claim 19 and the therefrom dependent claims are directed respectively to a system, to a computer implemented method and to computer executable instructions stored on a non-transitory storage medium. Thus, on its face, each such independent claim and the therefrom dependent claims are directed to a statutory category of invention.

However, Claim 14, (which is repeated in Claims 9, 19) is rejected under 35 U.S.C. 101 because the claim is directed to an abstract idea, a judicial exception, without reciting additional elements that integrate the judicial exception into a practical application.

The claim recites automatically displaying a first image, automatically displaying a second image, receiving an indication of the selection operation, select the first image based on a certain time condition, select the second image based on a certain time condition. The limitations, as drafted, constitute a process that covers performance of the limitations in the mind, but for the recitation of generic computer components. That is, other than reciting generic computer components, nothing in the claim element precludes the steps from practically being performed in the mind. For example, "automatically displaying a first image," "automatically displaying a second image" encompasses a user manually displaying/showing a succession of images (reads on first image, second image) by flipping through a deck of cards with images. Similarly, the limitation "receiving an indication of the selection operation" as drafted, is a process that, under its broadest reasonable interpretation, covers a person in the audience manually or verbally making a selection for an image card while the user continues flipping the image cards. Similarly, the limitations "select the first image based on a certain time condition" and "select the second image based on a certain time condition" encompass then user manually or verbally making the selection of the first image or the second image, based on the audience selection. If a claim limitation, under its broadest reasonable interpretation, covers performance of the limitation in the mind, but for the recitation of generic computer components, then it falls within the "Mental Processes – Concepts Performed in the Human Mind (e.g. observation, evaluation, judgement, opinion)" grouping of abstract ideas. Accordingly, the claim recites an abstract idea.

This abstract idea is not integrated into a practical application. In particular, stripped of those claim elements that are directed to an abstract idea, the remaining positively recited elements of the independent claims are directed to obtaining the first information, providing the first information, obtaining the second information, providing the second information. These claim elements amount to no more than insignificant extra-solution activity (MPEP 2106.05(g)).

The non-positively recited claim elements are the prearranged intervals, the first interval, the first image, the second information, the predetermined value. While these descriptive elements may provide further helpful context for the claimed invention, they do not serve to integrate the abstract idea into a practical application.

The recited computing elements, i.e. one memory, one processor, are recited at a high-level of generality (i.e. as a generic computing device performing generic computer functions of obtaining data, interpreting the obtained data and providing results), such that they amount to no more than mere instructions to apply the exception using generic computer components.

Accordingly, these additional claim elements do not integrate the abstract idea into a practical application, because they do not impose any meaningful limits on practicing the abstract idea. Per Step 2A, the claim is directed to an abstract idea not integrated into a practical application.

Step 2B of the eligibility analysis concludes that the claim does not include additional elements that are sufficient to amount to significantly more than the judicial exception. Stripped of those claim elements that are directed to an abstract idea, not integrated into a practical application, the remaining positively recited elements of the independent claims are directed to obtaining the first information, providing the first information, obtaining the second information, providing the second information. When considered individually, these additional claim elements represent "Insignificant Extra-Solution (Pre-Solution and/or Post-Solution) Activity", i.e. activities incidental to the primary process or product that are merely a nominal or tangential addition to the claims. Specifically, the limitations are considered post-solution activity because they are mere outputting or post-processing results from executing the abstract idea. (MPEP 2106.05(g)) It is readily apparent that the claim elements are not directed to any specific improvements of the claims.

Furthermore, the independent claims contain descriptive limitations, not positively recited limitations of elements found in the independent claims and addressed above, such as describing the nature, structure and/or content of the prearranged intervals, the first interval, the first image, the second information, the predetermined value. However, these elements do not require any steps or functions to be performed and thus do not involve the use of any computing functions. While these descriptive elements may provide further helpful context for the claimed invention, these elements do not serve to confer subject matter eligibility to the claimed invention since their individual and combined significance is still not heavier than the abstract concepts at the core of the claimed invention.

After stripping away the abstract idea claim elements, the additional positively recited steps and descriptive claim elements, the only remaining elements of the independent claims are directed to one memory, one processor. When considered individually, these additional claim elements serve merely to implement the abstract idea using computer components performing computer functions. They do not constitute “Improvements to the Functioning of a Computer or to Any Other Technology or Technical Field”. (MPEP 2106.05(a)) It is readily apparent that the claim elements are not directed to any specific improvements of any of these areas.

When the independent claims are considered as a whole, as a combination, the claim elements noted above do not amount to any more than they amount to individually. The operations appear to merely apply the abstract concept to a technical environment in a very general sense – i.e. a computer receives information from another computer, processes that information and then sends a response based on processing results. The most significant elements of the claims, that is the elements that really outline the inventive elements of the claims, are set forth in the elements identified as an abstract idea. Therefore, it is concluded that the elements of the independent claims are directed to one or more abstract ideas and do not amount to significantly more. (MPEP 2106.05)

Further, Step 2B of the analysis takes into consideration all dependent claims as well, both individually and as a whole, as a combination.

Dependent Claim 11 (which is repeated in Claim 16) is not directed to any additional abstract ideas, but is directed to an additional claim element such as to displaying a confirmation screen to the user. When considered individually, the limitation represents Insignificant Extra-Solution (Pre-Solution and/or Post-Solution) Activity”, i.e. activities incidental to the primary process or product that are merely a nominal or tangential addition to the claims. Specifically, the limitation is considered pre-solution activity because it is mere gathering or pre-processing data/information in conjunction with the abstract idea. (see MPEP 2106.05(g)) It is readily apparent that the claim elements are not directed to any specific improvements of the claims.

Dependent Claim 11 (which is repeated in Claim 16) is not directed to any additional abstract ideas, but is directed to an additional claim element such as to receiving a second selection. Dependent Claim 12 (which is repeated in Claim 17) is not directed to any additional

abstract ideas, but is directed to additional claim elements such as to determining the second time. Dependent Claim 13 (which is repeated in Claim 18) is not directed to any additional abstract ideas, but is directed to additional claim elements such as to obtain the first information. These limitations have already be determined to be part of the identified abstract idea.

Moreover, the claims in the instant application do not constitute significantly more also because the claims or claim elements only serve to implement the abstract idea using computer components to perform computing functions (*Enfish*, MPEP 2106.05(a)). Specifically, the computing system encompasses general purpose hardware and software modules, as disclosed in the application specification in fig1, fig2, fig4 and [0007]-[0027], including among others user terminal, web server, advertisement delivery system, communication controller, main controller, advertisement information manager, log manager, selection manager, advertisement database, log database.

When the dependent claims are considered as a whole, as a combination, the additional elements noted above appear to merely apply the abstract concept to a technical environment in a very general sense – i.e. a computer receives information from another computer, processes that information and then sends a response based on processing results. The most significant elements of the claims, that is the elements that really outline the inventive elements of the claims, are set forth in the elements identified in the independent claims as an abstract idea. The fact that the computing devices are facilitating the abstract concept is not enough to confer statutory subject matter eligibility. In sum, the additional elements do not serve to confer subject matter eligibility to the invention since their individual and combined significance is still not heavier than the abstract concepts at the core of the claimed invention. Therefore, it is concluded that the dependent claims of the instant application do not amount to significantly more either. (see MPEP 2106.05)

In sum, Claims 9, 11-14, 16-19 are rejected under 35 USC 101 as being directed to non-statutory subject matter.

Claim Rejections - 35 USC § 112(a)
Written Description (Possession)

The following is a quotation of 35 U.S.C. 112(a):

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 9, 11-14, 16-19 are rejected under 35 USC 112(a) as failing to comply with the written description requirement. The claim contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 9, 14, 19 are rejected for reciting the subject matter "third time occurred in less time after the second time than required to form an intention to select the second image" which is not adequately described in the specification, in the drawings or in the original set of claims to satisfy the requirements as described in MPEP 2163.05 V: "While there is a presumption that an adequate written description of the claimed invention is present in the specification as filed, *In re Wertheim*, 541 F.2d 257, 262, 191 USPQ 90, 96 (CCPA 1976), a question as to whether a specification provides an adequate written description may arise in the context of an original claim. An original claim may lack written description support when (1) the claim defines the invention in functional language specifying a desired result but the disclosure fails to sufficiently identify how the function is performed or the result is achieved ..." Further "Even if a claim is supported by the specification, the language of the specification, to the extent possible, must describe the claimed invention so that one skilled in the art can recognize what is claimed. The appearance of mere indistinct words in a specification or a claim, even an original claim, does not necessarily satisfy that requirement. "*Enzo Biochem, Inc. v. Gen-Probe, Inc.*, 323 F.3d 956, 968, 63 USPQ2d 1609, 1616 (Fed. Cir. 2002) (holding that generic claim language appearing in *ipsis verbis* in the original specification did not satisfy the written description requirement)."

In the instant situation, the application specification even does not attempt to disclose the function. Therefore, it is not clear how the time required to form an intention to select an image is measured. No further information, like calculation method or algorithm is provided; i.e. HOW the function of measuring time is performed. Therefore, the specification discloses neither the necessary structure, nor the necessary algorithm to perform the function, i.e. HOW the calculation is performed.

The question is, given the disclosure, would a POSITA conclude that the inventor was in possession of the term "third time occurred in less time after the second time than required to form an intention to select the second image" in order to cause a system to perform the

functions? The answer is clearly "no." It looks as if the invention recites terms that have neither structure nor algorithm.

Therefore, the subject matter was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For examination purpose, Examiner will interpret "third time occurred in less time after the second time than required to form an intention to select the second image" as any type of calculation, which is what the prior art of record discloses. The reference is provided for compact prosecution purpose.

The remainder of the claims are rejected by virtue of dependency.

Response to Amendments/Arguments

Applicant's remarks and arguments have been fully considered.

Applicant respectfully disagrees with the OA conclusions and asserts that the presented claims fully comply with the requirements of 35 U.S.C. § 101. Further, Applicant is of the opinion that the prior art fails to teach Applicant's invention.

Examiner respectfully disagrees with the former.

With respect to Applicant's Remarks as to the claims being rejected under 35 USC § 101.

Applicant submits:

A. The pending claims are not directed to a judicial exception.

B. The pending claims contain an inventive concept. Furthermore, Applicant asserts that the Office has failed to meet its burden to establish that the pending claims do not contain an inventive concept.

Examiner responds – The arguments have been considered in light of Applicants' amendments to the claims. The arguments ARE NOT PERSUASIVE. Therefore, the rejection is maintained.

The instant claims, as a whole, do not amount to significantly more than the abstract idea itself. This is because the claims

(a) do not effect an improvement to another technology or technical field;

(b) do not amount to an improvement to the functioning of a computer itself;

(c) do not move beyond a general link of the use of an abstract idea to a particular technological environment.

The claims merely amount to the application or instructions to apply the abstract idea on a generic computer, and are considered to amount to nothing more than requiring a generic system built around a computer with user interfaces to merely carry out the abstract idea itself. As such, the claims, when considered as a whole, are nothing more than the instruction to implement the abstract idea in a particular, albeit well-understood, routine and conventional technological environment.

More specific:

Examiner points out that, given the extensive amendments to the claims, Applicant's arguments and remarks pertaining to the eligibility rejections are by and large obsolete. Regardless, Examiner will try to answer as many arguments and remarks as possible, in the interest of advancing prosecution.

Applicant submits "'A PHOSITA would view this problem as something that cannot be solved in the human mind, because the delay of the human mind and human physical coordination are a cause of the problem.'" Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. Examiner argues that the process can be very well covered in the human mind (note: "in the human mind" covers in this argumentation any type of manual, visual or verbal action, as result of human judgment). By way of example: a customer steps into a store and asks for a certain type of fabric. The salesperson puts a deck with a multitude of fabrics on the counter and begins to flip through the fabrics by successively turning the corner of the next fabric. The customer watches attentively. The salesperson waits for a "sign" from the customer. At a certain point the customer says "this one." However, the salesperson is not sure if "this one" refers to the piece of fabric last shown (the outgoing piece) or to the piece of fabric that to be shown (the incoming piece), for customer's interjection came during the flip time from one piece of fabric to the next one.

At this point in time, the sales person has two options: (a) to double check with the customer or (b) to "second guess" the customer by assessing if the interjection "this one" came closer in time to the outgoing piece of fabric or the coming piece of fabric. Based on experience,

the salesperson, with a high probability, can guess right. One can experience similar situation all the time in numerous areas of real life.

The statement "... because the delay of the human mind and human physical coordination are a cause of the problem," although being in itself correct, does not mean that only the computer is the solution to this problem (something extrinsic to the "human mind and human physical coordination"). Again by way of example – continuing with the example just presented, the salesperson could very well decide to slow down the flipping pace, so that the customer will have enough time to decide. Furthermore, the salesperson could decide to wait for an acknowledgement from the customer before flipping to the next piece of fabric. In the latter situation, the confusion possibility is practically eliminated.

It is true that, generally, computerizing a process will allow to speed up that process. However, in the computerized version, it is expected that all steps are computerized (similarly, in the "manual" version, all steps should be manual). Attempting to mix the two types of processes, i.e. computerized and manual, will lead to false problems and logic fallacies. In this specific case, the argumentation fallacy is to interject into the computerized process, arguments about the capability of the human mind and to conclude that the combination of computerized process steps and human mind steps would not "work" properly.

In sum, the process disclosed in the instant application is the computerized version of a routine process executed in the human mind, and therefore, based on the 2019 PEG, an abstract idea. The problem the instant application tries to solve, has been already solved in the human mind realm, as shown in the above example. This solution can be easily computerized as well, as shown earlier in this response. Therefore, the image selection process, including the selection disambiguation process can be executed both as a computerized version or as an "in the human mind" version. It follows, that the computerized image selection and selection disambiguation process can be executed in the human mind and, therefore, it constitutes and abstract idea (see the 2019 PEG).

Applicant submits "It is not reasonable to interpret claim 1 as referring to a person holding up cards and another person verbally choosing a card. A person holding up cards is not disclosed in any embodiment in the application." Examiner has carefully considered, but doesn't find Applicant's arguments persuasive. Based on the 2019 PEG, the process of the base claim(s) is compared to a potential mental process, a process that could be executed in the human mind. Therefore, this interpretation is not only reasonable, but also required.

Applicant submits ““The claims do more than simply saying "Apply It" without telling how to achieve the desired result. See, for example, Claim 14 Features 6 and 7 taking action based on a time difference and a predetermined threshold.”” Examiner has carefully considered, but doesn’t find Applicant’s arguments persuasive. No such rejection argument has been used in the instant Office Action eligibility rejection.

Applicant submits ““The claims do more than simply saying "Apply It" without telling how to achieve the desired result. See, for example, Claim 14 Features 6 and 7 taking action based on a time difference and a predetermined threshold.”” Examiner has carefully considered, but doesn’t find Applicant’s arguments persuasive. The eligibility analysis on the instant Office Action concludes at Step 2A Prong Two, among other conclusions:

This abstract idea is not integrated into a practical application. In particular, stripped of those claim elements that are directed to an abstract idea, the remaining positively recited elements of the independent claims are directed to obtaining the first information, providing the first information, obtaining the second information, providing the second information. These claim elements amount to no more than insignificant extra-solution activity (MPEP 2106.05(g)).

Applicant submits “The 'Field of Use' Negative Bullet.” Examiner has carefully considered, but doesn’t find Applicant’s arguments persuasive. The eligibility analysis in the instant Office Action makes no such argument.

Applicant submits “The present application raises the fact issues of the problem and solution. See the Review of Application above. Applicant has argued the claims are patent eligible at Step 2B based on facts.” Examiner has carefully considered, but doesn’t find Applicant’s arguments persuasive. First, “The courts consider the determination of whether a claim is eligible (which involves identifying whether an exception such as an abstract idea is being claimed) to be a question of law (*Roslin*). Accordingly, courts do not rely on evidence that a claimed concept is a judicial exception, and in most cases resolve the ultimate legal conclusion on eligibility without making any factual findings.” (see July 2015 IEG Update: Subject Matter Eligibility – IV. Requirements of a Prima Facie Case).

Examiner points out that since, the *Berkheimer* decision was issued, which requires only “well-known, routine and conventional” determinations to be made based on facts. The eligibility analysis in the instant Office Action makes no such determinations.

Second, PTAB decisions, with very few exceptions, are not precedential, primarily because the PTAB standards are different from the examination standards. The cases quoted by Applicant, i.e. *In re Dominguez*, *In re Gillin*, are not among the precedential cases.

It becomes self-evident that there are no meaningful limitations in the claims that transform the judicial exception into a patent eligible application such that the claims amount to significantly more than the judicial exception itself. Therefore, the rejection under 35 U.S.C. § 101 is maintained.

With respect to Applicant's Remarks as to the claims being rejected under 35 USC § 103.

The rejection is withdrawn, as a result of the amendments.

Examiner has reviewed and considered all of Applicant's remarks. The rejection is maintained, necessitated by the new *35 USC § 112* rejection and by the fact that the rejection of the claims under *35 USC § 101* has not been overcome.

Conclusion

Applicants' amendments necessitated the new ground(s) of rejection presented in this Office action. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this office action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this office action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Radu Andrei whose telephone number is 313.446.4948. The examiner can normally be reached on Monday – Friday 8:30am – 5pm EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ilana Spar can be reached at (571)270-7537. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

As detailed in MPEP 502.03, communications via Internet e-mail are at the discretion of the applicant. Without a written authorization by applicant in place, the USPTO will not respond via Internet e-mail to any Internet correspondence which contains information subject to the confidentiality requirement as set forth in 35 U.S.C. 122. A paper copy of such correspondence will be placed in the appropriate patent application. The following is a sample authorization form which may be used by applicant:

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Any response to this action should be mailed to:

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/Radu Andrei/
Primary Examiner, AU 3682