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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
15/720,823	09/29/2017	Tomoaki Hirai	060518.04365	7018
27305	7590	10/25/2019	EXAMINER	
HOWARD & HOWARD ATTORNEYS PLLC 450 West Fourth Street Royal Oak, MI 48067			RADA, ALEX P	
			ART UNIT	PAPER NUMBER
			3715	
			NOTIFICATION DATE	DELIVERY MODE
			10/25/2019	ELECTRONIC

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):

IPDocket@HowardandHoward.com
dtrost@HowardandHoward.com

Office Action Summary	Application No. 15/720,823	Applicant(s) Hirai et al.	
	Examiner ALEX P RADA	Art Unit 3715	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 27 September 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) 1-20 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) 1-20 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

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Response to Amendment

In response to the amendment filed 27 September 2019 wherein applicant amends claims 1, 9, 17 and claims 1-20 are pending in this application.

Terminal Disclaimer

1. The terminal disclaimer filed on 27 September 2019 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of application number 15/720680 has been reviewed and is accepted. The terminal disclaimer has been recorded.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 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.

3. Claims 1-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to an abstract idea without significantly more. The claim(s) recite(s) “receive a signal from the user input device indicating a wager being placed by the player;” “initiate a skill contest game and display the skill contest game on the display device;” “determine a number of skill events being included in the skill contest game, each skill event including an image being displayed in a corresponding user input button for a predefined event time period;” “determine a reference point total as a function of the

number of skill events; “conduct a round of the skill contest game including displaying the skill events on the game screen in a sequential display pattern;” “detect a player touch operation associated with each skill event being displayed in a corresponding user input button and determine a timing period of each detected player touch operation;” “determine a total amount of base points associated with the detected player touch operations based on a corresponding timing period associated with each detected player touch operation;” “determine a normalized skill game point total based on the total amount of base points and the reference point total; determine an award as a function of the normalized skill game point total;” and adjust the credit balance based on the award.”

The limitations of “receive”, “initiate”, “determine”, “conduct”, “detect”, and “adjust” steps is a process that, under its broadest reasonable interpretation, covers performance of fundamental economic principles or practices (including hedging, insurance, mitigating risk) and managing person behavior or relationships or interactions between people (including social activities, teaching and following rules or instructions. That is, other than reciting “a processor,” nothing in the claim elements precludes the steps from being performed by generic computer components of a program that implements the rules and instruction of a game. If the claim limitations, under its broadest reasonable interpretation, covers performance of fundamental economic principles or practices (including hedging, insurance, mitigating risk) and managing person behavior or relationships or interactions between people (including social activities, teaching and following rules or instructions but for the recitation of generic computer components, then it falls within the “Certain Methods of Organizing Human Activity” grouping of abstract ideas.

This judicial exception is not integrated into a practical application. The claim recites an additional element using a processor to perform the “receive”, “initiate”, “determine”, “conduct”, “detect”, and “adjust” steps. The processor in the “receive”, “initiate”, “determine”, “conduct”,

“detect”, and “adjust” steps is recited at a high-level of generality such that it amounts no more than mere instructions to apply the exception using a generic computer component. The 2019 PEG (Revised Patent Subject Matter Eligibility Guidance) defines the phrase “integration into a practical application” to require an additional element or a combination of additional elements in the claim to apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that it is more than a drafting effort designed to monopolize the exception. Limitations that are indicative of integration into a practical application when recited in a claim with a judicial exception include:

- Improvements to the functioning of a computer, or to any other technology or technical field, as discussed in MPEP 2106.05(a);
- Applying or using a judicial exception to effect a particular treatment or prophylaxis for disease or medical condition — see *Vanda* Memo
- Applying the judicial exception with, or by use of, a particular machine, as discussed in MPEP 2106.05(b);
- Effecting a transformation or reduction of a particular article to a different state or thing, as discussed in MPEP 2106.05(c); and
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception, as discussed in MPEP 2106.05(e) and the *Vanda* Memo issued in June 2018.

Limitations that are not indicative of integration into a practical application when recited in a claim with a judicial exception include:

- Adding the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea, as discussed in MPEP 2106.05(f);
- Adding insignificant extra-solution activity to the judicial exception, as discussed in MPEP 2106.05(g); and

- Generally linking the use of the judicial exception to a particular technological environment or field of use, as discussed in MPEP 2106.05(h).

Accordingly, this additional element does not integrate the abstract idea into a practical application because it does not impose any meaningful limits on practicing the abstract idea.

The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception. The additional limitations of a display, computer generated graphical image, a user input, touch operation, computer-readable and storage media are considered to be extra-solution activity. Adding these generic computer elements to perform generic functions that are well-understood, routine and conventional, such as gathering data, performing calculations, and outputting a result as evidence by Alice Corp., 134 S. Ct. at 2355–56 (mere instruction to implement an abstract idea (game rules) on a computer "cannot impart patent eligibility), and *Versata Dev. Group, Inc. v. SAP Am.* (Storing and retrieving information in memory) see MPEP (2106.05(d)(II), does not transform the claims into eligible subject matter. Regarding the acceptor device and cashout device, as further evidence by Singer et al. (US Pub. No. 2004/0192431) in paragraph 21; and Kadlic (US 5,816,915) in col. 3, lines 35-59, discloses that a credit input mechanism (coins and bill acceptors) and ticket reader are conventional and well known in the art. Nothing in the claims, understood in light of the specification, requires anything other than off-the-shelf, conventional computer, network, and display technology for gathering, sending, and presenting the desired information. As discussed above with respect to integration of the abstract idea into a practical application, the additional element of using a processor to perform the “receive”, “initiate”, “determine”, “conduct”, “detect”, and “adjust” steps amounts to no more than mere instructions to apply the exception using a generic computer component. Mere instruction to apply an exception using a generic computer component cannot provide an inventive concept.

The dependent claims 2-8, 10-16 and 18-20 each recite a further step of the abstract game method that when taken as a whole fails to contribute significantly more because each is merely another step that merely defines another rule/instruction, may be carried out by hand or in the mind as part of the overall method without integration into a practical application to any particular machine or device, improvement to any particular machine or device, or contribution of substantially more than an abstract method and generic computer components.

Response to Arguments

4. Applicant's arguments filed 27 September 2019 have been fully considered but they are not persuasive.

Applicant contends that the claimed invention does not recite an abstract idea and a judicial exception.

The examiner respectfully disagrees. As noted above, the limitations of “receive”, “initiate”, “determine”, “conduct”, “detect”, and “adjust” steps is a process that, under its broadest reasonable interpretation, covers performance of fundamental economic principles or practices (including hedging, insurance, mitigating risk) and managing person behavior or relationships or interactions between people (including social activities, teaching and following rules or instructions. The “receive” step of indicating a wager being placed by the player covers fundamental economic principles or practices (including hedging, insurance, mitigating risk) and the “initiate”, “determine”, “conduct”, “detect”, and “adjust” steps is a program that implements the rules and instruction of a game, managing person behavior or relationships or interactions between people (including social activities, teaching and following rules or instructions. If the claim limitations, under its broadest reasonable interpretation, covers performance of fundamental economic principles or practices (including hedging, insurance, mitigating risk) of placing a wager to initiate play of a game and

managing person behavior or relationships or interactions between people (including social activities, teaching and following rules or instructions) of a program that implements the rules and instruction of a game, but for the recitation of generic computer components, then it falls within the “Certain Methods of Organizing Human Activity” grouping of abstract ideas.

This judicial exception is not integrated into a practical application. The processor in the “receive”, “initiate”, “determine”, “conduct”, “detect”, and “adjust” steps is recited at a high-level of generality such that it amounts no more than mere instructions to apply the exception using a generic computer component. The 2019 PEG (Revised Patent Subject Matter Eligibility Guidance) defines the phrase “integration into a practical application” to require an additional element or a combination of additional elements in the claim to apply, rely on, or use the judicial exception in a manner that imposes a meaningful limit on the judicial exception, such that it is more than a drafting effort designed to monopolize the exception. Limitations that are indicative of integration into a practical application when recited in a claim with a judicial exception include:

- Improvements to the functioning of a computer, or to any other technology or technical field, as discussed in MPEP 2106.05(a);
- Applying or using a judicial exception to effect a particular treatment or prophylaxis for disease or medical condition – see *Vanda* Memo
- Applying the judicial exception with, or by use of, a particular machine, as discussed in MPEP 2106.05(b);
- Effecting a transformation or reduction of a particular article to a different state or thing, as discussed in MPEP 2106.05(c); and
- Applying or using the judicial exception in some other meaningful way beyond generally linking the use of the judicial exception to a particular technological environment, such that the claim as a whole is more than a drafting effort designed to monopolize the exception, as discussed in MPEP 2106.05(e) and the *Vanda* Memo issued in June 2018.

Limitations that are not indicative of integration into a practical application when recited in a claim with a judicial exception include:

- Adding the words “apply it” (or an equivalent) with the judicial exception, or mere instructions to implement an abstract idea on a computer, or merely uses a computer as a tool to perform an abstract idea, as discussed in MPEP 2106.05(f);
- Adding insignificant extra-solution activity to the judicial exception, as discussed in MPEP 2106.05(g); and
- Generally linking the use of the judicial exception to a particular technological environment or field of use, as discussed in MPEP 2106.05(h).

Accordingly, this additional element does not integrate the abstract idea into a practical application because it does not impose any meaningful limits on practicing the abstract idea. The claims do not purport to improve the functioning of the computer itself or to improve any other technology or field. Use of an unspecified generic computer does not transform an abstract idea into a patent-eligible invention. Thus, the claims does not amount to significantly more than the abstract idea itself.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). 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 final 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 final 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 date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX P RADA whose telephone number is (571)272-4452. The examiner can normally be reached on M-F 8-5.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dmitry Suhol can be reached on (571) 272-4430. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A.P.R/
Examiner, Art Unit 3715

/Jay Trent Liddle/
Primary Examiner, Art Unit 3715

REMARKS

No new matter is added by this amendment. The present application was filed on September 29, 2017 with original claims 1-20. In the prior amendment, claims 1, 9, and 17 were amended. By this amendment, claims 1, 9, and 17 have been amended. The claims remaining in consideration are claims 1-20 of which claims 1, 9, and 17 are independent. Reconsideration is respectfully requested.

Rejections under 35 U.S.C. § 101

Claims 1-20 stand rejected under 35 U.S.C. §101 as being directed to an abstract idea without significantly more. This rejection is respectfully traversed.

Under the USPTO's 2019 Revised Patent Subject Matter Eligibility Guidance, 84 Fed. Reg. 50 (Jan. 7, 2019) (hereinafter "2019 Revised Guidance"), the Examiner should first look to whether the claim recites:

(1) any judicial exceptions, including certain groupings of abstract ideas (i.e., mathematical concepts, certain methods of organizing human activities such as a fundamental economic practice, or mental processes) (hereinafter "Step 2A, Prong 1"); and

(2) additional elements that integrate the judicial exception into a practical application (see MPEP § 2106.05(a)-(c), (e)-(h)) (hereinafter "Step 2A, Prong 2").

Only if a claim (1) recites a judicial exception and (2) does not integrate that exception into a practical application, should the Examiner then look to whether the claim

(3) adds a specific limitation beyond the judicial exception that is not "well-understood, routine, conventional" in the field (see MPEP § 2106.05(d)); or

(4) simply appends well-understood, routine, conventional activities previously known to the industry, specified at a high level of generality, to the judicial exception. *See* 2019 Revised Guidance.

In accordance with the 2019 Revised Guidance, the Examiner is required to determine whether the claims recite subject matter that fall within the following groupings of abstract ideas:

(a) **Mathematical concepts** - mathematical relationships, mathematical formulas or

equations, mathematical calculations;

(b) **Certain methods of organizing human activity** - fundamental economic principles or practices; commercial or legal interactions; managing personal behavior or relationships or interactions between people; and

(c) **Mental processes** – concepts performed in the human mind.

The Examiner asserts that the claimed invention is directed to a Method of Organizing Human Activity because it covers performance of fundamental economic principles or practices (including hedging, insurance, mitigating risk) and managing person behavior or relationships or interactions between people (including social activities, teaching and following rules or instructions).

The present claims have been amended to address the issues noted by the Examiner.

As discussed in the October 2019 Update on Subject Matter Eligibility, issued October 17, 2019, the *Certain Methods of Organizing Human Activity* group is limited to activity that falls within the enumerated sub-groupings of fundamental economic principles or practices, commercial or legal interactions, managing personal behavior, and relationships or interactions between people, and is not to be expanded beyond these enumerated sub-groupings except in rare circumstances as explained in Section III(C) of the 2019 PEG.

According to the 2019 PEG, “fundamental economic principles” or “fundamental economic practices” include subject matter relating to the economy and commerce, hedging, insurance, and mitigating risk. Examples of subject matter where the fundamental economic principles or fundamental economic practices is relating to the economy and commerce, hedging, insurance, and mitigating risk include:

- local processing of payments for remotely purchased goods, *Inventor Holdings, LLC v. Bed Bath & Beyond, Inc.*;
- using a marking affixed to the outside of a mail object to communicate information about the mail object, i.e., the sender, recipient, and contents of the mail object, *Secured Mail Solutions LLC v. Universal Wilde, Inc.*; and
- placing an order based on displayed market information, *Trading Technologies Int’l, Inc. v. IBG, LLC*.

The present invention does not define a system for local processing of payments for remotely purchased goods, using a marking affixed to the outside of a mail object to communicate information about the mail object, i.e. the sender, recipient, and contents of the mail object, or placing an order based on displayed market information. As such, the present invention does not define subject matter where the fundamental economic principle or practice is relating to the economy and commerce, hedging, insurance, or mitigating risk, and cannot be found to fall within the *Certain Methods of Organizing Human Activity* group, according to the 2019 PEG.

In addition, under the 2019 PEG, “managing personal behavior” or “relationships” or “interactions between people” include subject matter relating to social activities, teaching, and following rules or instructions. Examples of subject matter where managing personal behavior or relationships or interaction between people include:

- a set of rules for playing a dice game, *In re Marco Guldenaar Holding B.V.*;
- voting, verifying the vote, and submitting the vote for tabulation, *Voter Verified, Inc. v. Election Systems & Software LLC*;
- assigning hair designs to balance head shape, *In re Brown*; and
- a series of instructions of how to hedge risk, *Bilski v. Kappos*.

The present invention does not define a set of rules for playing a dice game, voting, verifying the vote, and submitting the vote for tabulation, assigning hair designs to balance head shape, or a series of instructions of how to hedge risk. As such, the present invention does not define subject matter managing personal behavior or relationships or interactions between people is social activities, teaching, or following rules or instructions, and cannot be found to fall within the *Certain Methods of Organizing Human Activity* group, according to the 2019 PEG.

In addition, under the 2019 PEG, in evaluating whether a claim recites an abstract idea, examiners should carefully consider the broadest reasonable interpretation of the claim in light of the specification. The examiner should review the specification to determine if the underlying claimed invention is described as a concept that is performed in the human mind and recites a mental process.

The present claims define a gaming machine that includes a display device that displays a game screen including a plurality of user input buttons and a user input device that includes a

touch button unit that is configured to transmit a signal indicating a player touch operation associated with each of the user input buttons. The controller of the gaming machine is programmed to conduct a round of the skill contest game including displaying skill events on the game screen, detect a player touch operation associated with each skill event via the touch button unit, and determine a timing period of each detected player touch operation. The controller is also programmed to determine a total amount of base points associated with the detected player touch operations based on a corresponding timing period, determine a normalized skill game point total based on the total amount of base points and the reference point total, and determine an award as a function of the normalized skill game point total.

For example, paragraphs [0066], [0070], [0073], and [0169]-[0171] describe, “*In the illustrated embodiment, the gaming machine 10 also includes a cabinet assembly 18 that is configured to support the display device 14, the user input device 16, and/or the gaming controller 12 from a gaming stand 20 and/or a supporting surface... The user input device 16 includes a player selection device 32 including a touch button unit 34 for receiving a player's selection... The touch button unit 34 includes a plurality of transparent touch buttons 46 that are positioned over a portion of the first display 26... In method step 1008, the gaming controller 12 conducts a round of the skill contest game 170 including displaying the skill events on the game screen in a sequential display pattern. For example, the gaming controller 12 may be programmed to select a musical soundtrack associated with the skill contest game and synchronize the display of the skill events in the sequential display pattern with the selected musical soundtrack. In method step 1010, the gaming controller 12 detects a player's touch operation associated with each displayed skill event marker 90 and determines a total amount of base points as a function of the detected touch operations . . . In method step 1012, the gaming controller 12 determines a normalized skill game point total as a function of the total amount of base points achieved by the player. For example, in one embodiment, the gaming controller 12 detects a player touch operation associated with each skill event, determines a total amount of base points associated with the detected player touch operations, and determines a normalized skill game point total based on the total amount of base points and the reference point total....”*

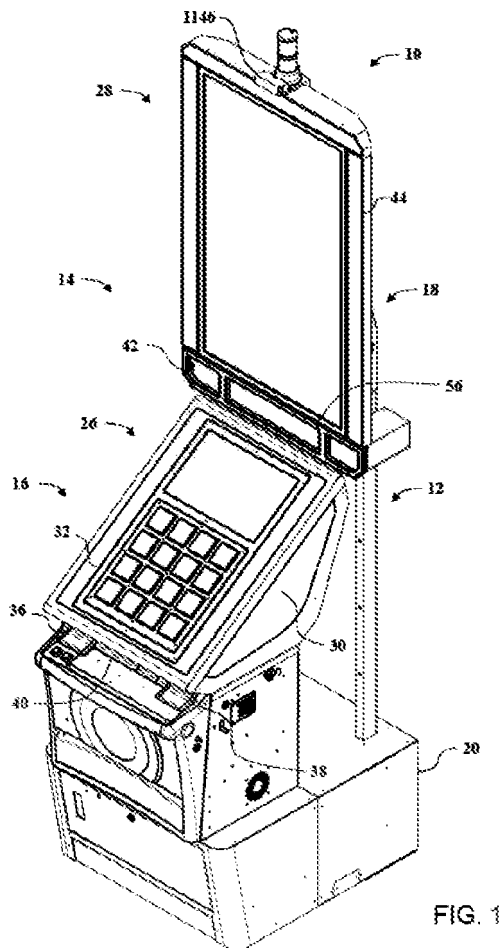


FIG. 1

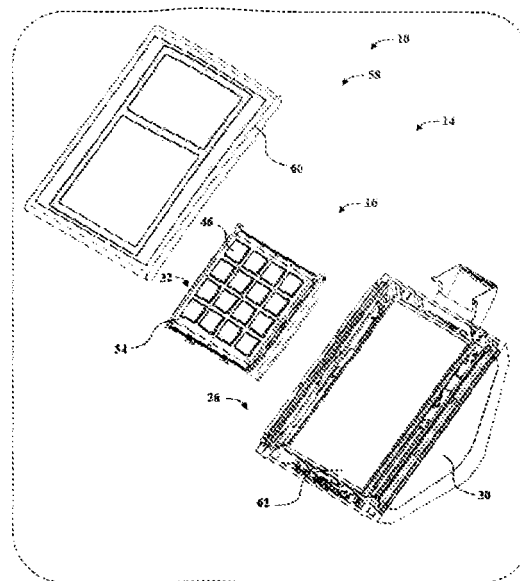
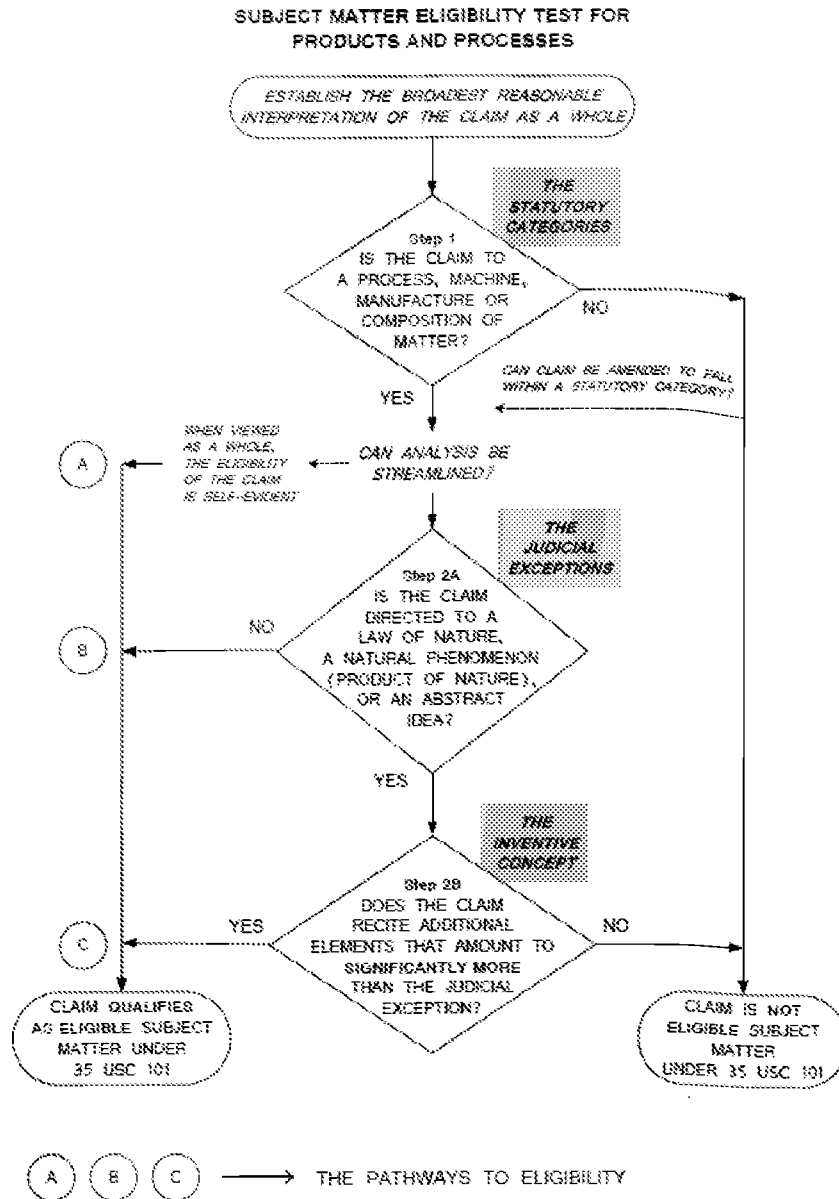


FIG. 6

Under the broadest reasonable interpretation of the claims in light of the specification, the present invention cannot be determined to recite concepts found to fall within the *Certain Methods of Organizing Human Activity* group, according to the 2019 PEG. Accordingly, the claimed invention does not fall within any of the enumerated groupings of abstract ideas.

In accordance with MPEP 2106 – Patent Subject Matter Eligibility, once the claimed invention has been determined to not fall within enumerated groupings of abstract ideas listed in the 2019 PEG, the claims qualifies as eligible subject matter under 35 U.S.C. § 101, shown as Pathway to Eligibility “B”, in the subject matter eligibility analysis flow chart presented below.



Accordingly, for at least the reasons set forth above, Applicant submits that claims 1-20 are eligible under 35 U.S.C. § 101, and requests the rejection under Section 101 be withdrawn.

Conclusion

All of the Examiner's objections and rejections having been successfully traversed and/or made moot, Applicant respectfully asserts that the present application is in condition for allowance. An early Notice of Allowance is respectfully solicited.

Inventor: Tomoaki Hirai *et al.*
Serial No: 15/720,823
Filed: September 29, 2017
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Applicant believes that no fees are due; however, if any become required, the Commissioner is hereby authorized to charge any additional fees or credit any overpayments to Deposit Account 08-2789.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS PLLC

January 27, 2020
Date

/Seaton J. Curran/
Seaton J. Curran, Registration No. 62,026
3800 Howard Hughes Parkway, Suite 1000
Las Vegas, Nevada 89169
(702) 667-4819

IN THE CLAIMS

1. (Currently Amended). A gaming machine for providing a skill-based wagering game to a player, comprising:

a display device configured to display a game screen including a plurality of user input buttons arranged in a matrix using computer generated graphical images;

a user input device including a player selection device, an acceptor device, and a cashout device, the player selection device including a touch button unit configured to generate and transmit a signal indicating a player touch operation associated with each of the user input buttons, the acceptor device configured to accept an item associated with a monetary value to establish a credit balance being increasable and decreasable based at least on wagering activity, the cashout device configured to receive an input to cause an initiation of a payout associated with the credit balance; and

a controller including a processor programmed to:

receive a signal from the user input device indicating a wager being placed by the player;

initiate a skill contest game and display the skill contest game on the game screen of the display device;

determine a number of skill events being included in the skill contest game, each skill event including an image being displayed in a corresponding user input button for a predefined event time period;

determine a reference point total as a function of the number of skill events;

conduct a round of the skill contest game including displaying the skill events on the game screen in a sequential display pattern;

detect a player touch operation associated with each skill event being displayed in a corresponding user input button via the touch button unit and determine a timing period of each detected player touch operation;

determine a total amount of base points associated with the detected player touch operations based on a corresponding timing period associated with each detected player touch operation;

determine a normalized skill game point total based on the total amount of base points and the reference point total;

determine an award as a function of the normalized skill game point total; and
adjust the credit balance based on the award.

2. (Original). The gaming machine of claim 1, wherein the award includes an amount of gaming credits, the controller is programmed to:

determine a ratio of gaming credits to skill game points; and
calculate the amount of gaming credits included in the award by multiplying the normalized skill game point total by the ratio of gaming credits to skill game points.

3. (Original). The gaming machine of claim 1, wherein the controller is programmed to:

calculate the normalized skill game point total by dividing the product of the total amount of base points and a predefined maximum skill game point total by the reference point total.

4. (Original). The gaming machine of claim 3, wherein the reference point total is a maximum total amount of base points associated with the skill contest game.

5. (Original). The gaming machine of claim 1, wherein the controller is programmed to:

select a musical soundtrack associated with the skill contest game; and
synchronize the display of the skill events in the sequential display pattern with the selected musical soundtrack.

6. (Original). The gaming machine of claim 5, further comprising:
a memory device including a plurality of music data files, each music data file being associated with a musical soundtrack and including a predefined number of skill events and a timing record including a predefined sequential display pattern, the controller programmed to:

receive a player's selection of the musical soundtrack and select a music data file associated with the selected musical soundtrack;

determine the number of skill events associated with the selected musical soundtrack; and

determine the reference point total as a function of the number of skill events associated with the selected musical soundtrack and a maximum base point amount associated with each skill event.

7. (Original). The gaming machine of claim 6, wherein the controller is programmed to:

display each skill event including an event time period having a plurality of consecutive operation timing periods, each operating timing period being associated with a predefined base point amount; and

for each skill event:

determine a consecutive operation timing period associated with the player touch operation;

determine a number of base points acquired during the skill event by determining the predefined base point amount associated with the determined consecutive operation timing period associated with the player touch operation; and

calculate the total amount of base points as the sum of the number of base points acquired for each skill event.

8. (Original). The gaming machine of claim 1, wherein the controller is programmed to:

initiate a primary skill-based wagering game upon receiving the wager from the player; randomly determine if a trigger condition occurs with the primary skill-based wagering game; and

initiate the skill contest game upon detecting the occurrence of the trigger condition.

9. (Currently Amended). A method of operating a gaming machine, the gaming machine including a display device, a user input device, and a controller including a processor, the method including the processor performing the steps of:

displaying a skill-based wagering game on the display device including a game screen including a plurality of user input buttons arranged in a matrix using computer generated graphical images;

receiving a signal from the user input device indicating a wager being placed by the player, the user input device including a player selection device, an acceptor device, and a cashout device, the player selection device including a touch button unit configured to generate and transmit a signal indicating a player touch operation associated with each of the user input buttons, the acceptor device configured to accept an item associated with a monetary value to establish a credit balance being increasable and decreasable based at least on wagering activity, the cashout device configured to receive an input to cause an initiation of a payout associated with the credit balance;

initiating a skill contest game and display the skill contest game on the game screen of the display device;

determining a number of skill events being included in the skill contest game, each skill event including an image being displayed in a corresponding user input button for a predefined event time period;

determining a reference point total as a function of the number of skill events;

conducting a round of the skill contest game including displaying the skill events on the game screen in a sequential display pattern;

detecting a player touch operation associated with each skill event being displayed in a corresponding user input button via the touch button unit and determining a timing period of each detected player touch operation;

determining a total amount of base points associated with the detected player touch operations based on a corresponding timing period associated with each detected player touch operation;

determining a normalized skill game point total based on the total amount of base points and the reference point total;

determining an award as a function of the normalized skill game point total; and

adjusting the credit balance based on the award.

10. (Original). The method of claim 9, wherein the award includes an amount of gaming credits, the method including the processor performing the steps of:

determining a ratio of gaming credits to skill game points; and

calculating the amount of gaming credits included in the award by multiplying the normalized skill game point total by the ratio of gaming credits to skill game points.

11. (Original). The method of claim 9, including the processor performing the steps of:

calculating the normalized skill game point total by dividing the product of the total amount of base points and a predefined maximum skill game point total by the reference point total.

12. (Original). The method of claim 11, wherein the reference point total is a maximum total amount of base points associated with the skill contest game.

13. (Original). The method of claim 9, including the processor performing the steps of:

selecting a musical soundtrack associated with the skill contest game; and

synchronizing the display of the skill events in the sequential display pattern with the selected musical soundtrack.

14. (Original). The method of claim 13, wherein the gaming machine includes a memory device including a plurality of music data files, each music data file being associated with a musical soundtrack and including a predefined number of skill events and a timing record including a predefined sequential display pattern, the method including the processor performing the steps of:

determining the number of skill events associated with the selected musical soundtrack;
and

determining the reference point total as a function of the number of skill events associated with the selected musical soundtrack and a maximum base point amount associated with each skill event.

15. (Original). The method of claim 14, including the processor performing the steps of:

displaying each skill event including an event time period having a plurality of consecutive operation timing periods, each operating timing period being associated with a predefined base point amount; and

for each skill event:

determining a consecutive operation timing period associated with the player touch operation;

determining a number of base points acquired during the skill event by determining the predefined base point amount associated with the determined consecutive operation timing period associated with the player touch operation; and

calculating the total amount of base points as the sum of the number of base points acquired for each skill event.

16. (Original). The method of claim 9, including the processor performing the steps of:

initiating a primary skill-based wagering game upon receiving the wager from the player; randomly determining if a trigger condition occurs with the primary skill-based wagering game; and

initiating the skill contest game upon detecting the occurrence of the trigger condition.

17. (Currently Amended). One or more non-transitory computer-readable storage media, having computer-executable instructions embodied thereon, wherein when executed by at least one processor, the computer-executable instructions cause the at least one processor to:

display a skill-based wagering game on a display device including a game screen including a plurality of user input buttons arranged in a matrix using computer generated graphical images;

receive a signal from a user input device indicating a wager being placed by the player, the user input device including a player selection device, an acceptor device, and a cashout device, the player selection device including a touch button unit configured to generate and transmit a signal indicating a player touch operation associated with each of the user input buttons, the acceptor device configured to accept an item associated with a monetary value to establish a credit balance being increasable and decreasable based at least on wagering activity, the cashout device configured to receive an input to cause an initiation of a payout associated with the credit balance;

initiate a skill contest game and display the skill contest game on the game screen of the display device;

determine a number of skill events being included in the skill contest game, each skill event including an image being displayed in a corresponding user input button for a predefined event time period;

determine a reference point total as a function of the number of skill events;

conduct a round of the skill contest game including displaying the skill events on the game screen in a sequential display pattern;

detect a player touch operation associated with each skill event being displayed in a corresponding user input button via the touch button unit and determine a timing period of each detected player touch operation;

determine a total amount of base points associated with the detected player touch operations based on a corresponding timing period associated with each detected player touch operation;

determine a normalized skill game point total based on the total amount of base points and the reference point total;

determine an award as a function of the normalized skill game point total; and

adjust the credit balance based on the award.

18. (Original). The one or more computer-readable storage media according to claim 17, wherein when executed by at least one processor, the computer-executable instructions cause the processor to:

determine a ratio of gaming credits to skill game points; and
calculate an amount of gaming credits included in the award by multiplying the normalized skill game point total by the ratio of gaming credits to skill game points.

19. (Original). The one or more computer-readable storage media according to claim 17, wherein when executed by at least one processor, the computer-executable instructions cause the processor to:

select a musical soundtrack associated with the skill contest game;
determine the number of skill events associated with the selected musical soundtrack; and
determine the reference point total as a function of the number of skill events associated with the selected musical soundtrack and a maximum base point amount associated with each skill event.

20. (Original). The one or more computer-readable storage media according to claim 19, wherein when executed by at least one processor, the computer-executable instructions cause the processor to:

synchronize the display of the skill events in the sequential display pattern with the selected musical soundtrack;

display each skill event including an event time period having a plurality of consecutive operation timing periods, each operating timing period being associated with a predefined base point amount; and

for each skill event:

determine a consecutive operation timing period associated with the player touch operation; and

determine a number of base points acquired during the skill event by determining the predefined base point amount associated with the determined consecutive operation timing period associated with the player touch operation; and

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Serial No: 15/720,823

Filed: September 29, 2017

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calculate the total amount of base points as the sum of the number of base points acquired for each skill event.