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Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
Row 1: 16/704,493, 12/05/2019, Patrick J. Rooney, 091212US06, 5472
Row 2: 39310, 7590, 03/02/2020, TRADING TECHNOLOGIES INTERNATIONAL, INC., (EXAMINER: NORMAN, SAMICA L)
Row 3: (ART UNIT: 3697, PAPER NUMBER)
Row 4: (NOTIFICATION DATE: 03/02/2020, DELIVERY MODE: 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):

docketing@mbhb.com
patentreporting@tradingtechnologies.com

Office Action Summary	Application No. 16/704,493	Applicant(s) Rooney, Patrick J.	
	Examiner SAMICA L NORMAN	Art Unit 3697	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 09 December 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) 2-12 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) 2-12 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)

3) Interview Summary (PTO-413)

Paper No(s)/Mail Date _____

2) Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)

4) Other: _____

Paper No(s)/Mail Date _____

Claim Rejections - 35 USC § 101

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.

Claims 2-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. 101 as covering non-statutory subject matter. A claim drawn to a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. 101 by adding the limitation “non-transitory” to the claim. Its not acceptable to just add “physical” or “tangible” - *Nuijten*'s ineligible signals were physical and tangible.

Double Patenting

A rejection based on double patenting of the “same invention” type finds its support in the language of 35 U.S.C. 101 which states that “whoever invents or discovers any new and useful process... may obtain a patent therefor...” (Emphasis added). Thus, the term “same invention,” in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the claims that are directed to the same invention so they are no longer

coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

Claims 2-12 is/are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 2-12 of prior U.S. Patent No. 10,540,718. This is a statutory double patenting rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMICA L NORMAN whose telephone number is (571)270-1371. The examiner can normally be reached on Mon-Thur 9:30am-8p EST, with Fri off.

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, Jerry O'Connor can be reached on (571) 272-6787. 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 <https://ppair-my.uspto.gov/pair/PrivatePair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-

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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.

SAMICA L. NORMAN
Primary Examiner
Art Unit 3697

/SAMICA L NORMAN/
Primary Examiner, Art Unit 3697

REMARKS

I. Summary of the Office Action

The Office Action dated March 2, 2020 (“the Office Action”) made the following objections and/or rejections, each of which is addressed in more detail below:

Claims 2-12 were rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claims 2-12 were rejected on the ground of statutory double patenting as claiming the same invention as U.S. Patent No. 10,540,718 (“the ‘718 patent”).

II. Related Applications

The Applicant understands that the Examiner reviews the claims and prosecution history of related applications as they contain common subject matter. To this end, the Applicant reminds the Examiner that the present application is related through a common claim of priority to U.S. Patent Application Serial Nos. 12/637,536 (now U.S. Patent No. 8,386,368), 13/746,151 (now U.S. Patent No. 8,498,927), 13/915,189 (abandoned), 14/451,465 (now U.S. Patent No. 9,990,676), and 15/962,516 (now U.S. Patent No. 10,540,718).

In addition, for the purposes of the present application, the Applicant hereby rescinds any disclaimer of claim scope that may have been (or may be) made during the prosecution of any related application. The Applicant respectfully requests examination of the instant claims according to the claim language in light of the prior art without importing statements made by the Applicant in the prosecution of any related application.

III. Status of the Claims

The present application includes claims 2-12. By this Response, claims 2-12 have been amended. The Applicant expressly reserves the right to pursue the subject matter of the previously presented claims in a continuing application. The Applicant respectfully submits that no new matter has been added by these amendments.

IV. Claim Rejections – 35 U.S.C. 101

The Applicant now turns to the rejection of claims 2-12 under 35 U.S.C. 101 as being directed to non-statutory subject matter. The Applicant respectfully disagrees that the examined claims were directed to non-statutory subject matter. However, to expedite prosecution, the Applicant has amended the pending claims to more clearly recite that they are directed to statutory subject matter. Therefore, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

V. Double Patenting

The Applicant now turns to the rejection of claims 2-12 on the ground of statutory double patenting as claiming the same invention as the '718 patent. The Applicant respectfully disagrees that a statutory double patent rejection is appropriate here. As discussed in MPEP 804(II)(A), “[s]ame invention’ means **identical** subject matter.” (emphasis added). The Applicant respectfully submits that the present claims recite a computer readable medium, whereas the claims of the '718 patent recite a method. That is, the present claims do not recite the same statutory class of invention, much less the “same invention,” as the claims of the '718 patent. For at least this reason, the Applicant respectfully requests reconsideration and withdrawal of this rejection.

To expedite prosecution (in anticipation of a subsequent non-statutory double patenting rejection), a terminal disclaimer is being submitted in conjunction with this Response with respect to the '718 patent.

VI. Conclusion

In general, the Office Action made various statements regarding the pending claims and the cited art that are now moot in light of the above. Thus, the Applicant will not address such statements at the present time. However, the Applicant expressly reserves the right to challenge such statements in the future should the need arise (for example, if such statements should become relevant by appearing in a rejection of any current or future claim).

All the stated grounds of objection and rejection have been respectfully traversed, accommodated, or rendered moot. The Applicant therefore submits that the present application

is in condition for allowance. If the Examiner believes that further dialogue would expedite consideration of the application, the Examiner is invited to contact Trading Technologies in-house Patent Counsel Adam Faier at 312-698-6003.

Respectfully submitted,
Trading Technologies International, Inc.

Date: July 1, 2020

By: /Adam J. Faier/
Adam J. Faier
Reg. No. 56,898

AMENDMENTS TO THE CLAIMS

The following is a complete listing of the claims:

1. (Cancelled)
2. (Currently Amended) A **non-transitory** computer readable medium having stored therein instructions executable by a processor, including instructions executable to:
 - receive, via a data receiver of an electronic computing device, market data identifying an inside market for a first tradeable object and a second tradeable object;
 - receive, via a graphical user interface of the electronic computing device, a user request to trade a synthetic spread order for a quantity of a synthetic spread, the synthetic spread including a quoting leg for a first tradeable object and a hedge leg for a second tradeable object;
 - submit, in response to receiving the user request via the graphical user interface, via the electronic computing device to an electronic exchange, a quoting order for the first tradeable object;
 - submit, in response to receiving at the electronic computing device confirmation of a fill of at least part of the quoting order, via the electronic computing device to the electronic exchange, a hedge order for the second tradeable object;
 - determine, via the electronic computing device, whether the synthetic spread order has a filled leg and an unfilled leg, where the hedge order is unfilled and the quoting order is filled;
 - determine, via the electronic computing device, whether the inside market for the first tradeable object has moved a predetermined amount according to monitoring the market data for the inside market for the first tradeable object;
 - submit, in response to determining that the inside market has moved the predetermined amount and that the synthetic spread order has the filled leg and the unfilled leg, via the electronic computing device to the electronic exchange, a bracket order for the first tradeable object; and
 - display, via the graphical user interface, an order descriptor representing a status of the synthetic spread order.

3. (Currently Amended) The **non-transitory** computer readable medium of claim 2 where the unfilled leg comprises at least one child hedge order for the first tradeable object.

4. (Currently Amended) The **non-transitory** computer readable medium of claim 3 where the at least one child hedge order comprises at least a partial quantity pending execution at an electronic exchange.

5. (Currently Amended) The **non-transitory** computer readable medium of claim 4 further comprising instructions executable to submit an order message to the electronic exchange in response to execution of the bracket order, where the order message is configured to cancel the at least one child hedge order.

6. (Currently Amended) The **non-transitory** computer readable medium of claim 2 where the bracket order comprises any one of a cover order and an order-cancels-order.

7. (Currently Amended) The **non-transitory** computer readable medium of claim 2 where a price for the bracket order is determined according to a position associated with the filled leg.

8. (Currently Amended) The **non-transitory** computer readable medium of claim 7 where the position associated with the filled leg is an open position.

9. (Currently Amended) The **non-transitory** computer readable medium of claim 7 further comprising instructions executable to determine the price according to a user request.

10. (Currently Amended) The **non-transitory** computer readable medium of claim 2 further comprising instructions executable to submit the bracket order in response to determining that the inside market has moved a predetermined amount after identifying the synthetic spread order.

11. (Currently Amended) The **non-transitory** computer readable medium of claim 2 further comprising instructions executable to determine that the inside market has moved the predetermined amount and submit the bracket order according to a defined parent-child relationship for the synthetic spread order.

12. (Currently Amended) The **non-transitory** computer readable medium of claim 2 further comprising instructions executable to submit the bracket order at a predetermined amount of time after determining that the synthetic spread order includes the filled leg and the unfilled leg.