Title: AUTHORIZATION OF A TRADING STRATEGY ALGORITHM

[Continued on next page]
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(88) Date of publication of the international search report: 29 November 2012
**INTERNATIONAL SEARCH REPORT**

**A. CLASSIFICATION OF SUBJECT MATTER**

<table>
<thead>
<tr>
<th>IPC(8)</th>
<th>USPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>G06Q 40/04 (2012.01)</td>
<td>705/37</td>
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</table>

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

<table>
<thead>
<tr>
<th>IPC (8)</th>
<th>USPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>G06F 21/00; G06Q 40/00</td>
<td>705/35, 56, 37, 317, 726/26</td>
</tr>
</tbody>
</table>

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Google Patents, Google, Orbit

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>

Further documents are listed in the continuation of Box C.

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**Date of the actual completion of the international search**

28 August 2012

**Date of mailing of the international search report**

14 SEP 2012

**Name and mailing address of the ISA/US**

Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

**Authorized officer:**

Blaine R. Copenhaver

PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)
### Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. □ Claims Nos.:
   - because they relate to subject matter not required to be searched by this Authority, namely:

2. □ Claims Nos.:
   - because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. □ Claims Nos.:
   - because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

### Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See extra sheet.

1. □ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. □ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. □ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ✗ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
   - 1-22

#### Remark on Protest

- □ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- □ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- □ No protest accompanied the payment of additional search fees.
Continuation of Box III.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I: claims 1-22, drawn to a method and tangible computer readable storage medium comprising instructions that when executed cause a computing device to receive a trading algorithm definition corresponding to a trading algorithm; receiving a user input authorizing the trading algorithm definition to be executed on an algorithm server operable to execute programming code representing the trading algorithm; and sending a unique/identifier corresponding to the trading algorithm definition, the unique identifier to be associated with the programming code representing the trading algorithm and with a trader authorized to execute the programming code.

Group II, claims 23-29, drawn to a method and tangible computer readable storage medium comprising instructions that when executed cause a computing device to accept/store a received approved trading algorithm, a received trader identifier and a received authorization identifier; determine whether the authorization identifier corresponds to at least one of the trader identifier or a unique identifier; if the authorization identifier corresponds to the trader identifier or the unique identifier, execute programming code representing the approved trading algorithm and rejecting the programming code and sending a notification indicating the programming code was not executed if the authorization identifier does not correspond to the trader identifier or unique identifier.

The inventions listed as Groups I-II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention: receive a trading algorithm definition corresponding to a trading algorithm; receiving a user input authorizing the trading algorithm definition to be executed on an algorithm server operable to execute programming code representing the trading algorithm; and sending a unique identifier corresponding to the trading algorithm definition, the unique identifier to be associated with the programming code representing the trading algorithm and with a trader authorized to execute the programming code as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: accept/store a received approved trading algorithm, a received trader identifier and a received authorization identifier; determine whether the authorization identifier corresponds to at least one of the trader identifier or a unique identifier; if the authorization identifier corresponds to the trader identifier or the unique identifier, execute programming code representing the approved trading algorithm and rejecting the programming code and sending a notification indicating the programming code was not executed if the authorization identifier does not correspond to the trader identifier or unique identifier as claimed therein is not present in the invention of Groups I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of a computing device associating an unique identifier corresponding to an approved trading algorithm; programming code to be executed representing the trading algorithm, this technical feature is not a special technical feature as it does not make a contribution over the prior art in view of US 7,702,571 B2 (JANOWSKI et al) 20 April 2010 (20.04.2010) figures 1-2B; column 8, line 65 through column 10, line 12.

Since none of the special technical features of the Group I or II inventions are found in more than one of the inventions, unity of invention is lacking.