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(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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[Continued on next page]

(54) Title: SERVER-MANAGED, TRIGGERED DEVICE ACTIONS

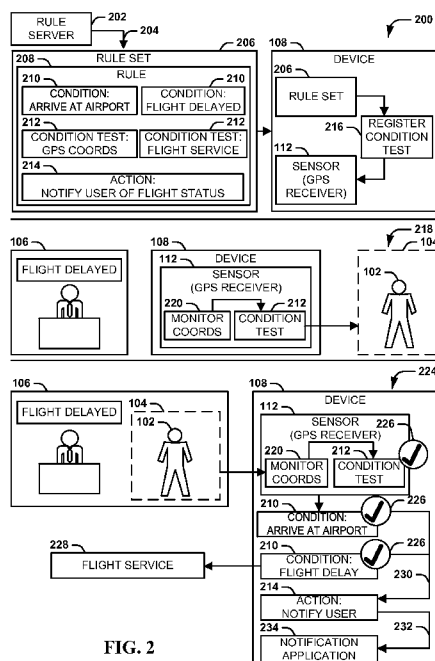


FIG. 2

(57) **Abstract:** In some scenarios, devices may execute applications that are configured to monitor a set of conditions (e.g., geographic coordinates detected by global positioning system (GPS) receivers), and to execute actions upon detecting the fulfillment of the conditions. However, in such architectures, each application may be responsible for polling the sensors of the device to detect condition fulfillment, and it may be difficult to specify rules in a hardware-independent manner involving multiple applications and/or devices. Presented herein are techniques for configuring devices to perform actions by receiving a rule set from a rule server; registering a set of condition tests for respective conditions of a rule with the sensors of the device; upon being notified by the sensor that a condition test has been fulfilled, evaluating the conditions of the rule; and upon determining a fulfillment of the conditions, executing one or more actions (optionally involving multiple devices and/or applications).

**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*
- *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))*

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 14/42214

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - G06N 5/02 (2015.01)

CPC - G06N5/04

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)

CPC: G06N5/04; IPC(8): G06N 5/02 (2015.01); USPC: 706/47

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

USPC: 706/47, 340/539.26, 340/517

CPC: G06N5/02, G06N5/025, G06N5/04, G06Q10/10, G06Q10/06, G06N5/022 (keyword limited, see below)

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

PatBase, Google Web, Google Patents

Search terms: device, action, rule, server, sensor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2012/0158161 A1 (Cohn et al.) 21 June 2012 (21.06.2012), entire document, especially abstract, para [0048]-[0050], [0088], [0090], [0092], [0094]-[0099], [0007], [0009], [0011], [0030], [0033].	1-10
A	US 2012/0011233 A1 (Dixon et al.) 12 January 2012 (12.01.2012), entire document.	1-10
A	US 2006/0063518 A1 (Paddon et al.) 23 March 2006 (23.03.2006), entire document.	1-10

☐ Further documents are listed in the continuation of Box C.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

05 June 2015 (05.06.2015)

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