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- (71) **Applicant:** SYMBOL TECHNOLOGIES, INC.
[US/US]; One Motorola Plaza, Holtsville, NY 11742 (US).
- (72) **Inventors:** JAIN, Binit; 1318 E. Algonquin Road, Schaumburg, Illinois 60173 (US). EKL, Randy L.; 930 Lancaster Lane, Lake Zurich, Illinois 60047 (US). GRIESMANN, Daniel S.; 124 South Michigan Avenue, Villa Park, Illinois 60181 (US).
- (74) **Agents:** SMITH, Terri et al.; Symbol Technologies, Inc., One Motorola Plaza, Holtsville, NY 11742 (US).

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(54) **Title:** RFID-BASED INVENTORY MONITORING SYSTEMS AND METHODS WITH SELF-ADJUSTING OPERATIONAL PARAMETERS

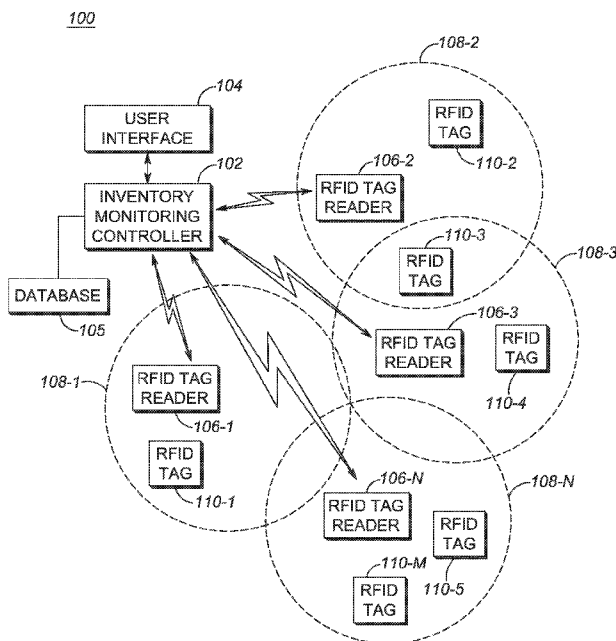


FIG. 1

(57) **Abstract:** An inventory monitoring controller maintains information reflecting a current inventory of articles based on radio frequency identification (RFID) tag identifying information received from one or more RFID tag readers in the context of inventory polling operations. In an embodiment, the controller also adjusts an operational parameter (e.g., a missing article detection threshold or a variable polling parameter) based on an analysis of the RFID tag identifying information. For example, a variable polling parameter may be adjusted in response to an occurrence of a triggering event (e.g., an inventory change indicated by the RFID tag identifying information or an occurrence of a temporal event), and a missing article detection threshold may be adjusted based on historical information relating to the detection of (or failure to detect) a particular RFID tag.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - H04Q 5/22; G06Q 10/08 (2014.01)

CPC - G06K 7/10009, G06Q 10/087, G06K 7/00, G06K 7/10039

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)

IPC(8): H04Q 5/22; G06Q 10/08 (2014.01)

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

IPC(8): H04Q 5/22; G06Q 10/08 (2014.01)

CPC: G06K 7/10009, G06Q 10/087, G06K 7/00, G06K 7/10039, G06K 7/0008; USPC: 340/10.1, 705/28, 340/5.92 (see terms below)

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

PatBase, PubWEST, Google Scholar Search terms used: RFID, scan, poll, read, SKU, tag, SKU, historic, manufacturer, brand, color, sex, gender, size, design, type, misplaced, wrongly, incorrectly, placed, located, locations, rank, sort, order, exist, time, period, suggest, desired, candidate, intended, determine, notify

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/0216969 A1 (Bauer et al.) 20 November 2003 (20.11.2003), entire document, especially fig. 1-2, para [0026], [0029]-[0032], [0035]-[0036], [0040]-[0043], [0046]-[0053], [0090], [0101]-[0103], [0111], [0133], [0145], [0168], [0193]-[0197], [0211]-[0212].	1-17
X	US 2012/0161967 A1 (Stern) 28 June 2012 (28.06.2012), entire document, especially fig. 1-3, para [0016]-[0018], [0021], [0024], [0051]-[0054], [0084]-[0088], [0094], [0097]-[0099].	1-17
A	US 2009/0231135 A1 (Chaves et al.) 17 September 2009 (17.09.2009), entire document, especially fig. 1, para [0002], [0022]-[0024], [0031]-[0035], [0043]-[0045], [0038]-[0042], [0052], [0057]-[0059], [0070], [0081], [0084]-[0085], [0088], [0093], [0098]	1-17
A	US 2009/0222129 A1 (Waddington et al.) 03 September 2009 (03.09.2009), entire document	1-17

☐ 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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"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

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Facsimile No. 571-273-3201

Authorized officer:

Lee W. Young

PCT Helpdesk: 571-272-4300

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