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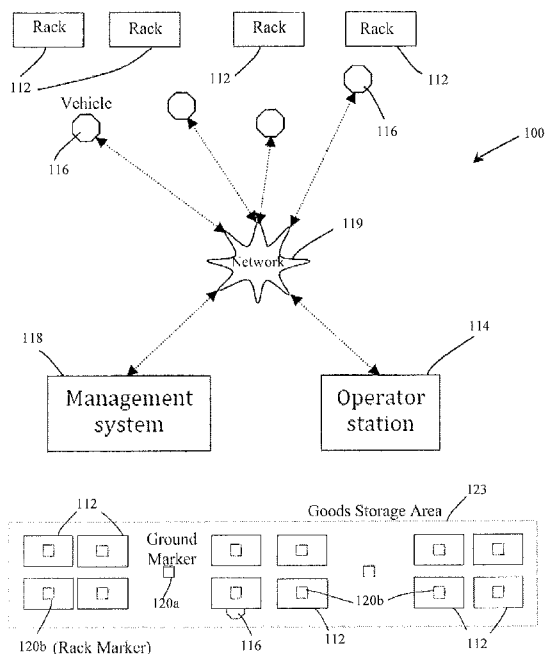
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[Continued on next page]

(54) **Title:** METHOD OF MANAGING RESOURCES IN A WAREHOUSE



(57) **Abstract:** Described herein is an apparatus and method for selecting a storage location for an item. The method includes obtaining order information for a plurality of previously fulfilled orders, wherein each order includes at least one item. Based on the obtained order information, one or a combination of an affinity value of the item and a popularity value of the item are computed. The method determines available storage locations in a plurality of storage racks, each rack including at least one shelf. Further, the method computes for each available storage location, one or a combination of an affinity score and a popularity score of the storage rack with respect to the item. The method selects the storage location from the available storage locations based on at least one of the calculated affinity score and the calculated popularity score, and instructs a vehicle to store the item at the selected storage location.

Fig. 1

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A. CLASSIFICATION OF SUBJECT MATTER
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 CPC - B65G1/137, 65/005; G06Q10/087

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)

See Search History document

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

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

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 8,001,141 B1 (BAR, T) 16 August 2011; figures 1-3; column 4, lines 30-34; column 4, line 51 to column 5, line 14; claims 1, 20	1-21
Y	WO 2014/077819 A1 (AMAZON TECHNOLOGIES, INC.) 22 May 2014; abstract; paragraphs [0016], [0017], [0020], [0021], [0026], [0028], [0066], [0067], [0069], figures 1-4, 9	1-21
Y	US 8,645,221 B1 (SARMA, S) 04 February 2014; column 5, lines 18-38; column 7, lines 3-16	2, 9, 16
Y	US 2015/0248538 A1 (DENTSPLY IMPLANTS NV) 03 September 2015; abstract; figure 6; paragraphs [0033], [0055]; claims 30, 31	3, 4, 10, 11, 17, 18
Y	US 2009/0202155 A1 (HAYASHI, T et al.) 13 August 2009; figure 5; paragraphs [0132]-[0136]	4, 11, 18
Y	US 2005/0102186 A1 (BUIL, V) 12 May 2005; figure 6; paragraphs [0026], [0045]	5, 12, 19
Y	US 2015/0032498 A1 (BEIJING JINGDONG CENTURY TRADING CO., LTD.) 29 January 2015; abstract; paragraphs [0001], [0003], [0006]	6, 13, 20
Y	US 2011/0276364 A1 (BERGSTROM, J) 10 November 2011; figure 8; paragraphs [0101], [0104]	7, 14, 21

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