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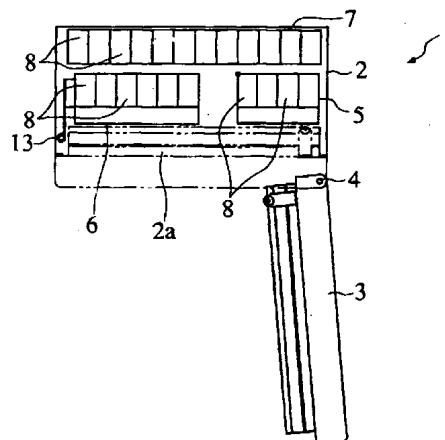
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(54) Automatic vending machine

(57) In an automatic vending machine which comprises a vending machine main body 2 for storing a commodity rack 5 incorporating a plurality of commodity racks 8 and a body door 3 for opening or closing a front opening 2a in the vending machine main body 2 through a hinge 4, the commodity rack 5 being arranged close to the interior surface on the hinge 4 side of the vending machine main body 2, the commodity rack 5 can turn obliquely forward with a portion on a side opposite to the hinge 4 as a center when the body door 3 is open. Therefore, the automatic vending machine can improve the work efficiency of loading commodities without reducing the storage capacity of commodities.

Fig. 1A





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EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT | | | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
|--|---|---|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | |
| X, P | PATENT ABSTRACTS OF JAPAN vol. 97, no. 1, 31 January 1997 & JP 08 235432 A (KUBOTA CORP), 13 September 1996 * abstract; figures 1-4 * | 1-3 | G07F11/04 G07F9/10 |
| Y, P A | --- | 4 5 | |
| Y | PATENT ABSTRACTS OF JAPAN vol. 15, no. 33 (P-1158), 25 January 1991 & JP 02 271491 A (SANYO ELECTRIC CO LTD), 6 November 1990 * abstract; figures 1-3 * | 4 | |
| A | --- | 1 | |
| X | PATENT ABSTRACTS OF JAPAN vol. 17, no. 435 (P-1590), 11 August 1993 & JP 05 089342 A (SANYO ELECTRIC CO LTD), 9 April 1993 * abstract; figures 3-7 * | 1-4 | |
| X A | US 3 756 362 A (PEARCE) 4 September 1973 * column 2, line 26 - column 3, line 35; figures 1-3 * | 1,2 3-5 | TECHNICAL FIELDS SEARCHED (Int.Cl.6) |
| X | PATENT ABSTRACTS OF JAPAN vol. 17, no. 435 (P-1590), 11 August 1993 & JP 05 089352 A (FUJI ELECTRIC CO LTD), 9 April 1993 * abstract; figures 1A-3 * | 1,2 | G07F |
| A | --- | 3-5 | |
| A, P | PATENT ABSTRACTS OF JAPAN vol. 96, no. 12, 26 December 1996 & JP 08 221652 A (SANYO ELECTRIC CO LTD), 30 August 1996 * abstract; figures 2,3 * | 1,4 | |
| The present search report has been drawn up for all claims | | | |
| Place of search | Date of completion of the search | Examiner | |
| THE HAGUE | 26 March 1999 | Rivero, C | |
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ON EUROPEAN PATENT APPLICATION NO.**

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| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| US 3756362 A | 04-09-1973 | NONE | |