

Title (en)  
coin handling apparatus.

Title (de)  
Vorrichtung zur Behandlung von Münzen.

Title (fr)  
Dispositif pour le traitement de pièces de monnaie.

Publication  
**EP 0167181 A2 19860108 (EN)**

Application  
**EP 85110175 A 19820929**

Priority  
• EP 82305167 A 19820929  
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Abstract (en)  
A microprocessor-controlled coin handling apparatus, for example for a vending machine, has a plurality of change tubes (22, 24, 26) each of which is provided with a single level sensor (150, 152) for determining whether or not the number of coins in the respective tube (22, 24, 26) is greater than a predetermined number. The microprocessor (50) keeps a count of the coins in the tube (22, 24, 26). When the power is turned on, the count is set to zero if the sensor (150, 152) indicates that the number of coins is less than the predetermined number, and is set to a predetermined "full" number (FULNUM) otherwise. The microprocessor (50) increments and decrements the counts as coins are delivered to and dispensed from the change tubes (22, 24, 26). Whenever the level of coins rises or falls such that the sensor output changes, the coin count is automatically corrected. Also disclosed is a non-volatile memory (60) for storing parameters determining how the coins are handled. Keys (102, 104, 106) are provided for accessing and altering the contents of the memory (60). Some contents are accessible in a first mode, whereas other contents are inaccessible in this mode, and require a second or third access mode to be entered. At least one location can be altered in a first manner during one of the access modes, and in a second manner only during a different access mode.

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IPC 8 full level  
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CPC (source: EP)  
**G07F 5/24** (2013.01); **G07F 9/08** (2013.01)

Citation (applicant)  
• GB 1582691 A 19810114 - MARS INC  
• GB 2006501 A 19790502 - MARS INC  
• US 4056181 A 19771101 - IKEGUCHI SHIGEHICO, et al  
• EP 0076640 A1 19830413 - MARS INC [US]

Cited by  
EP0689171A3; US5499944A; US5380242A; EP0557960A3; WO2004013818A1; WO9403874A1; WO9411848A1

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