

Title (en)

Paper sheet storing apparatus, paper sheet handling system, and automatic teller machine

Title (de)

Einzelblattaufbewahrungsvorrichtung, Einzelblatthandhabungssystem und Geldautomat

Title (fr)

Appareil de stockage de feuille de papier, système de manipulation de feuille de papier, et distributeur automatique

Publication

EP 2043059 A3 20091118 (EN)

Application

EP 08011250 A 20080620

Priority

JP 2007253220 A 20070928

Abstract (en)

[origin: EP2043059A2] A cash circulation cartridge 130a included in an automatic teller machine 100 has a storage cartridge 137, a feed-in mechanism configured to convey bills 10 into the storage cartridge 137, and a hitting member 136. The feed-in mechanism includes a pair of conveyor guides 131g1 and 131g2, a pair of conveyor rollers 131r1 and 131r2, feed rollers 132, pinch rollers 133, and gate rollers 134. When each of the bills 10 is conveyed to the storage cartridge 137 by the feed-in mechanism, the hitting member 136 comes into contact with a front end of the bill 10 to be lifted up. When a rear end of the bill 10 enters a space for accumulation of the bills 10, the hitting member 136 hits the rear end of the bill 10 and thereby drops the bill 10 down in the storage cartridge 137. The hitting member 136 is arranged to come into contact with substantially the whole length of the conveyed bill 10 in its longitudinal direction, while hitting the rear end of the bill 10 and dropping the bill 10 down in the storage cartridge 137. This arrangement effectively reduces the potential for paper jams of the bills 10 and relevant troubles and ensures stable accumulation of the bills 10 in the cash circulation cartridge 130a.

IPC 8 full level

G07D 11/00 (2006.01); **B65H 29/14** (2006.01); **B65H 31/10** (2006.01)

CPC (source: EP)

B65H 29/14 (2013.01); **B65H 29/52** (2013.01); **B65H 83/025** (2013.01); **G07D 11/13** (2018.12); **G07D 11/50** (2018.12);
B65H 2301/4435 (2013.01); B65H 2404/63 (2013.01); B65H 2701/1313 (2013.01); B65H 2701/1912 (2013.01)

Citation (search report)

- [XI] EP 1320081 A2 20030618 - MARS INC [US]
- [X] EP 1302425 A2 20030416 - MARS INC [US]
- [A] US 5553840 A 19960910 - ARIKAWA JUNICHI [JP]

Cited by

EP2251840A1; CN113450494A; WO2011086156A1; US10221032B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2043059 A2 20090401; **EP 2043059 A3 20091118**; CN 101397102 A 20090401; CN 101397102 B 20120718; JP 2009083956 A 20090423;
JP 5072517 B2 20121114

DOCDB simple family (application)

EP 08011250 A 20080620; CN 200810128829 A 20080620; JP 2007253220 A 20070928