

Title (en)

Magnetic sensor and bill validator using the same

Title (de)

Magnetischer Sensor und damit ausgestattete Banknotenüberprüfungsvorrichtung

Title (fr)

Capteur magnétique et dispositif de validation de billets de banque utilisant ce capteur

Publication

EP 1258841 A3 20040107 (EN)

Application

EP 02010180 A 20020514

Priority

- JP 2001146215 A 20010516
- JP 2002066472 A 20020312

Abstract (en)

[origin: EP1258841A2] A highly sensitive magnetic sensor and a bill validator using the magnetic sensor are disclosed. The magnetic sensor is provided with an artificial-lattice MR (magnetic resistor) element formed on a board. The artificial-lattice MR element and wiring terminals, coupled to the artificial-lattice MR element, are integrated in a housing with resin. Moreover, a magnet is mounted in a hollow at the back of the board in the housing to provide a plane of artificial-lattice MR element with an auxiliary magnetic field perpendicularly.

IPC 1-7

G07D 7/04; **G01R 33/09**

IPC 8 full level

G01N 27/72 (2006.01); **G07D 7/04** (2006.01)

CPC (source: EP US)

G07D 7/04 (2013.01 - EP US)

Citation (search report)

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- [X] WO 0079298 A2 20001228 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- [Y] US 4973851 A 19901127 - LEE LARRY F [US]
- [A] EP 0863406 A2 19980909 - ALPS ELECTRIC CO LTD [JP]
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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

EP 1258841 A2 20021120; **EP 1258841 A3 20040107**; **EP 1258841 B1 20080416**; CN 1178175 C 20041201; CN 1385816 A 20021218; DE 60226092 D1 20080529; DE 60226092 T2 20090702; ES 2304406 T3 20081016; JP 2003035701 A 20030207; JP 3603872 B2 20041222

DOCDB simple family (application)

EP 02010180 A 20020514; CN 02119798 A 20020516; DE 60226092 T 20020514; ES 02010180 T 20020514; JP 2002066472 A 20020312