

Title (en)
DEVICE FOR SORTING DIFFERENT MATERIALS WITH THE AID OF A CONVEYOR BELT AND AN ELECTROMAGNETIC ACTUATOR

Title (de)
SORTIEREINRICHTUNG UNTERSCHIEDLICHER STOFFE MIT HILFE EINES TRANSPORTBANDES UND EINES ELEKTROMAGNETISCHEN STELLGLIEDS

Title (fr)
DISPOSITIF POUR TRIER DIFFERENTES MATIERES A L'AIDE D'UNE COURROIE TRANSPORTEUSE ET D'UN ACTIONNEUR ELECTROMAGNETIQUE

Publication
EP 1685641 A1 20060802 (DE)

Application
EP 04797990 A 20041118

Priority

- EP 2004013108 W 20041118
- DE 10354777 A 20031121

Abstract (en)
[origin: WO2005050823A1] The invention relates to a device for sorting different materials, comprising a conveyor belt (30), at least one sensor (37) that is allocated to the conveyor belt (30) and detects pieces of material according to the location thereof on the conveyor belt (30), and at least one actuator (24) which separates pieces of material in accordance with signals of the at least one sensor (37). The inventive sorting device is characterized in that an electromagnetic actuator (24) is used which encompasses an ejecting part (15) that is rotatable about a pin and is connected to at least one coil (10). Said coil (10) is located in the air gap between two couples of permanent magnets (8, 9, 22) and can be rotated from a zero position between the first oppositely magnetized couple (8) into a second position between the second oppositely magnetized couple (9). The ejecting part (15) separates the respective pieces of material with the aid of a rotational movement of the coil (10).

IPC 8 full level
H02K 33/18 (2006.01); **B07C 5/344** (2006.01); **B07C 5/36** (2006.01); **B65G 47/38** (2006.01); **B65G 47/42** (2006.01); **B65G 47/44** (2006.01); **B65G 47/48** (2006.01); **B65G 47/50** (2006.01); **B65G 47/82** (2006.01); **H02K 41/035** (2006.01)

CPC (source: EP US)
B07C 5/344 (2013.01 - EP US); **B07C 5/36** (2013.01 - EP US); **B65G 47/50** (2013.01 - EP US); **B65G 47/766** (2013.01 - EP US); **H02K 41/0358** (2013.01 - EP US)

Citation (search report)
See references of WO 2005050823A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005050823 A1 20050602; AU 2004311216 A1 20050602; AU 2004311216 B2 20100325; CN 1906829 A 20070131; CN 1906829 B 20110309; DE 10354777 A1 20050630; DE 10354777 B4 20080327; EP 1685641 A1 20060802; JP 2007513750 A 20070531; JP 5214882 B2 20130619; US 2007102325 A1 20070510

DOCDB simple family (application)
EP 2004013108 W 20041118; AU 2004311216 A 20041118; CN 200480040730 A 20041118; DE 10354777 A 20031121; EP 04797990 A 20041118; JP 2006540328 A 20041118; US 57960104 A 20041118