

Title (en)

DEVICE AND PROCESS FOR SEPARATING PARTICLES WITH A ROTARY MAGNET SYSTEM

Title (de)

VORRICHTUNG UND VERFAHREN ZUR TEILCHENSEPARATION MIT EINEM ROTIERENDEN MAGNETSYSTEM

Title (fr)

PROCEDE ET DISPOSITIF DE SEPARATION DE PARTICULES AVEC UN SYSTEME MAGNETIQUE ROTATIF

Publication

**EP 0898496 A1 19990303 (DE)**

Application

**EP 97929147 A 19970517**

Priority

- DE 19619760 A 19960517
- DE 19634802 A 19960829
- EP 9702536 W 19970517

Abstract (en)

[origin: US2002144934A1] An apparatus for separating mixed particles divides the material to be sorted into constituent fractions comprising non-ferromagnetic particles of different electrical conductance. The particles are fed onto a conveyor, e.g. a conveyor belt that linearly moves the particles in a given direction. A rotating magnetic system is arranged below and/or above the conveyor belt. The rotary direction of the magnetic system is chosen so that the direction of movement of the surface of the magnetic system and the direction of movement of the surface of the conveyor belt are different. The fractions of non-ferromagnetic particles that are electrically charged to varying degrees are thereby divided between a plurality of collecting containers.

IPC 1-7

**B03C 1/247**

IPC 8 full level

**B03C 1/23** (2006.01); **B03C 1/247** (2006.01)

CPC (source: EP US)

**B03C 1/247** (2013.01 - EP US); **B03C 2201/20** (2013.01 - EP US)

Citation (search report)

See references of WO 9744137A1

Cited by

DE102009056717A1; WO2011067402A1; DE202016103266U1; EP3260203A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**US 2002144934 A1 20021010; US 6467629 B1 20021022;** AT E216916 T1 20020515; AU 3336897 A 19971209; BR 9709588 A 20000509; CA 2254934 A1 19971127; DK 0898496 T3 20020819; EP 0898496 A1 19990303; EP 0898496 B1 20020502; ES 2172798 T3 20021001; JP 2000510764 A 20000822; PT 898496 E 20021031; US 6230897 B1 20010515; WO 9744137 A1 19971127

DOCDB simple family (application)

**US 79859101 A 20010303;** AT 97929147 T 19970517; AU 3336897 A 19970517; BR 9709588 A 19970517; CA 2254934 A 19970517; DK 97929147 T 19970517; EP 9702536 W 19970517; EP 97929147 A 19970517; ES 97929147 T 19970517; JP 54151597 A 19970517; PT 97929147 T 19970517; US 18080198 A 19981116