

Title (en)
Eddy current separator

Title (de)
Wirbelstrom-Abscheider

Title (fr)
Séparateur à courants de Foucault

Publication
EP 0812624 B1 20000405 (EN)

Application
EP 97201670 A 19970603

Priority
NL 1003325 A 19960612

Abstract (en)
[origin: EP0812624A1] For separating off non-ferrous metals from a stream of particles or separating non-ferrous metal particles from one another on the basis of composition, size, shape or density, by means of eddy currents, use is made of an installation having a rotor which is rotatable about an essentially vertical axis and has a number of magnets distributed over 360 DEG , the north and south poles of said magnets alternating at the circumference, the jacket surface of which rotor, or a guard plate covering said jacket surface, having the shape of an optionally truncated cone. There are means for rotating the rotor and feed means for feeding the stream of particles to the jacket surface of the rotor or said guard plate. Said last-mentioned feed means are so constructed that the particles to be separated impinge on the cone surface along an essentially closed circular strip. During rotation of the rotor a magnetic field is generated which is sufficiently powerful tangentially to repulse the conductive particles, or some of the particles which are to be separated on the basis of composition, size, shape or density, from the rotor surface or guard plate surface, such that a radial separation between the particles is achieved. An exceptionally good separation efficiency is achieved by this means. <IMAGE>

IPC 1-7
B03C 1/247

IPC 8 full level
B03C 1/247 (2006.01)

CPC (source: EP)
B03C 1/247 (2013.01); **B03C 2201/20** (2013.01)

Cited by
CN114505168A; FR2884735A1; CN114471928A; CN116441045A; CN104689912A; RU2746332C1; WO2006111636A1

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