Title (en)

MAGNETIC SEPARATORS.

Title (de)

MAGNETSCHEIDER.

Title (fr)

SEPARATEURS MAGNETIQUES.

Publication

EP 0339031 B1 19940713 (EN)

Application

EP 88900244 A 19871221

Priority

- GB 8630381 A 19861219
- GB 8700915 W 19871221

Abstract (en)

[origin: GB2219225A] A magnetic separator comprises a magnet (2) positioned at an angle (3) to the vertical and means (4) for feeding a mixture of magnetic and non-magnetic particulate material at or closely or adjacent the magnet in the region of high magnetic field. The non-magnetic particles fall under the action of gravity only whereas the magnetic particles are diverted towards the magnet until the gravitational force exceeds that exerted by the magnet. The arrangement provides a clean separation between the magnetic and non-magnetic particles and may be employed to separate the particules according to degree of magnetic susceptibility. A magnet (2) for a magnetic separator is also described comprising a linear superconducting magnet having a coil (36) with two generally straight portions (38) joined by curved ends (40). The coil is supported by a clamp (42) in a cryostat vessel (35) with the longest axis arranged horizontally and so as to provide a magnetic separation zone on one side of the coil. The magnet is powerful, robust and has a long range.

IPC 1-7

B03C 1/02; B03C 1/26; B03C 1/22

IPC 8 full level

B03C 1/035 (2006.01); **B03C 1/22** (2006.01); **B03C 1/26** (2006.01)

CPC (source: EP)

B03C 1/035 (2013.01); **B03C 1/08** (2013.01); **B03C 1/20** (2013.01); **B03C 1/22** (2013.01); **B03C 1/26** (2013.01); **B03C 1/286** (2013.01); B03C 2201/18 (2013.01); B03C 2201/20 (2013.01)

Citation (examination)

- GB 2102702 A 19830209 - CRYOGENIC CONSULT [GB]
- DE 2157217 A1 19730524 - PREUSSAG AG

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CN103316762A

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

WO 8804579 A2 19880630; **WO 8804579 A3 19880811**; AT E108346 T1 19940715; AU 1059988 A 19880715; AU 605232 B2 19910110; DE 3750226 D1 19940818; DE 3750226 T2 19941208; EP 0339031 A1 19891102; EP 0339031 B1 19940713; GB 2219225 A 19891206; GB 2219225 B 19901219; GB 8630381 D0 19870128; GB 8913855 D0 19890823; ZA 879568 B 19881130

DOCDB simple family (application)

GB 8700915 W 19871221; AT 88900244 T 19871221; AU 1059988 A 19880218; DE 3750226 T 19871221; EP 88900244 A 19871221; GB 8630381 A 19861219; GB 8913855 A 19871221; ZA 879568 A 19871221