

Title (en)
Process and device for separating stainless steel from mixed material containing it

Title (de)
Verfahren und Gerät zur Trennung von rostfreien Stahl aus gemischten Materialien

Title (fr)
Procédé et dispositif pour la séparation d'acier inoxydable hors de matériau mixte

Publication
EP 0687504 A1 19951220 (EN)

Application
EP 95830244 A 19950612

Priority
IT MI941234 A 19940614

Abstract (en)
A process for separating stainless steel from mixed materials containing it, wherein these materials are conveyed through a magnetic field having a magnetic potential gradient higher than 1500 Oe/cm with consequent attraction and stopping of stainless steel and its separation from the inert materials which are not attracted. Such a process is carried out with a device comprising a magnetic field generator consisting of a plurality of magnets arranged in parallel lines and rows wherein the polarities of the magnets are alternated in each line and in each row, every magnet being magnetically insulated each other. <IMAGE>

IPC 1-7
B03C 1/035; **B03C 1/12**; **B03C 1/18**; **B03C 1/22**

IPC 8 full level
B03C 1/035 (2006.01); **B03C 1/12** (2006.01); **B03C 1/18** (2006.01); **B03C 1/22** (2006.01)

CPC (source: EP)
B03C 1/035 (2013.01); **B03C 1/12** (2013.01); **B03C 1/18** (2013.01); **B03C 1/22** (2013.01); **B03C 2201/20** (2013.01); **B03C 2201/22** (2013.01)

Citation (search report)
• [A] FR 2326979 A1 19770506 - KLOECKNER HUMBOLDT DEUTZ AG [DE]
• [A] US 2959288 A 19601108 - FOWLER LESLIE L
• [A] US 4225047 A 19800930 - GRUBMAN ALAN A
• [X] J.KOPP, IEEE TRANSACTIONS ON MAGNETICS, vol. 20, no. 5, NEW YORK US, pages 1204 - 1206
• [A] R.M.BOZORTH: "Ferromagnetism", VAN NOSTRAND COMP., NEW YORK US

Cited by
CN103506218A; EP4132717A4; EP3307441A4; ITMI20121901A1; CN104768652A; AU2013343103B2; RU2626082C2; WO2018009242A1; WO2014072880A1; US9375727B2; US6415907B1; US11944980B2

Designated contracting state (EPC)
BE CH DE ES FR GB LI NL

DOCDB simple family (publication)
EP 0687504 A1 19951220; IT 1270218 B 19970429; IT MI941234 A0 19940614; IT MI941234 A1 19951214

DOCDB simple family (application)
EP 95830244 A 19950612; IT MI941234 A 19940614