

Title (en)
DEVICE AND METHOD FOR REMOVING MAGNETIC OR MAGNETISABLE PARTICLES FROM A LIQUID

Title (de)
VORRICHTUNG UND VERFAHREN ZUM ABTRENNEN VON MAGNETISCHEN ODER MAGNETISIERBAREN PARTIKELN AUS EINER FLÜSSIGKEIT

Title (fr)
DISPOSITIF ET PROCEDE POUR EXTRAIRE D'UN LIQUIDE DES PARTICULES MAGNETIQUES OU MAGNETISABLES

Publication
EP 1644120 B1 20111130 (DE)

Application
EP 04740646 A 20040705

Priority
• EP 2004007308 W 20040705
• DE 10331254 A 20030710

Abstract (en)
[origin: WO2005005049A1] The invention relates to a device (1) which is used to remove magnetic or magnetisable particles from a liquid by using a magnetic field. Said device comprises two limbs (2,3) which are made of a soft-magnetic material. An air gap (12) is provided between both poles (4, 5) of the limb. Said air gap can receive a container or a plurality of containers (9,10). A head piece (8) is arranged in a fixed or displaceable manner on one of the poles (4). A magnetisable bar or a plurality of magnetisable bars (7) is/are disposed in a fixed or displaceable manner on said head piece, in the vertical direction. A permanent magnet (15) or a group of at least two permanent magnets is/are arranged in a displaceable manner on at least one point of the device, such that a magnetic field (17) can be produced between both poles and the magnetic field can be activated or deactivated by displacing the magnet(s). Each area of the device, wherein the displaceable magnet(s) is/are arranged, is at least partially surrounded by a material (20) which protects the magnetic field.

IPC 8 full level
B03C 1/28 (2006.01); **B03C 1/01** (2006.01); **B03C 1/06** (2006.01)

CPC (source: EP US)
B03C 1/286 (2013.01 - EP US); **B03C 1/288** (2013.01 - EP US); **B03C 1/01** (2013.01 - EP US); **B03C 1/06** (2013.01 - EP US); **B03C 2201/26** (2013.01 - EP US)

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

DOCDB simple family (publication)
WO 2005005049 A1 20050120; AT E535305 T1 20111215; CA 2531399 A1 20050120; CA 2531399 C 20120131; DE 10331254 A1 20050210; DE 10331254 B4 20060504; DK 1644120 T3 20120319; EP 1644120 A1 20060412; EP 1644120 B1 20111130; ES 2377733 T3 20120330; JP 2009513318 A 20090402; JP 4762139 B2 20110831; US 2007175830 A1 20070802; US 7776221 B2 20100817

DOCDB simple family (application)
EP 2004007308 W 20040705; AT 04740646 T 20040705; CA 2531399 A 20040705; DE 10331254 A 20030710; DK 04740646 T 20040705; EP 04740646 A 20040705; ES 04740646 T 20040705; JP 2006518111 A 20040705; US 56411804 A 20040705