

Title (en)

DEVICE AND METHOD FOR RECOVERING MAGNETIC PARTICLES TRAPPED ON A MAGNETIC PLUG

Title (de)

VERFAHREN UND VORRICHTUNG ZUR RÜCKGEWINNUNG VON AUF EINEM MAGNETSTOPFEN GEFANGENEN MAGNETISCHEN PARTIKELN

Title (fr)

DISPOSITIF ET PROCEDE DE RECUPERATION DE PARTICULES MAGNETIQUES PIEGEES SUR UN BOUCHON MAGNETIQUE

Publication

**EP 2493623 A1 20120905 (FR)**

Application

**EP 10776619 A 20101022**

Priority

- FR 0957682 A 20091030
- EP 2010066000 W 20101022

Abstract (en)

[origin: WO2011051192A1] The invention relates to a device (100) for recovering magnetic particles (4) trapped on a magnetic plug (1). The magnetic plug (1) comprises a supporting end (2) and a magnetized element (3) for retaining the magnetic particles (4) in a liquid resulting from the wear of parts with which said liquid has been in contact. Said recovery device (100) includes magnetization means (106) and an enclosure (101) having an opening (102). Said enclosure (101) is capable of receiving the magnetic plug (1) via said opening (102) such that the magnetized element (3) is located inside said enclosure (101) and such that the supporting end (2) is located outside said enclosure (101). Said opening (102) is sized such that said supporting end (2) blocks said opening (102). The device (100) further comprises at least one injection nozzle (104) capable of injecting a gaseous fluid inside said enclosure (101), said nozzle (104) being oriented such that the flow of gaseous fluid expels the magnetic particles (4) retained on the magnetized element (3) toward the bottom of said enclosure (101). The magnetization means (106) are arranged so as to trap, by means of magnetization, the particles (4) urged toward the bottom of said enclosure (101).

IPC 8 full level

**B03C 1/28** (2006.01); **B03C 1/032** (2006.01)

CPC (source: EP US)

**B03C 1/032** (2013.01 - EP US); **B03C 1/284** (2013.01 - EP US); **B03C 1/286** (2013.01 - EP US)

Citation (search report)

See references of WO 2011051192A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**FR 2951961 A1 20110506; FR 2951961 B1 20111104;** BR 112012010100 A2 20170627; BR 112012010100 B1 20191126;  
CA 2778856 A1 20110505; CA 2778856 C 20170613; CN 102596416 A 20120718; CN 102596416 B 20150225; EP 2493623 A1 20120905;  
EP 2493623 B1 20190403; ES 2726428 T3 20191004; RU 2012122212 A 20131210; RU 2541685 C2 20150220; US 2012204910 A1 20120816;  
US 9248454 B2 20160202; WO 2011051192 A1 20110505

DOCDB simple family (application)

**FR 0957682 A 20091030;** BR 112012010100 A 20101022; CA 2778856 A 20101022; CN 201080049772 A 20101022; EP 10776619 A 20101022;  
EP 2010066000 W 20101022; ES 10776619 T 20101022; RU 2012122212 A 20101022; US 201013504277 A 20101022