

Title (en)

DEVICE AND METHOD FOR SEPARATING OUT MAGNETIZABLE IMPURITIES FROM FLOWING FLUIDS

Title (de)

VORRICHTUNG UND VERFAHREN ZUM ABSCHEIDEN MAGNETISIERBARER VERUNREINIGUNGEN AUS STRÖMENDEN FLUIDEN

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR SÉPARER DES IMPURETÉS MAGNÉTISABLES DE FLUIDES EN ÉCOULEMENT

Publication

EP 2864050 B1 20191127 (DE)

Application

EP 12742812 A 20120622

Priority

EP 2012062103 W 20120622

Abstract (en)

[origin: WO2013189549A1] The invention relates to a device for separating out magnetizable impurities from flowing fluids (liquids or gases), comprising a cylindrical chamber (2) with an inlet (18) (fluid inlet) for the fluid carrying the magnetizable particles, an outlet (22) for the cleaned fluid (clean fluid outlet) and an outlet (28, 38) for the magnetizable particles (particle outlet). An internal pipe (4) that forms, together with the chamber wall, an annular gap (12) through which the fluid flows is arranged in the chamber (2). A supply valve (20) is located upstream of, or at, the fluid inlet, and an outlet valve (30, 40) is provided at the particle outlet. At least one magnet (14, 36) is arranged outside said annular gap, between the fluid inlet and the cleaned fluid outlet in the direction of flow. A rotatable, helical scraper (10) is located in the annular gap (12), which scraper transports magnetizable particles which have deposited on the chamber wall and/or the internal pipe to the particle outlet (28, 38). A drive (8) is provided for the helical scraper (10) during the period of filter cleaning.

IPC 8 full level

B03C 1/28 (2006.01)

CPC (source: EP US)

B03C 1/284 (2013.01 - EP US); **B03C 1/286** (2013.01 - EP US); **B03C 1/288** (2013.01 - EP US); **B03C 2201/18** (2013.01 - EP US)

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)

WO 2013189549 A1 20131227; EP 2864050 A1 20150429; EP 2864050 B1 20191127; US 2015298139 A1 20151022

DOCDB simple family (application)

EP 2012062103 W 20120622; EP 12742812 A 20120622; US 201214410430 A 20120622