

Title (en)

MAGNETIC PARTICLE EXTRACTION DEVICE AND METHOD

Title (de)

VORRICHTUNG UND VERFAHREN ZUR EXTRAKTION VON MAGNETTEILCHEN

Title (fr)

DISPOSITIF D'EXTRACTION DE PARTICULES MAGNÉTIQUES ET PROCÉDÉ

Publication

**EP 4051436 A1 20220907 (EN)**

Application

**EP 20796840 A 20201030**

Priority

- EP 19206755 A 20191101
- EP 2020080515 W 20201030

Abstract (en)

[origin: EP3815790A1] There is provided a magnetic particle (e.g. black powder) extraction device and method for extraction of magnetic particles (e.g. black powder) from a fluid flow. The device comprises a housing having a first chamber and a second chamber, and a separator between the first chamber and the second chamber. A permanent magnet is provided, preferably more than one permanent magnet. The first chamber comprises a fluid-inlet; a fluid-outlet; and a flow-path from the fluid-inlet to the fluid-outlet. The first chamber may thus form a flow-path for the fluid that is to be cleaned of magnetic particles. The second chamber has an inner volume of a dimension to receive the at least one permanent magnet. The second chamber may in that manner accommodate the at least one permanent magnet. The at least one permanent magnet is movable between a filtering position enveloped by the fluid flow-path and a non-filtering position that is remote from the flow-path.

IPC 8 full level

**B03C 1/28** (2006.01)

CPC (source: EP)

**B03C 1/284** (2013.01); **B03C 1/288** (2013.01); **B03C 2201/20** (2013.01); **B03C 2201/28** (2013.01)

Citation (search report)

See references of WO 2021084071A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3815790 A1 20210505**; EP 4051436 A1 20220907; WO 2021084071 A1 20210506

DOCDB simple family (application)

**EP 19206755 A 20191101**; EP 2020080515 W 20201030; EP 20796840 A 20201030