

Title (en)

EDDY CURRENT SELECTION DEVICE AND EDDY CURRENT SELECTION METHOD

Title (de)

WIRBELSTROMAUSWAHLVORRICHTUNG SOWIE WIRBELSTROMAUSWAHLVERFAHREN

Title (fr)

DISPOSITIF DE SÉLECTION À COURANT DE FOUCAULT ET PROCÉDÉ DE SÉLECTION À COURANT DE FOUCAULT

Publication

**EP 3165293 A4 20180228 (EN)**

Application

**EP 15814598 A 20150305**

Priority

- JP 2014137349 A 20140703
- JP 2015056456 W 20150305

Abstract (en)

[origin: EP3165293A1] An eddy current separation apparatus includes: a rotating magnetic circular plate having a plurality of permanent magnets with alternating polarity, the magnets arranged in a circumferential direction; a palette arranged next to the rotating magnetic circular plate with a clearance; an actuator section having a rotating shaft fixed with the rotating magnetic circular plate; a feed section containing a product to be separated and supplying a predetermined quantity of the product to be separated to the palette; a discharge section having two containers for recycling and collecting the product to be separated supplied from the feed section to the palette in the containers for recycling; and a control unit controlling the rotating magnetic circular plate, the actuator section, the feed section and the discharge section; wherein the eddy current separation apparatus performs; a first step in which the feed section supplies a predetermined quantity of the product to be separated to the palette, a second step in which the discharged section is switched to the open position from the closed position after the first step is finished and a fixed time is passed, and a third step in which the discharged section is switched to the closed position after the second step has been finished, further wherein the eddy current separation apparatus performs from a first step to a third step again after the third step has been finished.

IPC 8 full level

**B03C 1/033** (2006.01); **B03C 1/23** (2006.01); **B03C 1/24** (2006.01); **B03C 1/247** (2006.01); **B07C 5/344** (2006.01)

CPC (source: EP)

**B03C 1/0332** (2013.01); **B03C 1/23** (2013.01); **B03C 1/247** (2013.01); **B07C 5/344** (2013.01); **B03C 2201/20** (2013.01); **B03C 2201/24** (2013.01); **B03C 2201/32** (2013.01)

Citation (search report)

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- [A] LUNGU M ET AL: "Eddy-current separation of small nonferrous particles by a single-disk separator with permanent magnets", IEEE TRANSACTIONS ON MAGNETICS, IEEE SERVICE CENTER, NEW YORK, NY, US, vol. 39, no. 4, 1 July 2003 (2003-07-01), pages 2062 - 2067, XP011098058, ISSN: 0018-9464, DOI: 10.1109/TMAG.2003.812724
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DE102018133387A1; DE102018133387B4

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)

**EP 3165293 A1 20170510; EP 3165293 A4 20180228; EP 3165293 B1 20200108**; CN 106457314 A 20170222; JP 6289638 B2 20180307; JP WO2016002256 A1 20170427; WO 2016002256 A1 20160107

DOCDB simple family (application)

**EP 15814598 A 20150305**; CN 201580031803 A 20150305; JP 2015056456 W 20150305; JP 2016531134 A 20150305