

Title (en)

CENTRIFUGAL SEPARATOR COMPRISING A DISC STACK

Title (de)

ZENTRIFUGALSEPARATOR MIT TRENNTELLERSTAPEL

Title (fr)

SÉPARATEUR CENTRIFUGE COMPRENANT UN EMPILEMENT DE DISQUES

Publication

**EP 4000739 A1 20220525 (EN)**

Application

**EP 20207214 A 20201112**

Priority

EP 20207214 A 20201112

Abstract (en)

The present invention provides a centrifugal separator configured to separate a heavy phase and a light phase from a liquid feed mixture. The separator is comprising a frame (2), a drive member (3) and a rotating part (4). The drive member (3) is configured to rotate the rotating part (4) in relation to the frame (2) around an axis of rotation (X), and the rotating part (4) comprises a centrifuge rotor (5) enclosing a separation chamber (9). Further, the separation chamber (9) comprises a stack (10) of separation discs (10a) arranged coaxially around the axis of rotation (X) and axially under a top disc (11) and the centrifugal separator (1) further comprises an inlet (14) for receiving the liquid feed mixture into the centrifuge rotor (5), a first outlet (6) for the heavy phase and a second outlet (7) for the light phase. The second outlet (7) is arranged in an outlet chamber (8) that is integrated in said top disc (11), said outlet chamber (8) being arranged such that its lowermost axial position (P1) is positioned axially below the uppermost axial position (P3) of the stack (10) of separation discs (10a).

IPC 8 full level

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CPC (source: EP KR)

**B04B 1/08** (2013.01 - EP KR); **B04B 11/02** (2013.01 - EP KR); **B04B 11/082** (2013.01 - EP KR)

Citation (search report)

- [XI] WO 0053330 A1 20000914 - ALFA LAVAL AB [SE], et al
- [XI] WO 2008013495 A1 20080131 - ALFA LAVAL CORP AB [SE], et al
- [XI] EP 2493624 B1 20141210 - ALFA LAVAL CORP AB [SE]
- [XI] CN 202061721 U 20111207 - WEIHAI SUOTONG ELECTROMECHANICAL EQUIPMENT CO LTD
- [A] WO 2016091617 A1 20160616 - GEA MECHANICAL EQUIPMENT GMBH [DE]

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)

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WO 2022100954 A1 20220519

DOCDB simple family (application)

**EP 20207214 A 20201112**; CN 202180075892 A 20211014; EP 2021078476 W 20211014; JP 2023528499 A 20211014;  
KR 20237019117 A 20211014