

Title (en)
A CENTRIFUGAL SEPARATOR

Title (de)
ZENTRIFUGALABSCHIEDER

Title (fr)
SÉPARATEUR CENTRIFUGE

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Application
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Abstract (en)

The present invention provides a centrifugal separator for separating at least a liquid heavy phase from a liquid feed mixture, comprising a frame (2), a drive member (3) and a rotatable part (4), wherein the drive member (3) is configured to rotate the rotatable part (4) in relation to the frame (2) around an axis of rotation (X), and wherein the rotatable part (4) comprises a centrifuge bowl (5) enclosing a separation space (9a) and a sludge space (9b). Further, the separation space (9a) comprises a stack (10) of separation discs (40) arranged coaxially around the axis of rotation (X) and wherein said sludge space (9b) is arranged radially outside said stack (10) of separation discs (40). The centrifuge bowl (5) further comprises an inlet (14) for receiving the liquid feed mixture and a first outlet chamber (6) in fluid connection with a heavy phase outlet pipe (6a) for discharging a separated liquid heavy phase. The centrifugal separator (1) further comprises a plurality of outlet pipes (30) for transport of said separated liquid heavy phase from said sludge space (9b) towards said first outlet chamber (6); and wherein the stack (10) of separation discs is compressed with a compression force when mounted in the centrifuge bowl (5) and wherein said plurality of outlet pipes (30) form an element for transmitting said compression force to the compressed stack (10) of separation discs.

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Citation (applicant)
WO 2021058287 A1 20210401 - ALFA LAVAL CORP AB [SE]

Citation (search report)
• [XY] US 1749764 A 19300311 - AUGUST FORSBERG ERIK
• [YDA] WO 2021058287 A1 20210401 - ALFA LAVAL CORP AB [SE]
• [A] US 2738923 A 19560320 - HARSTICK WILLIAM H
• [A] US 2725190 A 19551129 - HEIN HAROLD W, et al

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