

Title (en)
Reversible filter centrifuge.

Title (de)
Stülpfilterzentrifuge.

Title (fr)
Centrifugeuse à filtre réversible.

Publication
EP 0448737 B1 19941109 (DE)

Application
EP 90105624 A 19900324

Priority
EP 90105624 A 19900324

Abstract (en)
[origin: WO9114507A1] A sleeve filter centrifuge comprises a drum rotatably fitted in a housing (1) and having radial filtrate passages (12), a filter cloth (15) covering the filtrate passages, a lid (18) closing off the front of the drum, a filling opening for the suspension to be filtered fitted in the cover, a filling pipe (19) passing through the filling opening and a safety device which prevents the drum from being opened by releasing the cover while the drum is rotating at a higher than critical speed above which opening the drum would be dangerous, in which the drum and cover can be moved axially in relation to each other by means of a rotatably driven hollow shaft (3) and a support shaft (9) telescopically reciprocating therein in order to fold the filter cloth (15) back. A threaded spindle (34) is arranged on the support shaft (9) and there is a nut (33, 36) engaging with this threaded spindle. Either the spindle (34) or the nut (36) can be rotated by a motor (44) so that the support shaft (9) reciprocates telescopically in the hollow shaft depending on the relative speeds of the spindle or nut and the hollow shaft (3) and the drum (11), whereby the drum (11) opens when the rotation speed of the spindle (34) or nut (36) is higher than that of the drum (11) and closes when the rotation speed of the spindle (34) or nut (36) is lower than that of the drum (11), and the maximum speed of the spindle (34) or nut (36) is lower than the critical speed of the drum (11) so that the drum (11) opens only if it is rotating more slowly than the critical speed.

IPC 1-7
B04B 3/02; **B04B 7/06**

IPC 8 full level
B04B 3/00 (2006.01); **B04B 3/02** (2006.01); **B04B 7/06** (2006.01); **B04B 9/10** (2006.01); **B04B 11/04** (2006.01)

CPC (source: EP KR US)
B04B 3/02 (2013.01 - KR); **B04B 3/025** (2013.01 - EP US); **B04B 7/06** (2013.01 - EP US); **B04B 9/10** (2013.01 - EP US)

Cited by
CN105327787A

Designated contracting state (EPC)
AT BE CH DE DK ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0448737 A1 19911002; **EP 0448737 B1 19941109**; AT E113866 T1 19941115; CN 1023448 C 19940112; CN 1055128 A 19911009; DE 59007695 D1 19941215; DK 0448737 T3 19941212; ES 2063850 T3 19950116; JP 3281372 B2 20020513; JP H05504909 A 19930729; KR 0179342 B1 19990320; KR 920703209 A 19921217; RU 2067501 C1 19961010; US 5286378 A 19940215; WO 9114507 A1 19911003

DOCDB simple family (application)
EP 90105624 A 19900324; AT 90105624 T 19900324; CN 91101700 A 19910320; DE 59007695 T 19900324; DK 90105624 T 19900324; EP 9100047 W 19910115; ES 90105624 T 19900324; JP 50253691 A 19910115; KR 920701278 A 19920528; SU 5053196 A 19910115; US 83881592 A 19920323