

Title (en)

SOLID-BOWL SCREW CENTRIFUGE WITH OVERFLOW WEIR

Title (de)

VOLLMANTEL-SCHNECKENZENTRIFUGE MIT ÜBERLAUFWEHR

Title (fr)

CENTRIFUGEUSE À VIS SANS FIN ET À BOL PLEIN AVEC DÉVERSOIR DE DÉBORDEMENT

Publication

EP 2872256 A1 20150520 (DE)

Application

EP 13736864 A 20130705

Priority

- DE 102012106226 A 20120711
- EP 2013064255 W 20130705

Abstract (en)

[origin: WO2014009272A1] The invention relates to a solid-bowl screw centrifuge with at least one or more discharge weir(s) (23) for discharging clarified liquid out of a drum (3) which has a rotational axis (D) and a rotational direction (K), said centrifuge having the following features: a) at least one or more through-opening(s) (15) in a drum cover (17), b) each of the at least one through-opening(s) (15) is associated with a weir plate (25) which has a recess (29), c) an open discharge channel is formed on the through-opening at the recess (29), a deflection from a direction parallel to the rotational direction (D) of the drum substantially into a circumferential direction in the rotational direction (K) being carried out by means of said discharge channel, and d) the discharge channel is designed such that exiting liquid is conducted over the base of the discharge channel to an overflow edge (31k), wherein e) the base of the discharge channel to the overflow edge (31k) is inclined inwards in the rotational direction (D) relative to the tangential direction (T) by an inclination angle delta >= 0 at the point of the overflow edge (31k).

IPC 8 full level

B04B 1/20 (2006.01)

CPC (source: EP US)

B04B 1/20 (2013.01 - EP US); **B04B 11/02** (2013.01 - US); **B04B 2001/2075** (2013.01 - EP US); **B04B 2001/2083** (2013.01 - EP US)

Citation (search report)

See references of WO 2014009272A1

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)

WO 2014009272 A1 20140116; CN 104470639 A 20150325; CN 104470639 B 20170308; DE 102012106226 A1 20140116;
EP 2872256 A1 20150520; EP 2872256 B1 20200115; PL 2872256 T3 20200629; RU 2015103884 A 20160827; RU 2636706 C2 20171127;
SG 11201500183Q A 20150429; US 10252277 B2 20190409; US 2015165449 A1 20150618

DOCDB simple family (application)

EP 2013064255 W 20130705; CN 201380036580 A 20130705; DE 102012106226 A 20120711; EP 13736864 A 20130705;
PL 13736864 T 20130705; RU 2015103884 A 20130705; SG 11201500183Q A 20130705; US 201314413881 A 20130705