

Title (en)  
APPARATUS FOR SEPARATING SOLID FROM LIQUID COMPONENTS OF A SOLID-LIQUID MIXTURE

Title (de)  
VORRICHTUNG ZUM SEPARIEREN VON FESTEN UND FLÜSSIGEN ANTEILEN EINER FEST-FLÜSSIG-MISCHUNG

Title (fr)  
DISPOSITIF DE SÉPARATION DE COMPOSANTS SOLIDES ET LIQUIDES D'UN MÉLANGE SOLIDE/LIQUIDE

Publication  
**EP 3481526 A1 20190515 (DE)**

Application  
**EP 17752283 A 20170706**

Priority  
• DE 102016008266 A 20160706  
• EP 2017000796 W 20170706

Abstract (en)  
[origin: WO2018007009A1] The invention relates to an apparatus for separating solid from liquid components of a solid-liquid mixture by means of a vibrating sifter device comprising a vibrating screen (3), said vibrating screen (3) being arranged to extend from the bottom to the top at an angle and so as to convey upwards. An inlet (14) is arranged above the vibrating screen (3) and conducts the solid-liquid mixture into the housing (2) and onto the vibrating screen (3). An outlet is arranged below the vibrating screen (3) and conducts the liquid components away from the housing, a discharge opening being mounted at the front end of the vibrating screen (3) downstream with respect to the direction of conveyance, said discharge opening conducting the solid components away from the housing (2). A suction pump is provided for suctioning the liquid components from the housing and/or negative pressure is produced by means of another pressure generator in a space above the vibrating screen 3 in the housing (2) which is closed except for an inlet, an outlet and a discharge opening. In order to further improve said apparatus, the vibrating screen (3) has a plurality of screen decks 56 that project into the space (2.2) above the vibrating screen (3) and that have screen deck walls that are oriented at an upwards or downwards angle with respect to a separation surface of the vibrating screen (3) (Fig. 1).

IPC 8 full level  
**B01D 33/03** (2006.01); **B07B 1/46** (2006.01); **B07B 13/04** (2006.01)

CPC (source: EP)  
**B01D 33/0384** (2013.01); **B01D 33/0392** (2013.01); **B03B 5/04** (2013.01); **B07B 1/4609** (2013.01); **B07B 1/4618** (2013.01); **B07B 1/4636** (2013.01); **B07B 13/04** (2013.01)

Citation (search report)  
See references of WO 2018007009A1

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)  
**DE 102016008266 A1 20180111**; DE 202016008690 U1 20190117; EP 3481526 A1 20190515; WO 2018007009 A1 20180111

DOCDB simple family (application)  
**DE 102016008266 A 20160706**; DE 202016008690 U 20160706; EP 17752283 A 20170706; EP 2017000796 W 20170706