

Title (en)  
FORCED TYPE DRILLING SLUDGE-FLUID SEPARATOR

Title (de)  
BOHRSCHLAMM-FLÜSSIGKEIT-SEPARATOR VOM ZWANGSTYP

Title (fr)  
SÉPARATEUR BOUE-FLUIDE DE FORAGE DE TYPE FORCÉ

Publication  
**EP 3904633 A4 20220720 (EN)**

Application  
**EP 20882133 A 20200602**

Priority  
• CN 201911031881 A 20191028  
• CN 2020093837 W 20200602

Abstract (en)  
[origin: EP3904633A1] A forced drilling sludge-fluid separator, comprising a sludge-fluid kinetic energy attenuation tank (1), a sedimented sludge tank (3) and a sedimented sludge conveying device (4) which are arranged from top to bottom and communicated in sequence; the separator further comprises a mud pipe (5) for feeding drilling sludge and fluid, a grid plate (2) used for re-attenuating and splitting the kinetic energy of the drilling sludge and fluid and screening large pieces of drilling sludge, a refluxing tank (7) used for conveying the separated drilling fluid back to a drilled well, and a hydrocyclone desilting device for further desilting. According to the separator, the processes of sludge sedimentation, sludge removing and desilting in the drilling operation are finished in the same equipment simultaneously, and the separator has the advantages of compact structure, small volume, safety and reliability, and easiness in operation.

IPC 8 full level  
**E21B 21/06** (2006.01)

CPC (source: CN EP)  
**E21B 21/063** (2013.01 - EP); **E21B 21/065** (2013.01 - CN EP); **E21B 21/066** (2013.01 - CN)

Citation (search report)  
• [XAI] WO 2018217450 A1 20181129 - MOHR AND ASS A SOLE PROPRIETORSHIP [US]  
• [A] WO 9808587 A1 19980305 - HYDROTECH DYNAMICS LTD [CA]  
• See references of WO 2021082438A1

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)  
**EP 3904633 A1 20211103; EP 3904633 A4 20220720; CN 110566143 A 20191213; WO 2021082438 A1 20210506**

DOCDB simple family (application)  
**EP 20882133 A 20200602; CN 201911031881 A 20191028; CN 2020093837 W 20200602**