

Title (en)

WATER-ABRASIVE-SUSPENSION CUTTING SYSTEM AND METHOD FOR WATER-ABRASIVE-SUSPENSION CUTTING

Title (de)

WASSER-ABRASIV-SUSPENSIONS-SCHNEIDANLAGE UND VERFAHREN ZUM WASSER-ABRASIV-SUSPENSIONS-SCHNEIDEN

Title (fr)

INSTALLATION ET PROCÉDÉ DE DÉCOUPE PAR JET D'EAU CHARGÉE D'ABRASIF EN SUSPENSION

Publication

EP 3600767 B1 20210113 (DE)

Application

EP 17717102 A 20170331

Priority

EP 2017057784 W 20170331

Abstract (en)

[origin: WO2018177557A1] The invention relates to a water-abrasive-suspension cutting system (1), which has a high-pressure source (3) for providing (301) water under high pressure, a high-pressure line (5) connected to the high-pressure source (3), a pressure container (11) for providing an abrasive medium suspension (13) under high pressure, a lock chamber (21) which is configured to be under high pressure from time to time and under low pressure from time to time, and a filling valve (23) for filling (311) the lock chamber (21). The suction side of a pump (31) is connected fluidically to the lock chamber (21) such that the pump can be shut off in such a way that, when there is high pressure in the lock chamber (21), the pump (31) is shut off from the latter, and when there is low pressure in the lock chamber (21), the pump is capable of sucking an abrasive medium suspension into the lock chamber (21) through the filling valve (23).

IPC 8 full level

B24C 7/00 (2006.01); **B24C 1/04** (2006.01)

CPC (source: EP KR US)

B24C 1/045 (2013.01 - EP KR US); **B24C 7/0007** (2013.01 - EP KR US); **B24C 5/04** (2013.01 - US); **B26F 3/004** (2013.01 - US)

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

DOCDB simple family (publication)

WO 2018177557 A1 20181004; AU 2017407667 A1 20191017; BR 112019019228 A2 20200414; CA 3058489 A1 20181004; CA 3058489 C 20240213; CN 110719827 A 20200121; CN 110719827 B 20211109; EP 3600767 A1 20200205; EP 3600767 B1 20210113; JP 2020515422 A 20200528; JP 7097384 B2 20220707; KR 20190134716 A 20191204; MX 2019011569 A 20191118; PL 3600767 T3 20210816; US 11904435 B2 20240220; US 2021101255 A1 20210408

DOCDB simple family (application)

EP 2017057784 W 20170331; AU 2017407667 A 20170331; BR 112019019228 A 20170331; CA 3058489 A 20170331; CN 201780091539 A 20170331; EP 17717102 A 20170331; JP 2019553472 A 20170331; KR 20197032244 A 20170331; MX 2019011569 A 20170331; PL 17717102 T 20170331; US 201716498767 A 20170331