

Title (en)  
METHOD FOR EMPTYING VISCOUS MATERIAL OUT OF A CARTRIDGE WHICH IS OPEN ON BOTH SIDES, AND EMPTYING DEVICE  
SUITABLE FOR THIS PURPOSE

Title (de)  
VERFAHREN ZUM ENTLEREEN VON VISKOSEM MATERIAL AUS EINER BEIDSEITIG OFFENEN KARTUSCHE SOWIE HIERFÜR  
GEEIGNETE ENTLERER-VORRICHTUNG

Title (fr)  
PROCÉDÉ POUR VIDER UN MATÉRIAU VISQUEUX D'UNE CARTOUCHE OUVERTE DES DEUX CÔTÉS, ET DISPOSITIF DE VIDAGE CONÇU  
À CET EFFET

Publication  
**EP 4251879 A1 20231004 (DE)**

Application  
**EP 21815395 A 20211112**

Priority  
• DE 102020131081 A 20201124  
• EP 2021081528 W 20211112

Abstract (en)  
[origin: WO2022112022A1] The aim of the invention is to empty a cartridge (100) in a bubble-free manner. This is achieved in that the material (M) is pressed out of the removal opening (100a) of the cartridge (100) into a large-surface distributing head (7) which has a plurality of small outlet openings (17) on the lower face, whereby a plurality of thin strands (S1, S2, S3) are produced, said strands having a very large surface area in comparison to the volume thereof so that gas that is outgassed in the process can be removed via a vacuum applied about the strands. The strands (S1, S2, S3) fall into a collecting container (2) arranged underneath, and after the cartridge (100) is completely emptied, the strands are transported from the collecting container further downwards via the outlet opening (29), which can be found in the base of the collecting container (2), and into the discharge line (20), which is connected thereto and leads to the load, e.g. a metering device (300), by driving the distributing head (7) into the open side of the collecting container (2).

IPC 8 full level  
**F04B 15/02** (2006.01); **B05C 11/10** (2006.01); **B65D 83/00** (2006.01); **B67D 7/64** (2010.01); **F04B 13/00** (2006.01); **F04B 23/02** (2006.01)

CPC (source: EP US)  
**B05C 11/10** (2013.01 - EP); **B05C 11/1047** (2013.01 - EP US); **B65D 83/0005** (2013.01 - EP US); **B67D 7/645** (2013.01 - EP);  
**F04B 13/00** (2013.01 - EP); **F04B 15/02** (2013.01 - EP); **F04B 23/028** (2013.01 - EP)

Citation (search report)  
See references of WO 2022112022A1

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

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**DE 102020131081 B3 20211111**; EP 4251879 A1 20231004; JP 2023552709 A 20231219; US 2023294906 A1 20230921;  
WO 2022112022 A1 20220602

DOCDB simple family (application)  
**DE 102020131081 A 20201124**; EP 2021081528 W 20211112; EP 21815395 A 20211112; JP 2023530638 A 20211112;  
US 202318200485 A 20230522