

Title (en)  
ADSORBER FOR PURIFYING OR SEPARATING A GAS STREAM COMPRISING A REMOVABLE FILLING SYSTEM

Title (de)  
ADSORBER ZUR REINIGUNG ODER TRENNUNG EINES GASSTROMES MIT ABNEHMBAREM FÜLLSYSTEM

Title (fr)  
ADSORBEUR POUR L'ÉPURATION OU LA SÉPARATION D'UN FLUX GAZEUX COMPRENANT UN SYSTÈME DE REMPLISSAGE AMOVIBLE

Publication  
**EP 3755452 A1 20201230 (FR)**

Application  
**EP 19710735 A 20190211**

Priority  
• FR 1851601 A 20180223  
• FR 2019050293 W 20190211

Abstract (en)  
[origin: WO2019162591A1] An adsorber for purifying or separating a gas stream, comprising a cylindrical shell (R), a lower domed end (F1), an upper domed end (F2) comprising a main orifice for filling with a granular material, with said orifice having an internal diameter  $D_{in}$ , a granular material with a particle size  $ADN$ , a granular material with a particle size  $M$  and a filling system (A) removable from the shell made of granular material placed in the main filling orifice, characterized in that: the filling system (A) is composed of a cylinder that is perforated over all or part of the height thereof, of the upper end thereof having a diameter  $D_{ext}$  and of the lower end thereof, the  $D_{in}$ - $D_{ext}$  distance is strictly greater than twice the size of the particles of the material with a particle size  $M$ , the granular material with a particle size  $ADN$  and the granular material with a particle size  $M$  follow on from one another in the direction of circulation of the gas stream and are such that  $M > ADN$ , and the material with a particle size  $M$  is in contact with both at least one portion of the outer surface of the system (A) and at least one portion of the inner surface of the upper domed end (F2).

IPC 8 full level  
**B01J 8/02** (2006.01); **B01D 53/04** (2006.01)

CPC (source: EP US)  
**B01D 53/0423** (2013.01 - EP US); **B01D 53/047** (2013.01 - US); **B01J 8/003** (2013.01 - EP); **B01J 8/025** (2013.01 - EP); **B01J 8/0453** (2013.01 - EP); **C01B 13/0259** (2013.01 - EP); **B01D 53/0476** (2013.01 - EP); **B01D 2253/304** (2013.01 - US); **B01D 2256/12** (2013.01 - EP US); **B01D 2259/4146** (2013.01 - EP US); **B01J 2208/00752** (2013.01 - EP); **B01J 2208/00884** (2013.01 - EP)

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 2019162591 A1 20190829**; CN 111727081 A 20200929; CN 111727081 B 20220823; EP 3755452 A1 20201230; FR 3078269 A1 20190830; FR 3078269 B1 20200214; RU 2020129172 A 20220303; RU 2020129172 A3 20220329; US 11679355 B2 20230620; US 2020398211 A1 20201224

DOCDB simple family (application)  
**FR 2019050293 W 20190211**; CN 201980013707 A 20190211; EP 19710735 A 20190211; FR 1851601 A 20180223; RU 2020129172 A 20190211; US 201916975046 A 20190211