Title (en)
COLUMN WITH HEAT AND/OR MATERIAL EXCHANGE PACKING AND AIR SEPARATION PROCESS USING SAID COLUMN

Title (de)
SÄULE MIT WÄRME- UND/ODER MATERIALTAUSCHPACKUNG UND VERFAHREN ZUR VERWENDUNG DERSELBEN ZUR LUFTTRENNUNG

Title (fr)
COLONNE À GARNISSAGE D'ÉCHANGE DE CHALEUR ET/OU MATIÈRE ET PROCÉDÉ DE SÉPARATION D'UN GAZ DE L'AIR UTILISANT LADITE COLONNE

Publication
EP 2265368 A2 20101229 (FR)

Application
EP 09742259 A 20090407

Priority
• FR 2009050596 W 20090407
• FR 0852300 A 20080407

Abstract (en)
[origin: WO2009136061A2] A column with a packing for the exchange of heat and/or of material between a descending liquid and an ascending gas, of the type which comprises at least one exchange section (5, 9, 10, 11) either between two distributors or comprising at least two and at most twenty superposed portions, this exchange section comprising a lower portion (9A, 10A, 11A) and, above the latter, another portion (5B, 9B, 10B, 11B), the lower packing portion (9A, 10A, 11A) of at least one exchange section (9, 10, 11) comprising at least one packing module which has a number of transfer units less than that of at least one packing module of the other packing portion (9B, 10B, 11B) of the same exchange section. Application to air distillation columns.

IPC 8 full level
B01J 19/32 (2006.01); **F25J 3/04** (2006.01)

CPC (source: EP US)
B01J 19/32 (2013.01 - EP US); **F25J 3/04412** (2013.01 - EP US); **F25J 3/04909** (2013.01 - EP US); **F25J 3/04921** (2013.01 - EP US); B01J 2219/3221 (2013.01 - EP US); B01J 2219/32213 (2013.01 - EP US); B01J 2219/32234 (2013.01 - EP US); B01J 2219/32272 (2013.01 - EP US); B01J 2219/32408 (2013.01 - EP US)

Citation (search report)
See references of WO 2009136061A2

Designated contracting state (EPC)
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 SE SI SK TR

Designated extension state (EPC)
AL BA RS

DOCDB simple family (publication)
FR 2929532 A1 20091009; **FR 2929532 B1 20101231**; CN 101980775 A 20110223; EP 2265368 A2 20101229; US 2011023542 A1 20110203; US 9108179 B2 20150818; WO 2009136061 A2 20091112; WO 2009136061 A3 20100408

DOCDB simple family (application)
FR 0852300 A 20080407; CN 200980111760 A 20090407; EP 09742259 A 20090407; FR 2009050596 W 20090407; US 93592909 A 20090407