

Title (en)
INTER-BED MIXING IN FIXED BED REACTORS

Title (de)
MISCHEN ZWISCHEN BETTEN IN FESTBETTREAKTOREN

Title (fr)
MÉLANGE INTERLIT DANS DES RÉACTEURS À LITS FIXES

Publication
EP 3077095 A1 20161012 (EN)

Application
EP 14805761 A 20141114

Priority
• US 201361911144 P 20131203
• US 2014065625 W 20141114

Abstract (en)
[origin: WO2015084565A1] A reactor comprises a stator-type mixing device between fixed catalyst beds. The mixing device includes a plurality of blades or surfaces arranged around a central hub. The blades are arranged at an angle relative to vertical so that a fluid cannot pass vertically through the mixing device without contacting at least one blade or surface. The blades or surfaces allow the stator-type mixing device to span the full cross-sectional surface area of the reactor, so that concentration of liquids in a localized portion of the reactor cross-sectional area is reduced or minimized. For reactors where at least part of the process fluid is a liquid under reaction conditions, a distributor tray can be included below the stator-type mixing device.

IPC 8 full level
B01J 8/04 (2006.01); **B01F 5/06** (2006.01); **B01J 8/00** (2006.01); **B01J 8/02** (2006.01)

CPC (source: EP US)
B01F 25/4316 (2022.01 - EP US); **B01J 8/008** (2013.01 - EP); **B01J 8/0278** (2013.01 - EP); **B01J 8/0285** (2013.01 - EP);
B01J 8/0492 (2013.01 - EP); **B01J 8/0496** (2013.01 - EP); **B01J 2208/00362** (2013.01 - EP); **B01J 2208/00371** (2013.01 - EP);
B01J 2208/00557 (2013.01 - EP); **B01J 2208/00849** (2013.01 - EP); **B01J 2208/00938** (2013.01 - EP)

Citation (search report)
See references of WO 2015084565A1

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 2015084565 A1 20150611; CA 2925339 A1 20150611; EP 3077095 A1 20161012; SG 11201601995Q A 20160428

DOCDB simple family (application)
US 2014065625 W 20141114; CA 2925339 A 20141114; EP 14805761 A 20141114; SG 11201601995Q A 20141114