

Title (en)

ROTATING SURFACES FOR SDR

Title (de)

ROTIERENDE OBERFLÄCHEN FÜR SDR

Title (fr)

SURFACES ROTATIVES DE RÉACTEUR À DISQUE TOURNANT

Publication

EP 2387457 A2 20111123 (DE)

Application

EP 09799593 A 20091211

Priority

- EP 2009066944 W 20091211
- EP 09150414 A 20090113
- EP 09799593 A 20091211

Abstract (en)

[origin: WO2010081600A2] The invention relates to a spinning disc reactor substantially comprising a horizontally rotating disc-shaped and temperature-controlled carrier element comprising an outer reaction surface, infeed means for feeding at least one reactant to the reaction surface, and interior structures for controlling the temperature of the reaction surface. Said reactor further comprises at least one precipitating device for collecting and removing the reaction product from the reaction surface. The carrier element is particularly characterized in that it is made of two components a) and b) disposed horizontally one over the other and having substantially identical surface area dimensions. Said two components are interlocked closely together during the operating time, and the lower component a) comprises at least one flat milled and substantially uninterrupted groove in the top side thereof facing the interior of the carrier element for receiving, routing, and conducting a heat transfer fluid. Said component further comprises at least two holes for acting on and conducting the heat transfer fluid, wherein at least one profile seal circularly encompassing the outer surface area is disposed between the component a) and the component b). The two components a) and b) are connected overall reversibly to each other. The specific features named provide a simply designed reactor having advantageous maintenance, widely applicable, and thereby allowing targeted control of the chemical reaction on the rotating surface thereof.

IPC 8 full level

B01J 19/00 (2006.01); **B01J 19/02** (2006.01); **B01J 19/18** (2006.01)

CPC (source: EP US)

B01J 19/0013 (2013.01 - EP US); **B01J 19/0073** (2013.01 - EP US); **B01J 19/02** (2013.01 - EP US); **B01J 19/1887** (2013.01 - EP US); **B01J 2219/00085** (2013.01 - EP US); **B01J 2219/00166** (2013.01 - EP US); **B01J 2219/00189** (2013.01 - EP US)

Citation (search report)

See references of WO 2010081600A2

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 SM TR

DOCDB simple family (publication)

WO 2010081600 A2 20100722; **WO 2010081600 A3 20110120**; AU 2009337743 A1 20110818; AU 2009337743 A2 20111027; CA 2749590 A1 20100722; CN 102341167 A 20120201; EP 2387457 A2 20111123; JP 2012515076 A 20120705; US 2011309533 A1 20111222

DOCDB simple family (application)

EP 2009066944 W 20091211; AU 2009337743 A 20091211; CA 2749590 A 20091211; CN 200980157838 A 20091211; EP 09799593 A 20091211; JP 2011545656 A 20091211; US 200913144341 A 20091211