Title (en)

Mixing device, and mixing method using that device

Title (de)

Mischvorrichtung und Mischverfahren das diese Vorrichtung verwendet

Title (fr)

Dispositif de mélange et méthode de mélange utilisant ce dispositif

Publication

EP 1622706 A1 20060208 (DE)

Application

EP 04725681 A 20040405

Priority

- EP 2004003578 W 20040405
- DE 10321350 A 20030513

Abstract (en)

[origin: WO2004101126A1] The aim of the invention is to improve an existing mixing device in such a manner that for a predetermined reactor length retention time is increased and the material which is to be processed is transported at essentially the same speed irrespective of the radial distance thereof from the rotational axis. As a result, at least one row of blades is arranged on each shaft and each row of blades comprises at least two individual blades and the blades are fixed to the shaft at an incidence angle a in relation to the longitudinal axis of the shaft. The blades are curved in themselves such that the blades form an angle of incidence a on the fixing point of the shaft and an angle of incidence ss on the outer diameter DA. By virtue of the fact that a row of individual blades is used instead of a continuous screw, efficient mixing of charging material and coke can be achieved, the angle of incidence is reduced from the inside to the outside and the axial speed of the particles which are to be mixed is evened out on the total cross-section of the reactor, thereby enabling a stop-type flow to be obtained.

IPC 1-7

B01F 7/04

IPC 8 full level

B01F 7/04 (2006.01)

CPC (source: EP US)

B01F 27/702 (2022.01 - EP US)

Citation (search report)

See references of WO 2004101126A1

Designated contracting state (EPC)

AT DE ES FR GB NL

DOCDB simple family (publication)

WO 2004101126 A1 20041125; AT E352369 T1 20070215; AU 2004238009 A1 20041125; AU 2004238009 B2 20091112; CA 2529581 A1 20041125; CA 2529581 C 20091124; DE 10321350 A1 20050113; DE 10321350 B4 20050421; DE 502004002777 D1 20070315; EP 1622706 A1 20060208; EP 1622706 B1 20070124; ES 2281792 T3 20071001; JP 2007502207 A 20070208; JP 4708348 B2 20110622; MX PA05012173 A 20060818; US 2006181959 A1 20060817; US 7677788 B2 20100316

DOCDB simple family (application)

EP 2004003578 W 20040405; AT 04725681 T 20040405; AU 2004238009 A 20040405; CA 2529581 A 20040405; DE 10321350 A 20030513; DE 502004002777 T 20040405; EP 04725681 A 20040405; ES 04725681 T 20040405; JP 2006529674 A 20040405; MX PA05012173 A 20040405; US 55664804 A 20040405