Title (en)

PROCESS FOR MATERIALS CONVERSION UNDER TAYLOR EDDY CURRENT CONDITIONS IN A TAYLOR REACTOR WITH A REACTOR GAP REGION HAVING INCREASING OR DECREASING GAP SIZE, IN THE COURSE OF WHICH A CHANGE IN VISCOSITY OF THE REACTION MEDIUM OCCURS

Title (de)

VERFAHREN ZUR STOFFUMWANDLUNG UNTER TAYLORWIRBELSTRÖMUNGBEDINGUNGEN IN EINEM TAYLORREAKTOR MIT VERBREITERTER ODER VERENGTER RINGSPALTE, BEI DEREN VERLAUF EINE ÄNDERUNG DER VISKOSITÄT DES REAKTIONSMEDIUMS EINTRITT

Title (fr)

TRANSFORMATIONS DE MATIERES ACCOMPAGNEES D'UNE MODIFICATION DE LA VISCOSITE)DU MILIEU DE REACTION DANS DES CONDITIONS DE MELANGE TURBULENT DE TAYLOR DANS UN REACTEUR DE TAYLOR AYANT DES DISTANCES DE SEPARATION ENTRE LES ELEMENTS ROTATIFS ET STATIQUES DU REACTEUR ETANT CROISANTES OU DECROISANTES

Publication

**EP 1098697 A1 20010516 (DE)**

Application

**EP 99929311 A 19990623**

Priority

- DE 19828742 A 19980627
- EP 9904370 W 19990623

Abstract (en)

[origin: DE19828742A1] Viscosity change commences during reaction. The geometrical form of the reactor wall (1) and/or rotor (2), over the entire length, satisfies conditions for Taylor vortex flow in the reactor volume (5). The outer reactor wall and rotor of the Taylor reactor turn in the same direction. Angular velocity of the rotor exceeds that of the wall, which may be stationary. They are both circular in cross section, along their entire lengths. The reactor is vertical; reaction medium moves against gravity. The rotor is mounted centrally. The product outlet (7) is mounted at the highest point of the reactor cover. Outer wall and rotor diverge in the direction of flow, the rotor circumference remaining constant, rising or falling. The outer wall is frustrated conical, or includes an assembly of several such sections. Conformations are such that the annular gap between rotor and wall, narrows in the direction of flow. The rotor circumference changes as before. Reactions may take place in succession along the reactor. An inlet (6) is used to dose material and catalysts for second, third or further reactions. An Independent claim covers use of the reactor.

IPC 1-7

**B01J 19/18**

IPC 8 full level

**B01J 19/18** (2006.01)

CPC (source: EP US)

**B01J 19/1806** (2013.01 - EP US); **B01J 19/1887** (2013.01 - EP US); B01J 2219/00051 (2013.01 - EP US); B01J 2219/00162 (2013.01 - EP US); B01J 2219/00168 (2013.01 - EP US); B01J 2219/182 (2013.01 - EP US); B01J 2219/185 (2013.01 - EP US); B01J 2219/187 (2013.01 - EP US); B01J 2219/1946 (2013.01 - EP US)

Citation (search report)

See references of WO 0000280A1

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