

Title (en)

METHOD FOR THE PRODUCTION OF CERAMIC CATALYTIC MEMBRANE REACTORS BY CO-EXTRUSION

Title (de)

VERFAHREN ZUR HERSTELLUNG VON REAKTOREN MIT KERAMISCHER KATALYTISCHER MEMBRAN DURCH CO-EXTRUSION

Title (fr)

PROCEDE D'ELABORATION DE REACTEURS MEMBRANAIRES CATALYTIQUES CERAMIQUES PAR CO-EXTRUSION

Publication

**EP 1899126 A1 20080319 (FR)**

Application

**EP 05759825 A 20050503**

Priority

- FR 2005050297 W 20050503
- FR 0405124 A 20040512

Abstract (en)

[origin: WO2005113209A1] The invention relates to the preparation of a supported tubular ceramic membrane consisting of two layers which are coaxial according to an axis (x), a first support material layer (S) and a second active material layer (M), characterized in that it comprises the following successive stages: - a stage (a) in which a paste is formed coaxially from the support material (S) with simultaneous co-extrusion, having a speed  $V_s$  at which it flows along the axis (x) and wherein a paste (PM) is formed from the active material (M), having a speed  $V_M$  at which it flows along the axis (x) wherein  $V_s = V_M$ ; - a stage (b) wherein the co-extrudate formed in stage (a) is dried; - a stage (c) wherein the co-extrudate dried in stage (b) is debound, and a co-sintering stage (d) involving thermal treatment of the two coaxial layers of the product obtained in stage (c). The invention also relates to a device for carrying out stage (a).

IPC 8 full level

**B28B 3/20** (2006.01); **B28B 3/26** (2006.01); **B29C 48/09** (2019.01); **B29C 48/21** (2019.01); **B29C 48/34** (2019.01)

CPC (source: EP US)

**B01D 53/228** (2013.01 - EP US); **B01D 67/00411** (2022.08 - EP US); **B01D 69/088** (2013.01 - EP US); **B01D 69/1212** (2022.08 - EP US); **B01D 71/0271** (2022.08 - EP US); **B28B 3/20** (2013.01 - EP US); **B28B 3/2636** (2013.01 - EP US); **B29C 48/09** (2019.02 - EP US); **B29C 48/21** (2019.02 - EP US); **B01D 2323/12** (2013.01 - EP US); **B01D 2323/18** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

**WO 2005113209 A1 20051201**; CN 1953855 A 20070425; EP 1899126 A1 20080319; FR 2870161 A1 20051118; FR 2870161 B1 20060630; JP 2007537065 A 20071220; US 2005253312 A1 20051117

DOCDB simple family (application)

**FR 2005050297 W 20050503**; CN 200580015362 A 20050503; EP 05759825 A 20050503; FR 0405124 A 20040512; JP 2007512301 A 20050503; US 12804705 A 20050512