

Title (en)
Treatment apparatus for highly viscous fluid

Title (de)
Behandlungsvorrichtung für hochviskoses Fluid

Title (fr)
Appareil de traitement pour fluide hautement visqueux

Publication
EP 2719448 A1 20140416 (EN)

Application
EP 13150447 A 20130108

Priority
JP 2012226977 A 20121012

Abstract (en)
A treatment apparatus for production of solid/liquid type treatment materials in chemistry, medicines, electronics, ceramics, foods, feed or the like, which conducts a mixing and kneading, kneading or dispersion treatment of a highly viscous paste preliminarily mixed and kneaded having a viscosity range of 10 to 2,500 dPa · s, without using dispersion media or beads. This treatment apparatus comprises a vessel having a supply port and a discharge port of treatment materials, and a rotating body rotatably disposed in the vessel. An annular fine gap is formed between an inner face of the vessel and an outer periphery face of the rotating body for passage of the treatment materials, while being subject to the treatment by the rotating body. The surface of the rotating body which faces the fine gap is provided with notches formed by a knurling process.

IPC 8 full level
B01F 27/74 (2022.01); **B01F 23/57** (2022.01)

CPC (source: EP KR)
B01F 23/50 (2022.01 - KR); **B01F 27/00** (2022.01 - KR); **B01F 27/0531** (2022.01 - EP); **B01F 27/2722** (2022.01 - EP)

Citation (applicant)
• JP H03178326 A 19910802 - INOUE MFG
• JP 2007125518 A 20070524 - CHUO KAKOKI

Citation (search report)
• [X] US 5141328 A 19920825 - DILLEY JERRY D [US]
• [X] US 3684732 A 19720815 - GRABAUSKAS JOSEPH J
• [XY] GB 1307926 A 19730221 - PLIZ G MASCHINENFABRIK J S PET
• [XY] US 2009230223 A1 20090917 - STALL ALAN [US], et al
• [X] US 3471131 A 19691007 - FRITZWEILER RUPPRECHT, et al

Cited by
EP2995370A1

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)
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DOCDB simple family (publication)
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DOCDB simple family (application)
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