

Title (en)
PIPE-TYPE MIXER

Title (de)
ROHRMISCHER

Title (fr)
MÉLANGEUR À TUYAUX

Publication
EP 3587987 A1 20200101 (EN)

Application
EP 17912567 A 20170607

Priority
CN 2017087364 W 20170607

Abstract (en)

Disclosed is a pipe-type mixer, comprising an inner sleeve pipe (2) taking a mixing action and an outer sleeve pipe (1) taking a heat-exchange action, wherein the inner sleeve pipe (2) is located inside the outer sleeve pipe (1), and the cross section of the inner sleeve pipe (2) is a hexagon and is formed of a combination of one section of inner pipe twisting clockwise along the pipe centre and one section of inner pipe twisting anticlockwise. The pipe-type mixer is for a complex fluid with high solid content, high viscosity or containing fibers, while realizing enhanced mass transfer and heat transfer, and has anti-fouling, anti-blockage and alternative mechanical stirring functions.

IPC 8 full level
F28F 1/02 (2006.01); **F28D 7/10** (2006.01)

CPC (source: EP)
B01F 25/4331 (2022.01); **B01F 25/4333** (2022.01); **B01F 35/92** (2022.01); **F28D 7/10** (2013.01); **F28D 7/106** (2013.01); **F28F 1/02** (2013.01);
F28F 1/04 (2013.01); **F28D 2021/0052** (2013.01); **F28F 2210/06** (2013.01); **F28F 2215/04** (2013.01)

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)
BA ME

DOCDB simple family (publication)
EP 3587987 A1 20200101; EP 3587987 A4 20201104; EP 3587987 B1 20230215; CN 110431371 A 20191108; CN 110431371 B 20240507;
WO 2018223296 A1 20181213

DOCDB simple family (application)
EP 17912567 A 20170607; CN 2017087364 W 20170607; CN 201780088617 A 20170607