

Title (en)

MIXING INSERT, STATIC MIXER AND PRODUCTIONMETHOD

Title (de)

MISCHEREINSATZ, STATISCHER MISCHER SOWIE HERSTELLVERFAHREN

Title (fr)

ELEMENT D'UN MELANGEUR, MELANGEUR STATIQUE ET METHODE DE FABRICATION

Publication

EP 3386617 B1 20200304 (DE)

Application

EP 16822912 A 20161207

Priority

- DE 102015121351 A 20151208
- EP 2016080149 W 20161207

Abstract (en)

[origin: WO2017097860A1] A mixer insert (1) for a static mixer, comprising a plurality of mixing elements (3, 3a, 3b, 3c, 3d...) that are arranged in series along a longitudinal axis (L) and preferably immediately adjoining one another, respectively comprising a plurality of intersecting rods (8, 9; 10, 11), wherein at least two successive, along the longitudinal axis (L), mixing elements (3, 3a, 3b; 3b, 3c; 3c, 3d;...) are arranged rotated through a twist angle of preferably 90° with respect to one another and relative to the longitudinal axis (L). The invention provides that the mixer insert (1) is composed of multiple separate part-mixer inserts (2, 2a, 2b) which each extend along the longitudinal axis and are arranged adjacently perpendicular to the longitudinal axis (L), wherein each part-mixer insert (2, 2a, 2b) has a plurality of part-mixing elements (14, 14a, 14b, 14c, 14d...; 15, 15a, 15b, 15c, 15d...) immediately adjoining one another that are arranged in series along the longitudinal axis (L) and are integrally connected to one another along the longitudinal axis (L), and in that those part-mixing elements (14, 15; 14a, 15a; 14b, 15b; 14c, 15c; 14d, 15d;...), arranged in each case next to one another and perpendicular to the longitudinal axis, of the part-mixer inserts (2, 2a, 2b) form one of the mixing elements (3, 3a, 3b, 3c, 3d,...), and in that at least two of the part-mixing elements (14, 14a, 14b, 14c, 14d...; 15, 15a, 15b, 15c, 15d...), immediately adjoining one another along the longitudinal axis (L), of the part-mixer inserts (2, 2a, 2b) are arranged rotated through the twist angle with respect to one another and relative to the longitudinal axis (L).

IPC 8 full level

B01F 5/06 (2006.01); **B01F 15/00** (2006.01)

CPC (source: EP US)

B01F 25/43161 (2022.01 - EP US); **B01F 35/561** (2022.01 - EP US)

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

DOCDB simple family (publication)

DE 102015121351 A1 20170608; CN 108367258 A 20180803; CN 108367258 B 20210924; EP 3386617 A1 20181017; EP 3386617 B1 20200304; ES 2793307 T3 20201113; PL 3386617 T3 20200727; US 10882014 B2 20210105; US 2020254401 A1 20200813; WO 2017097860 A1 20170615

DOCDB simple family (application)

DE 102015121351 A 20151208; CN 201680071246 A 20161207; EP 16822912 A 20161207; EP 2016080149 W 20161207; ES 16822912 T 20161207; PL 16822912 T 20161207; US 201615781491 A 20161207