

Title (en)

MIXING AND/OR TURBULENT MIXING DEVICE

Title (de)

MISCH- UND/ODER VERWIRBELUNGSVORRICHTUNG

Title (fr)

DISPOSITIF DE MELANGE ET/OU DE TOURBILLONNEMENT

Publication

EP 1827667 B1 20100519 (DE)

Application

EP 05850183 A 20051220

Priority

- DE 2005002292 W 20051220
- DE 202004019745 U 20041222

Abstract (en)

[origin: US2013021871A1] The invention comprises embodiments of devices and methods involving mixers and/or swirlers that better combine or optimize important factors such as mixing and turbulent mixing intensity and/or natural liquid, vapor and gas-specific mixing and turbulent mixing and/or cost-efficient application possibilities and/or precise controllability of numerous substances and amounts. Throughflow plates provided with special hole arrangements and matching mixing and/or turbulent mixing aids, such as funnels, enable better control, regulation and optimization of flow speeds, mixing and/or turbulent mixing intensities and combinations and complex mixing and/or turbulent mixing processes. The invention is suitable for efficient mixing and/or turbulent mixing of liquids and/or mixtures of liquids and solids and/or vapors and/or gases. Many applications are conceivable, e.g. in water treatment, the food and beverages industry, medicine, pharmaceuticals, biology, physics and chemistry.

IPC 8 full level

B01F 5/06 (2006.01); **B05B 1/34** (2006.01); **E03C 1/08** (2006.01); **F15D 1/08** (2006.01)

CPC (source: EP KR US)

B01F 25/45 (2022.01 - EP US); **B01F 25/4521** (2022.01 - EP US); **B05B 1/3415** (2013.01 - EP KR US); **E03C 1/08** (2013.01 - EP KR US); **F15D 1/08** (2013.01 - EP KR US); **Y10T 29/49826** (2015.01 - 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 LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

DE 202004019745 U1 20050224; AT E468167 T1 20100615; AU 2005318737 A1 20060629; CA 2592000 A1 20060629; CN 100586545 C 20100203; CN 101087643 A 20071212; DE 112005003482 A5 20071122; DE 502005009612 D1 20100701; DK 1827667 T3 20100906; EP 1827667 A1 20070905; EP 1827667 B1 20100519; ES 2346336 T3 20101014; JP 2008524530 A 20080710; JP 4966863 B2 20120704; KR 20070099615 A 20071009; PL 1827667 T3 20101029; RU 2007127622 A 20090127; RU 2403083 C2 20101110; US 2010014378 A1 20100121; US 2013021871 A1 20130124; WO 2006066558 A1 20060629; WO 2006066558 B1 20070621

DOCDB simple family (application)

DE 202004019745 U 20041222; AT 05850183 T 20051220; AU 2005318737 A 20051220; CA 2592000 A 20051220; CN 200580044205 A 20051220; DE 112005003482 T 20051220; DE 2005002292 W 20051220; DE 502005009612 T 20051220; DK 05850183 T 20051220; EP 05850183 A 20051220; ES 05850183 T 20051220; JP 2007547170 A 20051220; KR 20077016339 A 20070716; PL 05850183 T 20051220; RU 2007127622 A 20051220; US 201213429373 A 20120324; US 72236905 A 20051220