Title (en)

Apparatus and method for mixing of a fluid flow in a flow channel

Title (de)

Vorrichtung und Verfahren zum Mischen eines Fluidstroms in einem Strömungskanal

Title (fr)

Dispositif et procédé de mélange d'un courant de fluide dans un conduit

Publication

EP 1681090 B1 20070530 (DE)

Application

EP 05000811 A 20050117

Priority

EP 05000811 A 20050117

Abstract (en)

[origin: EP1681090A1] A mixer has discs (3) producing leading edge vortices (5) in fluid (P) in a flow channel (2) with the discs (3) arranged in rows (8,9) transverse to the main flow direction (4) with each disc in a row equally angled co-directionally to flow direction (4), the rows (8,9) lying next to each other in a section (10) of channel (2) so that discs in adjacent rows alternate at positive and negative angles to flow direction (4). An independent claim is also included for a mixing process in which a fluid flow is mixed by a leading edge vortex system produced by >=2 counter-directionally oriented systems (14) in a flow channel section (10).

IPC 8 full level

B01F 5/06 (2006.01); **B01F 5/04** (2006.01); **B01F 15/00** (2006.01)

CPC (source: EP KR US)

A47K 3/022 (2013.01 - KR); **B01F 25/3131** (2022.01 - EP US); **B01F 25/3132** (2022.01 - EP US); **B01F 25/31322** (2022.01 - EP US); **B01F 25/43161** (2022.01 - EP KR US); **B01F 25/431973** (2022.01 - EP); **F24H 9/0005** (2013.01 - KR); B01F 25/431973 (2022.01 - US); B01F 2025/931 (2022.01 - EP US)

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Designated contracting state (EPC)

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DOCDB simple family (publication)

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DOCDB simple family (application)

EP 05000811 A 20050117; AT 05000811 T 20050117; CA 2532609 A 20060111; CA 2711423 A 20060111; CN 200510105623 A 20050928; DE 502005000780 T 20050117; ES 05000811 T 20050117; HK 06110478 A 20060920; JP 2006009213 A 20060117; KR 20060004845 A 20060117; PL 05000811 T 20050117; RU 2006101280 A 20060116; TW 94130603 A 20050906; US 16865605 A 20050629