

Title (en)
STATIC LAMINATION MICRO MIXER

Title (de)
STATISCHER LAMINATIONSMIKROVERMISCHER

Title (fr)
MICROMELANGEUR LAMELLAIRE STATIQUE

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Application
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Abstract (en)
[origin: WO2004052518A2] The invention relates to a static lamination micro mixer for mixing, dispersing, emulsifying or suspending at least two fluid phases. Said mixer contains at least one slitted disk provided with slits and a diaphragm which is also provided with slits and which is arranged over the at least one slitted disk. Said slits are manufactured in the form of continuous openings.

IPC 8 full level
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Citation (examination)
• US 422671 A 18900304
• US 5887977 A 19990330 - MORIKAWA HIDEYUKI [JP]
• US 3881701 A 19750506 - SCHOENMAN LEONARD, et al
• DE 10041823 A1 20020314 - INST MIKROTECHNIK MAINZ GMBH [DE], et al
• US 5534328 A 19960709 - ASHMEAD JAMES W [US], et al
• DE BELLEFON C ET AL: "Microreactors for dynamic high throughput screening of fluid-liquid molecular catalysis", ANGEWANDTE CHEMIE, WILEY - V C H VERLAG GMBH & CO. KGAA, DE, vol. 19, 1 January 2000 (2000-01-01), pages 3584 - 3587, XP003022882, ISSN: 0044-8249
• HAVERKAMP V ET AL: "The potential of micromixers for contacting of disperse liquid phases", FRESERIUS JOURNAL OF ANALYTICAL CHEMISTRY, SPRINGER, BERLIN, DE, vol. 364, 1 January 1999 (1999-01-01), pages 617 - 624, XP002260622, ISSN: 0937-0633, DOI: 10.1007/S002160051397
• EHRFELD W ET AL: "CHARACTERIZATION OF MIXING IN MICROMIXERS BY A TEST REACTION: SINGLE MIXING UNITS AND MIXER ARRAYS", INDUSTRIAL & ENGINEERING CHEMISTRY RESEARCH, AMERICAN CHEMICAL SOCIETY, US, vol. 38, no. 3, 1 January 1999 (1999-01-01), pages 1075 - 1082, XP000940846, ISSN: 0888-5885, DOI: 10.1021/IE980128D

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