

Title (en)

Method and apparatus for processing liquids under cavitation conditions

Title (de)

Verfahren und Vorrichtung zur Verarbeitung von Flüssigkeiten unter Kavitationsbedingungen

Title (fr)

Procédé et appareil pour le traitement de liquides sous des conditions de cavitation

Publication

**EP 1985357 A1 20081029 (EN)**

Application

**EP 08460013 A 20080421**

Priority

PL 38226407 A 20070424

Abstract (en)

A method and apparatus for processing liquid fluids with use of cavitation process is being disclosed, consisting of bringing a liquid to be cavitated in between two planar elements, one stationary, one rotary, said planar elements having regular, concentric structure of alternate protrusion and channels, divided into arched segments by radial channels in both planar elements, complementary on both stationary and rotary elements, so they create labyrinth like arrangement, with some clearance in both radial and axial directions, between the protrusions and channels which create said labyrinth. The process is particularly suitable for heating liquid fluids, mixing different liquids, dispersing suspensions within liquid fluid, decontamination of wastewater and many other processes.

IPC 8 full level

**B01F 27/73** (2022.01); **B01F 27/93** (2022.01); **B01J 19/00** (2006.01)

CPC (source: EP)

**B01F 27/2711** (2022.01); **B01F 23/40** (2022.01)

Citation (applicant)

- US 5385298 A 19950131 - GRIGGS JAMES L [US]
- WO 2005030659 A1 20050407 - SCHMID ANDREAS [DE]

Citation (search report)

- [PXPA] EP 1790615 A1 20070530 - TRADING ENGINEERING TECHNOLOGI [US]
- [XA] US 2004191667 A1 20040930 - KUROKAWA HISASHI [JP], et al
- [DA] WO 2005030659 A1 20050407 - SCHMID ANDREAS [DE]
- [A] US 2001021372 A1 20010913 - OMTVEIT TORE [NO], et al
- [A] DE 2033168 A1 19710218 - HONEYWELL INC
- [A] US 2478893 A 19490816 - BRANT DAVID O
- [A] US 2328950 A 19430907 - BRANT DAVID O
- [A] US 3996012 A 19761207 - ZUCKER FRIEDRICH J

Cited by

EP3253715A4; CN112811483A; CZ304934B6; EP2623192A4; EP2465610A1; WO2014049538A3

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**EP 1985357 A1 20081029**; PL 211672 B1 20120629; PL 382264 A1 20081027

DOCDB simple family (application)

**EP 08460013 A 20080421**; PL 38226407 A 20070424