

Title (en)  
CAVITATION REACTOR

Title (de)  
KAVITATIONSREAKTOR

Title (fr)  
RÉACTEUR DE CAVITATION

Publication  
**EP 2459307 A2 20120606 (DE)**

Application  
**EP 10725388 A 20100609**

Priority  
• DE 102009034977 A 20090728  
• EP 2010003469 W 20100609

Abstract (en)  
[origin: WO2011012186A2] The invention relates to a cavitation reactor for the hydrodynamic generation of homogeneous, oscillating cavitation bubbles in a fluid, comprising, while forming a flow channel and arranged one after the other in the direction of flow of the fluid: an acceleration section designed to increase the flow speed, a diaphragm arranged at a right angle to the direction of flow and having a plurality of micropassages designed to produce cavitation bubbles, the diaphragm having at least 10 micropassages per cm<sup>2</sup> across an entire flow area defined on a side of the diaphragm which is in contact with the oncoming flow, a stabilization section designed to stabilize an oscillation of the cavitation bubbles, and a collapse section having at least one expanded section of a flow area of the flow channel in the direction of flow.

IPC 8 full level  
**B01J 19/00** (2006.01); **A61L 2/02** (2006.01); **B01F 3/08** (2006.01); **B01F 5/06** (2006.01); **B01J 19/24** (2006.01); **B01J 19/26** (2006.01)

CPC (source: EP US)  
**B01F 23/41** (2022.01 - EP US); **B01F 25/433** (2022.01 - EP US); **B01F 25/4335** (2022.01 - EP US); **B01F 25/45** (2022.01 - EP US); **B01F 25/4521** (2022.01 - EP US); **B01J 19/006** (2013.01 - EP US); **B01J 19/008** (2013.01 - EP US); **B01J 19/26** (2013.01 - EP US); **C02F 1/34** (2013.01 - EP US); **Y10T 137/0318** (2015.04 - EP US)

Citation (search report)  
See references of WO 2011012186A2

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 SE SI SK SM TR

DOCDB simple family (publication)  
**DE 102009034977 A1 20110203**; **DE 102009034977 B4 20110721**; EP 2459307 A2 20120606; US 2012222744 A1 20120906; WO 2011012186 A2 20110203; WO 2011012186 A3 20110428

DOCDB simple family (application)  
**DE 102009034977 A 20090728**; EP 10725388 A 20100609; EP 2010003469 W 20100609; US 201013387858 A 20100609