

Title (en)  
RESONANT-VIBRATORY MIXING

Title (de)  
RESONANZSCHWINGSMISCHUNG

Title (fr)  
MALAXAGE VIBRANT RÉSONNANT

Publication  
**EP 3450006 A3 20190320 (EN)**

Application  
**EP 18202371 A 20070112**

Priority  
• EP 18202371 A 20070112  
• EP 07835660 A 20070112  
• US 2007000953 W 20070112

Abstract (en)  
[origin: WO2008088321A1] A method for mixing fluids and/or solids in a manner that can be varied from maintaining the integrity of fragile molecular and biological materials in the mixing vessel to homogenizing heavy aggregate material by supplying large amounts of energy. Variation in the manner of mixing is accomplished using an electronic controller to generate signals to control the frequency and amplitude of the motor(s), which drive an unbalanced shaft assembly to produce a linear vibratory motion. The motor may be a servo motor, stepper motor, a linear motor or a DC continuous motor. By placing a sensor on the mixing vessel platform to provide feedback control of the mixing motor, the characteristics of agitation in the fluid or solid can be adjusted to optimize the degree of mixing and produce a high quality mixant.

IPC 8 full level  
**B01F 11/00** (2006.01); **B06B 1/04** (2006.01); **B06B 1/10** (2006.01); **B06B 1/16** (2006.01)

CPC (source: EP)  
**B01F 31/265** (2022.01); **B01F 31/27** (2022.01); **B06B 1/04** (2013.01); **B06B 1/10** (2013.01); **B01F 2101/44** (2022.01)

Citation (search report)  
• [X] EP 0393492 A2 19901024 - RICOR LTD [IL]  
• [AD] US 4972930 A 19901127 - DAVIS EVAN B [US]  
• [A] US 2653521 A 19530929 - EINARSSON AHLFORS STEN ESKIL

Cited by  
CN111249960A; EP3953065A4

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)  
**WO 2008088321 A1 20080724**; EP 2112952 A1 20091104; EP 2112952 A4 20161012; EP 2112952 B1 20190313; EP 3450006 A2 20190306; EP 3450006 A3 20190320; EP 3450006 B1 20211201; ES 2719481 T3 20190710; ES 2906337 T3 20220418; JP 2010515565 A 20100513; JP 5313924 B2 20131009; PL 2112952 T3 20190731

DOCDB simple family (application)  
**US 2007000953 W 20070112**; EP 07835660 A 20070112; EP 18202371 A 20070112; ES 07835660 T 20070112; ES 18202371 T 20070112; JP 2009545527 A 20070112; PL 07835660 T 20070112