

Title (en)
PROCESS AND APPARATUS FOR IMPROVING THE DISINTEGRATION OF THIXOTROPIC SUSPENSIONS BY MEANS OF ULTRASOUND

Title (de)
VERFAHREN UND VORRICHTUNG ZUR VERBESSERUNG DER DESINTEGRATION VON THIXOTROPEN SUSPENSIONEN MITTELS
ULTRASCHALL

Title (fr)
PROCÉDÉ ET DISPOSITIF POUR AMÉLIORER LA DÉSINTÉGRATION DE SUSPENSIONS THIXOTROPES GRÂCE AUX ULTRASONS

Publication
EP 2197802 A1 20100623 (DE)

Application
EP 08838241 A 20080930

Priority
• EP 2008063073 W 20080930
• DE 102007000824 A 20071005

Abstract (en)
[origin: CA2712108A1] The invention is based on the field of process technology and relates to a process and to an apparatus as can be used, for example, for disintegration of sludges. It is an object of the present invention to specify a process in which the dynamic viscosity of the thixotropic suspensions is lowered before and/or during the ultrasound treatment. The object is achieved by a process in which thixotropic suspensions are subjected to mechanical stress and then sent to an ultrasound treatment, at least one further suspension stream with a higher flow rate being added to the suspension stream before the ultrasound treatment. The object is additionally achieved by an apparatus consisting of a pipeline system with an apparatus part for applying mechanical stress downstream of an ultrasound probe, and orifices being present in the pipeline upstream and downstream of the region with the ultrasound probes, these orifices being connected via a further pipeline.

IPC 8 full level
C02F 11/00 (2006.01); **C02F 1/36** (2006.01)

CPC (source: EP US)
B01J 19/10 (2013.01 - EP US); **C02F 1/34** (2013.01 - EP US); **C02F 1/36** (2013.01 - EP US); **C02F 11/00** (2013.01 - EP US);
C02F 2303/06 (2013.01 - EP US)

Citation (search report)
See references of WO 2009047165A1

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)
DE 102007000824 A1 20090409; CA 2712108 A1 20090416; CN 101821208 A 20100901; EP 2197802 A1 20100623;
US 2010288709 A1 20101118; WO 2009047165 A1 20090416

DOCDB simple family (application)
DE 102007000824 A 20071005; CA 2712108 A 20080930; CN 200880110375 A 20080930; EP 08838241 A 20080930;
EP 2008063073 W 20080930; US 68121308 A 20080930