

Title (en)

Method for the dispersion of nanoparticles in a fluid

Title (de)

Verfahren für das Dispergieren von Nanopartikeln in einem Fluid

Title (fr)

Procédé pour la dispersion de nanoparticules dans un fluide

Publication

**EP 2868370 A1 20150506 (EN)**

Application

**EP 14190989 A 20141030**

Priority

IT MO20130303 A 20131030

Abstract (en)

The appliance (1) for the dispersion of particles (P) in a fluid (F) comprises a supporting structure (2), a first disc (3) associated with the supporting structure (2) axially rotatable and a second disc (4) associated with the supporting structure (2), the first disc (3) and the second disc (4) being arranged parallel to one another and substantially closed to define at least an interstice (I), and introduction means (5) for introducing a fluid (F) containing agglomerates of particles (P) to disperse, able to introduce the fluid (F) inside the interstice (I) and in correspondence to a substantially central portion of the first disc (3), the rotation of the first disc (3) being able to submit the fluid (F) inside the interstice (I) to a complex field of forces, with the purpose of producing cutting forces able to separate the agglomerates of particles (P), dispersing the particles (P) inside the fluid (F).

IPC 8 full level

**B01F 7/00** (2006.01)

CPC (source: EP)

**B01F 27/2714** (2022.01)

Citation (applicant)

LU, K. L. ET AL.: "Mechanical damage of carbon nanotubes by ultrasound", CARBON, vol. 34, 1996, pages 814 - 816

Citation (search report)

- [XA] US 2005053532 A1 20050310 - HOLL RICHARD A [US]
- [XA] GB 1500901 A 19780215 - CEMENTATION RES LTD
- [XA] GB 722820 A 19550202 - JACKSON AND CHURCH COMPANY
- [XA] US 2172704 A 19390912

Cited by

CN110354962A

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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 2868370 A1 20150506; EP 2868370 B1 20191009**; ES 2764402 T3 20200603; IT MO20130303 A1 20150501; PL 2868370 T3 20200430

DOCDB simple family (application)

**EP 14190989 A 20141030**; ES 14190989 T 20141030; IT MO20130303 A 20131030; PL 14190989 T 20141030