

Title (en)

METHOD FOR GENERATING MECHANICAL WAVES BY CREATING AN INTERFACIAL ACOUSTIC RADIATION FORCE

Title (de)

VERFAHREN ZUR ERZEUGUNG MECHANISCHER WELLEN DURCH HERSTELLUNG EINER AKUSTISCHEN GRENZFLÄCHEN-
STRAHLUNGSKRAFT

Title (fr)

PROCEDE DE GENERATION D'ONDES MECANIKES PAR GENERATION DE FORCE DE RADIATION ACOUSTIQUE INTERFACIALE

Publication

EP 2084702 B1 20200318 (FR)

Application

EP 07866491 A 20071025

Priority

- FR 2007052247 W 20071025
- FR 0654502 A 20061025
- US 88323307 P 20070103

Abstract (en)

[origin: FR2907692A1] The method involves generating an interfacial acoustic radiation force (15) within a viscoelastic medium (11) i.e. biological medium, by applying acoustic waves i.e. ultrasonic waves, focused on an interface (13) i.e. artificial membrane, delimiting the medium (11) and an artificial medium (14) that possess distinct acoustic properties. The medium is imaged by using an ultrasonic sensor (12), in a rapid manner. The generation of the force is combined with the imaging of the medium such that propagation of mechanical waves that are generated in the medium, is imaged. An independent claim is also included for an artificial membrane for serving as an interface during implementation of a method of generating a mechanical transverse wave.

IPC 8 full level

G10K 11/30 (2006.01)

CPC (source: EP US)

G10K 11/30 (2013.01 - EP US)

Citation (examination)

- US 5903516 A 19990511 - GREENLEAF JAMES F [US], et al
- DE 4229631 A1 19940310 - SIEMENS AG [DE]

Designated contracting state (EPC)

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DOCDB simple family (publication)

FR 2907692 A1 20080502; FR 2907692 B1 20091030; CA 2667527 A1 20080502; CA 2667527 C 20160621; CN 101589426 A 20091125; CN 101589426 B 20130320; EP 2084702 A2 20090805; EP 2084702 B1 20200318; US 2008276709 A1 20081113; US 8037766 B2 20111018; WO 2008050072 A2 20080502; WO 2008050072 A3 20080619

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FR 0654502 A 20061025; CA 2667527 A 20071025; CN 200780039649 A 20071025; EP 07866491 A 20071025; FR 2007052247 W 20071025; US 9240607 A 20071025