

Title (en)

PROBING SYSTEM FOR MEASURING THE DIRECTION AND SPEED OF MUCUS FLOW IN VIVO

Title (de)

SONDIERSYSTEM ZUR MESSUNG DER RICHTUNG UND GESCHWINDIGKEIT DES SCHLEIMFLUSSES IN VIVO

Title (fr)

SYSTÈME DE SONDAGE PERMETTANT DE MESURER LA DIRECTION ET LA VITESSE D'UN ÉCOULEMENT DE MUCUS IN VIVO

Publication

EP 2503933 A1 20121003 (EN)

Application

EP 10803148 A 20101125

Priority

- US 26427509 P 20091125
- IL 2010000986 W 20101125

Abstract (en)

[origin: WO2011064775A1] The present invention relates to a system and method for measuring the direction and speed of movement of mucus flowing along a ciliary tissue surface, wherein said system comprises: a) a probing unit comprising: dispensing means for controlled seeding of labeled particles into said flowing mucus; probe illumination means for illuminating the mucus flowing over said ciliary tissue surface; optical sensing means for detecting the movement of said labeled particles; optical coupling means for optically coupling said illuminated mucus to said optical sensing means; and b) a control unit comprising at least one illumination source, and means for processing optical or electrical signals received from said optical sensing means and determining the direction and speed of said mucus according to said received signals; c) means for transferring optical or electrical or control signals between said probing unit and said control unit.

IPC 8 full level

A61B 1/04 (2006.01); **A61B 1/267** (2006.01); **A61B 1/273** (2006.01); **A61B 5/00** (2006.01); **G01N 21/49** (2006.01)

CPC (source: EP US)

A61B 1/0008 (2013.01 - EP US); **A61B 1/04** (2013.01 - EP US); **A61B 1/043** (2013.01 - EP); **A61B 1/233** (2013.01 - EP); **A61B 5/0071** (2013.01 - EP); **A61B 5/0084** (2013.01 - EP); **A61B 5/7207** (2013.01 - EP)

Citation (search report)

See references of WO 2011064775A1

Citation (examination)

- US 2007270652 A1 20071122 - MORISHITA KOKI [JP], et al
- US 5993378 A 19991130 - LEMELSON JEROME H [US]

Cited by

CN109965865A; US11278190B2; US9642513B2; US10499794B2; US10203493B2; US11543646B2; US10165929B2; US10912445B2; US9872609B2; US10799095B2; US9901244B2; US9986892B2; US11471028B2; US9655502B2; US10470649B2; US11291357B2; US10905320B2; US11889986B2; US9706905B2; US9713415B2; US10638922B2; US11534056B2; US11864734B2; US9706903B2; US10092167B2; US10182707B2; US10791910B2; US9814374B2; US9854959B2; US10070774B2; US10292578B2; US10898063B2; US11026566B2; US11497388B2; US9986899B2; US10080486B2; US10905315B2; US11547275B2; US11793393B2; US9713417B2; US9993142B2; US10791909B2; US10925471B2; US11925323B2

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

DOCDB simple family (publication)

WO 2011064775 A1 20110603; EP 2503933 A1 20121003

DOCDB simple family (application)

IL 2010000986 W 20101125; EP 10803148 A 20101125