

Title (en)

IMPROVED DETECTION OF FLUID CHANGES

Title (de)

VERBESSERTE ERKENNUNG VON FLÜSSIGKEITSVERÄNDERUNGEN

Title (fr)

DÉTECTION AMÉLIORÉE DE CHANGEMENTS DE FLUIDE

Publication

**EP 3537951 A4 20200701 (EN)**

Application

**EP 16921385 A 20161229**

Priority

- US 201615349260 A 20161111
- US 2016069209 W 20161229

Abstract (en)

[origin: WO2018089035A1] A volumetric integral phase-shift spectroscopy (VIPS) device for detecting evidence of a stroke in a patient may include a frame including a housing, at least one VIPS receiver in the housing, circuitry in the housing coupled with the at least one VIPS receiver, two wrap-around ends, configured to wrap around the back of the patient's head and over the ears, a first VIPS transmitter in one of the two wrap-around ends, a second VIPS transmitter in the other of the two wrap-around ends, and a processor. The first and second VIPS transmitters and the at least one VIPS receiver may measure multiple phase shifts and/or multiple amplitudes in a fluid and/or a tissue in the patient's head. The processor may determine that the multiple phase shifts and/or multiple amplitudes matches a predefined stroke-specific VIPS signature and thus detect evidence of a stroke.

IPC 8 full level

**A61B 5/00** (2006.01)

CPC (source: EP)

**A61B 5/00** (2013.01); **A61B 5/0022** (2013.01); **A61B 5/031** (2013.01); **A61B 5/05** (2013.01); **A61B 5/6814** (2013.01); **G16H 40/67** (2017.12)

Citation (search report)

- [XY] WO 2016036946 A1 20160310 - CEREBROTECH MEDICAL SYSTEMS INC [US]
- [Y] US 8303110 B1 20121106 - WEAVER JOSH [US], et al
- [A] WO 2014152374 A1 20140925 - UNIV CALIFORNIA [US]
- See references of WO 2018089035A1

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 2018089035 A1 20180517**; AU 2016429442 A1 20190523; CA 3042629 A1 20180517; CN 110191672 A 20190830; EP 3537951 A1 20190918; EP 3537951 A4 20200701; IL 266498 A 20190731; JP 2020511173 A 20200416; MA 46734 A 20190918

DOCDB simple family (application)

**US 2016069209 W 20161229**; AU 2016429442 A 20161229; CA 3042629 A 20161229; CN 201680091869 A 20161229; EP 16921385 A 20161229; IL 26649819 A 20190507; JP 2019524411 A 20161229; MA 46734 A 20161229