

Title (en)
CATHETER FRAME PIECES USED AS LARGE SINGLE AXIS SENSORS

Title (de)
KATHETERRAHMENTEILE ALS GROSSE EINZELACHSENSENSOREN

Title (fr)
PIÈCES DE CADRE DE CATHÉTER UTILISÉ COMME GRANDS CAPTEURS À AXE UNIQUE

Publication
EP 3184037 B8 20211201 (EN)

Application
EP 16206174 A 20161222

Priority
US 201514757678 A 20151223

Abstract (en)
[origin: EP3184037A1] Catheterization of the heart is carried out using a framework formed by a plurality of electrically conducting wire loops. The wire loops are modeled as polygons, each subdivided into a plurality of triangles. The wire loops are exposed to magnetic fluxes at respective frequencies, and signals read from the loops. Theoretical magnetic fluxes in the polygons are computed as sums of theoretical magnetic fluxes in the triangles thereof. The location and orientation of the framework in the heart is determined by relating the computed theoretical magnetic fluxes to the signals.

IPC 8 full level
A61B 5/00 (2006.01); **A61B 5/283** (2021.01); **A61B 5/296** (2021.01); **A61B 5/332** (2021.01); **A61B 18/00** (2006.01); **A61N 1/00** (2006.01)

CPC (source: CN EP IL US)
A61B 5/05 (2013.01 - US); **A61B 5/062** (2013.01 - EP IL US); **A61B 5/065** (2013.01 - US); **A61B 5/287** (2021.01 - CN EP US); **A61B 5/318** (2021.01 - CN); **A61B 5/6852** (2013.01 - CN EP IL US); **A61B 5/6856** (2013.01 - US); **A61B 5/6869** (2013.01 - CN); **A61B 18/12** (2013.01 - CN); **A61B 18/1492** (2013.01 - CN EP IL US); **A61N 1/056** (2013.01 - EP US); **A61B 5/283** (2021.01 - EP US); **A61B 5/318** (2021.01 - EP US); **A61B 5/6858** (2013.01 - EP US); **A61B 2018/00011** (2013.01 - US); **A61B 2018/00267** (2013.01 - EP US); **A61B 2018/00351** (2013.01 - CN EP US); **A61B 2018/00357** (2013.01 - EP US); **A61B 2018/00577** (2013.01 - EP US); **A61B 2018/00595** (2013.01 - CN); **A61B 2018/00839** (2013.01 - EP US); **A61B 2018/1407** (2013.01 - EP US); **A61B 2034/2051** (2016.02 - EP US); **A61B 2562/0209** (2013.01 - CN)

Cited by
CN112294428A; EP3733103A1; EP3903721A1; US12029545B2; WO2018220479A1; EP3284404B1

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

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EP 3184037 A1 20170628; EP 3184037 B1 20210825; EP 3184037 B8 20211201; AU 2016259379 A1 20170713; CA 2950924 A1 20170623; CN 106963478 A 20170721; CN 106963478 B 20220125; EP 3936033 A1 20220112; EP 3936033 B1 20220928; EP 4169442 A1 20230426; IL 249200 A0 20170131; IL 249200 B 20210429; JP 2017113566 A 20170629; JP 2022091913 A 20220621; JP 7051291 B2 20220411; JP 7282946 B2 20230529; US 10687761 B2 20200623; US 11647958 B2 20230516; US 2017181706 A1 20170629; US 2020289059 A1 20200917; US 2023248315 A1 20230810

DOCDB simple family (application)
EP 16206174 A 20161222; AU 2016259379 A 20161117; CA 2950924 A 20161207; CN 201611206260 A 20161223; EP 21192763 A 20161222; EP 22197995 A 20161222; IL 24920016 A 20161124; JP 2016248944 A 20161222; JP 2022055581 A 20220330; US 201514757678 A 20151223; US 202016890964 A 20200602; US 202318297404 A 20230407