

Title (en)  
TISSUE MAPPING AND TREATMENT

Title (de)  
GEWEBEKARTIERUNG UND BEHANDLUNG

Title (fr)  
CARTOGRAPHIE ET TRAITEMENT TISSULAIRE

Publication  
**EP 4072456 A4 20231220 (EN)**

Application  
**EP 20900230 A 20201211**

Priority  
• US 201962947471 P 20191212  
• US 2020064587 W 20201211

Abstract (en)  
[origin: WO2021119479A1] Methods, systems, and devices are described for mapping and treating tissue during a medical procedure. In some cases, a device includes a mesh of wires with sensors coupled thereto. The mapping device can be coupled to an expandable treatment element. Alternatively, the treatment device can be a separate device, and advanced through an access lumen in the mapping device. The expandable treatment element can include multiple segments. The sensors can be used to map a tissue area and monitor the tissue during a medical procedure

IPC 8 full level  
**A61B 18/14** (2006.01); **A61B 18/04** (2006.01); **A61B 18/12** (2006.01); **A61B 18/16** (2006.01); **A61B 18/18** (2006.01)

CPC (source: EP)  
**A61B 5/01** (2013.01); **A61B 5/287** (2021.01); **A61B 5/367** (2021.01); **A61B 5/4836** (2013.01); **A61B 5/6858** (2013.01); **A61B 5/6869** (2013.01); **A61B 5/7275** (2013.01); **A61B 18/02** (2013.01); **A61B 18/1492** (2013.01); **A61B 18/1233** (2013.01); **A61B 2018/0016** (2013.01); **A61B 2018/00166** (2013.01); **A61B 2018/00196** (2013.01); **A61B 2018/0022** (2013.01); **A61B 2018/00261** (2013.01); **A61B 2018/00267** (2013.01); **A61B 2018/00351** (2013.01); **A61B 2018/00375** (2013.01); **A61B 2018/00577** (2013.01); **A61B 2018/00666** (2013.01); **A61B 2018/00702** (2013.01); **A61B 2018/00791** (2013.01); **A61B 2018/00839** (2013.01); **A61B 2018/0097** (2013.01); **A61B 2018/00982** (2013.01); **A61B 2018/0212** (2013.01); **A61B 2018/124** (2013.01); **A61B 2034/2063** (2016.02); **A61B 2090/065** (2016.02); **A61N 1/36** (2013.01)

Citation (search report)  
• [A] US 2017189106 A1 20170706 - SCHULER BRIAN [US], et al  
• [A] US 2015359487 A1 20151217 - COULOMBE NICOLAS [CA]  
• [A] WO 2018212840 A1 20181122 - CRYTERION MEDICAL INC [US]  
• [A] US 2013261471 A1 20131003 - SAHA SUNIPA [US], et al  
• [XAI] OKISHIGE KAORU ET AL: "Quick, safe, and effective maneuver to prevent phrenic nerve injury during cryoballoon ablation of atrial fibrillation", JOURNAL OF INTERVENTIONAL CARDIAC ELECTROPHYSIOLOGY, SPRINGER NEW YORK LLC, US, vol. 53, no. 2, 24 May 2018 (2018-05-24), pages 233 - 238, XP036608381, ISSN: 1383-875X, [retrieved on 20180524], DOI: 10.1007/S10840-018-0379-2  
• [IA] FRANCESCHI, FRÉDÉRIC; DUBUC, MARC; GUERRA, PETER G.; KHAIRY, PAUL: "Phrenic nerve monitoring with diaphragmatic electromyography during cryoballoon ablation for atrial fibrillation: The first human application", HEART RHYTHM, ELSEVIER, US, vol. 8, no. 7, 31 January 2011 (2011-01-31), pages 1068 - 1071, XP028235701, ISSN: 1547-5271, [retrieved on 20110209], DOI: 10.1016/J.HRTHM.2011.01.047  
• See also references of WO 2021119479A1

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 2021119479 A1 20210617**; EP 4072456 A1 20221019; EP 4072456 A4 20231220

DOCDB simple family (application)  
**US 2020064587 W 20201211**; EP 20900230 A 20201211