

Title (en)
METHODS AND SYSTEMS FOR UTILIZING QUANTITATIVE IMAGING

Title (de)
VERFAHREN UND SYSTEME ZUR VERWENDUNG VON QUANTITATIVER BILDGEBUNG

Title (fr)
PROCÉDÉS ET SYSTÈMES D'UTILISATION D'IMAGERIE QUANTITATIVE

Publication
EP 3803687 A4 20220323 (EN)

Application
EP 19811880 A 20190524

Priority
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• US 201862771448 P 20181126
• US 2019033930 W 20190524

Abstract (en)
[origin: WO2019231844A1] Systems and methods for analyzing pathologies utilizing quantitative imaging are presented herein. Advantageously, the systems and methods of the present disclosure utilize a hierarchical analytics framework that identifies and quantify biological properties/analytes from imaging data and then identifies and characterizes one or more pathologies based on the quantified biological properties/analytes. This hierarchical approach of using imaging to examine underlying biology as an intermediary to assessing pathology provides many analytic and processing advantages over systems and methods that are configured to directly determine and characterize pathology from underlying imaging data.

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Citation (search report)
• [X1] US 2017046839 A1 20170216 - PAIK DAVID S [US], et al
• [X1] MAJD ZREIK ET AL: "Automatic Detection and Characterization of Coronary Artery Plaque and Stenosis using a Recurrent Convolutional Neural Network in Coronary CT Angiography", ARXIV.ORG, CORNELL UNIVERSITY LIBRARY, 201 OLIN LIBRARY CORNELL UNIVERSITY ITHACA, NY 14853, 12 April 2018 (2018-04-12), XP080870084
• [X1] WEI JUN ET AL: "Computerized detection of noncalcified plaques in coronary CT angiography: Evaluation of topological soft gradient prescreening method and luminal analysis", MEDICAL PHYSICS., vol. 41, no. 8Part1, 7 July 2014 (2014-07-07), US, pages 081901 - n/a, XP055888731, ISSN: 0094-2405, Retrieved from the Internet <URL:https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4105962/pdf/MPHYA6-000041-081901_1.pdf> DOI: 10.1118/1.4885958
• See references of WO 2019231844A1

Designated contracting state (EPC)
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