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.

IPC 8 full level

G06K 9/00 (2022.01); **G06K 9/62** (2022.01); **G06T 7/00** (2017.01); **G06T 7/10** (2017.01); **G06T 7/60** (2017.01); **G06V 10/44** (2022.01); **G06V 10/82** (2022.01)

CPC (source: EP KR US)

G06F 18/2193 (2023.01 - EP KR); **G06F 18/2414** (2023.01 - EP KR); **G06N 3/08** (2013.01 - KR); **G06T 7/0012** (2013.01 - EP KR); **G06T 7/10** (2017.01 - EP KR); **G06T 7/60** (2013.01 - EP KR); **G06V 10/454** (2022.01 - EP KR US); **G06V 10/82** (2022.01 - EP KR US); G06T 2207/10072 (2013.01 - EP KR); G06T 2207/10116 (2013.01 - EP KR); G06T 2207/20081 (2013.01 - EP KR); G06T 2207/20084 (2013.01 - EP KR); G06T 2207/30096 (2013.01 - EP KR); G06T 2207/30101 (2013.01 - EP KR); G06V 2201/032 (2022.01 - EP KR)

Citation (search report)

- [XI] US 2017046839 A1 20170216 - PAIK DAVID S [US], et al
- [XI] 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
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- See also references of WO 2019231844A1

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DOCDB simple family (publication)

WO 2019231844 A1 20191205; CN 112567378 A 20210326; EP 3803687 A1 20210414; EP 3803687 A4 20220323; JP 2021525929 A 20210927; JP 2022123103 A 20220823; JP 7113916 B2 20220805; JP 7542578 B2 20240830; KR 102491988 B1 20230127; KR 20210042267 A 20210419

DOCDB simple family (application)

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