

Title (en)

SYSTEMS AND METHODS FOR DETECTING AN INDICATION OF A VISUAL FINDING TYPE IN AN ANATOMICAL IMAGE

Title (de)

SYSTÈME UND VERFAHREN ZUR ERKENNUNG EINER ANZEIGE EINES VISUELLEN BEFUNDS IN EINEM ANATOMISCHEN BILD

Title (fr)

SYSTÈMES ET PROCÉDÉS DE DÉTECTION D'UNE INDICATION D'UN TYPE DE RECHERCHE VISUELLE DANS UNE IMAGE ANATOMIQUE

Publication

EP 3791325 A1 20210317 (EN)

Application

EP 19800738 A 20190507

Priority

- US 201815972912 A 20180507
- US 201916269619 A 20190207
- US 201916269633 A 20190207
- IB 2019053724 W 20190507

Abstract (en)

[origin: EP3567525A1] There is provided a method comprising: providing two anatomical images 104 of a target individual, each captured at a unique orientation of the target individual, inputting first and second anatomical images respectively into a first and second convolutional neural network (CNN) of a classifier to respectively output first and second feature vectors, inputting a concatenation of the first and second feature vectors into a fully connected layer of the classifier 110, and computing an indication of distinct visual finding(s) 112 present in the anatomical images by the fully connected layer, wherein the statistical classifier is trained on a training dataset including two anatomical images of each respective sample individual, each image captured at a respective unique orientation of the target individual, and a tag created based on an analysis that maps respective individual sentences of a text based radiology report to one of multiple indications of visual findings.

IPC 8 full level

G06N 3/02 (2006.01); **G06N 3/04** (2006.01); **G06N 3/08** (2006.01); **G16H 30/00** (2018.01); **G16H 30/20** (2018.01)

CPC (source: EP US)

G06F 18/256 (2023.01 - EP US); **G06V 10/454** (2022.01 - EP US); **G06V 2201/03** (2022.01 - EP)

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3567525 A1 20191113; DE 202019005911 U1 20230419; EP 3791310 A1 20210317; EP 3791310 A4 20220330; EP 3791325 A1 20210317; EP 3791325 A4 20220413; JP 2019195627 A 20191114; WO 2019215604 A1 20191114; WO 2019215605 A1 20191114; WO 2019215606 A1 20191114

DOCDB simple family (application)

EP 19173136 A 20190507; DE 202019005911 U 20190507; EP 19800738 A 20190507; EP 19800865 A 20190507; IB 2019053724 W 20190507; IB 2019053725 W 20190507; IB 2019053726 W 20190507; JP 2019087284 A 20190507