Title (en)

METHOD AND DEVICE FOR PROCESSING AT LEAST ONE IMAGE OF A GIVEN PART OF AT LEAST ONE LUNG OF A PATIENT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERARBEITUNG MINDESTENS EINES BILDES EINES BESTIMMTEN TEILS MINDESTENS EINER LUNGE EINES PATIENTEN

Title (fr)

PROCÉDÉ ET DISPOSITIF DE TRAITEMENT D'AU MOINS UNE IMAGE D'UNE PARTIE DONNÉE D'AU MOINS UN POUMON D'UN PATIENT

Publication

EP 3523778 A1 20190814 (FR)

Application

EP 17777294 A 20171004

Priority

• FR 1659565 A 20161004
• EP 2017075246 W 20171004

Abstract (en)

[origin: WO2018065482A1] The invention relates to a method for automatically processing at least one image slice of a given part of at least one lung of a patient suffering from a pathology that causes a bronchial infection by diffuse dilatation of the bronchial tubes of the lungs, the method comprising steps of segmenting (102) the at least one image slice of the given part of the lung, in order to produce a histogram characterising the pulmonary density of the given part of the lung, by means of the voxels of the at least one image slice, each voxel being associated with a given pulmonary density; calculating (104) a threshold, from the histogram, corresponding to a threshold pulmonary density, based on at least one characteristic of the histogram, a first characteristic being the mode of the histogram; determining (106) from the at least one image slice of the given part of the lung, a pulmonary volume having a pulmonary density higher or lower than the calculated threshold, corresponding to the sum of the voxels having a pulmonary density higher or lower than the calculated threshold; and calculating (110) an automatic score on the basis of the determined pulmonary volume, in order to monitor the evolution of the bronchial infection of the patient.

IPC 8 full level

G06T 7/00 (2017.01); **G06T 7/11** (2017.01); **G06T 7/62** (2017.01)

CPC (source: EP US)

A61B 6/032 (2013.01 - US); **A61B 6/541** (2013.01 - US); **G06T 7/0012** (2013.01 - EP US); **G06T 7/11** (2016.12 - EP US); **G06T 7/162** (2016.12 - US); **G06T 7/62** (2016.12 - EP US); G06T 2207/10072 (2013.01 - EP); G06T 2207/10081 (2013.01 - US); G06T 2207/20072 (2013.01 - US); G06T 2207/30061 (2013.01 - EP US)

Citation (search report)

See references of WO 2018065482A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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