

Title (en)

METHOD OF TRACKING A CLINICAL TARGET IN MEDICAL IMAGES

Title (de)

VERFAHREN ZUR VERFOLGUNG EINES KLINISCHEN ZIELS AUF MEDIZINISCHEN BILDERN

Title (fr)

PROCEDE DE SUIVI D'UNE CIBLE CLINIQUE DANS DES IMAGES MEDICALES

Publication

**EP 3371775 A1 20180912 (FR)**

Application

**EP 16806241 A 20161028**

Priority

- FR 1560541 A 20151103
- FR 2016052820 W 20161028

Abstract (en)

[origin: WO2017077224A1] The invention relates to a method of tracking a clinical target in a current image of a sequence of medical digital images, with respect to a reference image of said sequence, a digital image comprising image elements comprising the following steps: obtaining of a segmentation of a contour of said target on the basis of said reference image; determination of a zone delimiting the interior of the segmented contour of the target in said reference image; obtaining of a measurement of confidence per image element in said determined zone for said reference image and for said current image; deformation of said contour obtained by minimizing a cost function based on a difference of intensity between the current image and the reference image in the determined zone, said cost function being weighted by the confidence measurements obtained for the image elements of the zone. According to the invention, such a method comprises a step of adapting the reference image at least on the basis of the intensities of the current image and of the confidence measurements of the current image in the zone of the target and in that the cost function takes into account the intensities of the adapted reference image.

IPC 8 full level

**G06T 7/00** (2017.01); **G06T 7/20** (2017.01)

CPC (source: EP US)

**G06T 7/12** (2016.12 - EP US); **G06T 7/143** (2016.12 - EP US); **G06T 7/20** (2013.01 - EP US); **G06T 2207/10016** (2013.01 - US);  
**G06T 2207/10068** (2013.01 - EP US); **G06T 2207/10132** (2013.01 - EP US); **G06T 2207/20116** (2013.01 - EP US)

Citation (search report)

See references of WO 2017077224A1

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)

**FR 3043234 A1 20170505; FR 3043234 B1 20171103; EP 3371775 A1 20180912; US 2018322639 A1 20181108; WO 2017077224 A1 20170511**

DOCDB simple family (application)

**FR 1560541 A 20151103; EP 16806241 A 20161028; FR 2016052820 W 20161028; US 201615773403 A 20161028**