

Title (en)

SYSTEM AND METHOD FOR THREE-DIMENSIONAL DEPTH IMAGING

Title (de)

SYSTEM UND VERFAHREN FÜR DREIDIMENSIONALE TIEFENBILDGEBUNG

Title (fr)

SYSTEME ET PROCEDE D'IMAGERIE TRIDIMENSIONNELLE EN PROFONDEUR

Publication

EP 3166476 A1 20170517 (FR)

Application

EP 15742370 A 20150706

Priority

- FR 1456536 A 20140707
- FR 2015051861 W 20150706

Abstract (en)

[origin: WO2016005688A1] The invention relates to an imaging system and method aimed at constructing a three-dimensional depth image of a patient, which is particularly useful in the field of medical imaging, in particular in the field of X-ray imaging of moving patients. The system includes first imaging means 18 comprising at least one stationary surface-imaging device 3 allowing the acquisition of a sequence of two-dimensional surface images 4 of a patient 2, and a computer processor including a first reconstruction module 5 for constructing a sequence of three-dimensional surface representations 6 of a patient 2 from a series of simultaneous two-dimensional surface images taken in each sequence of two-dimensional surface images 6 acquired by the first imaging means. Second imaging means 19 comprise at least one stationary depth-imaging device 7 allowing the acquisition of a sequence of several two-dimensional depth images 8 of a patient. The computer processor includes a second reconstruction module 9 for constructing a three-dimensional depth representation 1 of the patient from a sequence of three-dimensional surface representations of a patient constructed by the first reconstruction module and a sequence of two-dimensional depth images of the patient acquired by the stationary depth-imaging device.

IPC 8 full level

A61B 5/00 (2006.01); **A61B 5/11** (2006.01); **A61B 6/00** (2006.01); **G06T 15/00** (2011.01)

CPC (source: EP US)

A61B 5/0035 (2013.01 - EP US); **A61B 5/1128** (2013.01 - EP US); **A61B 5/4528** (2013.01 - EP US); **A61B 6/4021** (2013.01 - US);
A61B 8/4416 (2013.01 - EP US); **A61B 8/466** (2013.01 - EP US); **A61B 8/483** (2013.01 - EP US); **A61B 8/5261** (2013.01 - EP US);
G06T 7/0012 (2013.01 - US); **G06T 7/11** (2016.12 - US); **G06T 7/70** (2016.12 - US); **G06T 11/003** (2013.01 - US);
H04N 13/243 (2018.04 - EP US); **H04N 13/246** (2018.04 - EP US); **A61B 2505/09** (2013.01 - EP US); **A61B 2576/00** (2013.01 - EP US);
G06T 2207/10081 (2013.01 - US); **G16H 30/40** (2017.12 - EP)

Citation (search report)

See references of WO 2016005688A1

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 3023155 A1 20160108; EP 3166476 A1 20170517; US 2017206679 A1 20170720; WO 2016005688 A1 20160114

DOCDB simple family (application)

FR 1456536 A 20140707; EP 15742370 A 20150706; FR 2015051861 W 20150706; US 201515324620 A 20150706