

Title (en)  
DEVICE FOR DETECTING THE THREE-DIMENSIONAL GEOMETRY OF OBJECTS AND METHOD FOR THE OPERATION THEREOF

Title (de)  
VORRICHTUNG ZUM ERFASSEN DER DREIDIMENSIONALEN GEOMETRIE VON OBJEKTEN UND VERFAHREN ZUM BETREIBEN DERSELBEN

Title (fr)  
DISPOSITIF D'ENREGISTREMENT DE LA GÉOMÉTRIE TRIDIMENSIONNELLE D'OBJETS ET PROCÉDÉ DE FONCTIONNEMENT DE CE DISPOSITIF

Publication  
**EP 2812649 A1 20141217 (DE)**

Application  
**EP 13708646 A 20130204**

Priority

- DE 102012100953 A 20120206
- AT 2013000017 W 20130204

Abstract (en)  
[origin: CA2863798A1] The invention relates to a device for detecting the three-dimensional geometry of objects (9), in particular teeth, comprising a handpiece (1) which is provided with at least one position sensor (12) for detecting the change of the spatial position of the handpiece (1), and an optical device (2) having at least one camera (5, 6) for capturing images and at least one light source (3) for at least one projector (4). The position sensor (12) in the handpiece (1) initially determines the size of the change of the spatial position of the device. It is determined therefrom, how many pictures the camera (5, 6) can take in a defined time unit.

IPC 8 full level  
**A61B 5/107** (2006.01); **A61C 9/00** (2006.01); **G01B 11/25** (2006.01); **G01B 21/04** (2006.01); **H04N 13/221** (2018.01)

CPC (source: EP US)  
**A61B 5/1076** (2013.01 - EP US); **A61B 5/1077** (2013.01 - EP US); **A61B 5/1079** (2013.01 - EP US); **A61B 5/4547** (2013.01 - EP US); **A61C 9/006** (2013.01 - EP US); **G01B 11/022** (2013.01 - US); **G01B 11/2513** (2013.01 - EP US); **G01B 21/042** (2013.01 - EP US); **G06T 7/0012** (2013.01 - US); **H04N 7/18** (2013.01 - US); **H04N 13/189** (2018.04 - EP US); **H04N 13/194** (2018.04 - EP US); **H04N 13/221** (2018.04 - EP US); **H04N 13/254** (2018.04 - EP US); **A61B 2560/0209** (2013.01 - EP US); **H04N 2213/001** (2013.01 - US)

Citation (search report)  
See references of WO 2013116880A1

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)  
**DE 102012100953 A1 20130808; DE 102012100953 B4 20200109**; BR 112014018895 A2 20170620; BR 112014018895 A8 20170711; CA 2863798 A1 20130815; EP 2812649 A1 20141217; EP 2812650 A1 20141217; EP 2812650 B1 20190724; EP 3467432 A1 20190410; EP 3467432 B1 20200422; KR 20140128336 A 20141105; US 10166090 B2 20190101; US 2015002649 A1 20150101; US 2015282902 A1 20151008; US 2016287358 A1 20161006; US 9861456 B2 20180109; WO 2013116880 A1 20130815; WO 2013116881 A1 20130815

DOCDB simple family (application)  
**DE 102012100953 A 20120206**; AT 2013000017 W 20130204; AT 2013000018 W 20130204; BR 112014018895 A 20130204; CA 2863798 A 20130204; EP 13708646 A 20130204; EP 13708647 A 20130204; EP 18199891 A 20130204; KR 20147022907 A 20130204; US 201314376187 A 20130202; US 201314377030 A 20130204; US 201615176206 A 20160608