Title (en)

METHOD AND SYSTEM FOR DETERMINING MOTION PATTERNS DURING A DENTAL TREATMENT

Title (de

VERFAHREN UND SYSTEM ZUR BESTIMMUNG VON BEWEGUNGSMUSTERN BEI EINER ZAHNBEHANDLUNG

Title (fr)

PROCÉDÉ ET SYSTÈME SERVANT À DÉTERMINER DES MODÈLES DE MOUVEMENT LORS DE SOINS DENTAIRES

Publication

EP 3174431 B1 20200708 (DE)

Application

EP 15749757 A 20150729

Priority

- DE 102014110760 A 20140729
- DE 102014110761 A 20140729
- DE 102014110762 A 20140729
- DE 102014113224 A 20140914
- DE 102014114417 A 20141005
- DE 102014115821 A 20141030
- DF 102014115824 A 20141030
- DE 102014118444 A 20141211
- EP 2015067414 W 20150729

Abstract (en)

[origin: WO2016016323A1] The invention relates to a method for determining a motion of a dental treatment means, in particular a tooth brush, resulting during a dental treatment, in particular a teeth cleaning, at least comprising the following steps: providing at least a part of the data, in particular image data, sensed by means of an optical detection device and concerning a motion parameter of a dental treatment means with respect to a reference system moving along with the head of a treated person to a processor device for determining the motion, said dental treatment means being moved at least in an X/Y plane, wherein the data represent characteristic body points of the hand surface, body lines of the hand surface, and/or body surfaces of the hand, in particular of the fingers, by means of which the dental treatment means is guided, defining a further three-dimensional reference system by means of the processor device, which further reference system moves along with the dental treatment means during a motion of the dental treatment means in space, wherein the further reference system is formed by the characteristic body points of the hand, body lines of the hand, and/or body surfaces of the hand by means of which the dental treatment means is guided, and determining the motion on the basis of the relative motion of the reference systems.

IPC 8 full level

A46B 15/00 (2006.01)

CPC (source: EP)

A46B 15/0006 (2013.01); A46B 15/0012 (2013.01); A46B 2200/1066 (2013.01)

Citation (examination)

- WO 2014036423 A1 20140306 IDEAS THAT WORK LLC [US]
- WO 2014202438 A1 20141224 OHMER BENJAMIN [DE]

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

DOCDB simple family (publication)

WO 2016016323 A1 20160204; EP 3174431 A1 20170607; EP 3174431 B1 20200708; EP 3679831 A1 20200715; EP 3679831 A3 20201007; EP 3679831 B1 20210324; EP 3788909 A1 20210310

DOCDB simple family (application)

EP 2015067414 W 20150729; EP 15749757 A 20150729; EP 20020314 A 20150729; EP 20160884 A 20150729