

Title (en)

ASSISTANCE DEVICE FOR PROVIDING IMAGING SUPPORT TO AN OPERATOR DURING A SURGICAL INTERVENTION

Title (de)

ASSISTENZEINRICHTUNG ZUR BILDGEBENDEN UNTERSTÜTZUNG EINES OPERATEURS WÄHREND EINES CHIRURGISCHEN EINGRIFFS

Title (fr)

DISPOSITIF D'ASSISTANCE PERMETTANT LE GUIDAGE PAR L'IMAGE D'UN OPÉRATEUR PENDANT UNE INTERVENTION CHIRURGICALE

Publication

**EP 3054888 A1 20160817 (DE)**

Application

**EP 14777534 A 20140902**

Priority

- DE 102013109677 A 20130905
- EP 2014068585 W 20140902

Abstract (en)

[origin: WO2015032738A1] An assistance device (10) for providing imaging support to an operator during a surgical intervention is described, comprising an endoscope (12) with a camera (16) for generating image data; a viewing device (20) for showing a moving image; a manipulator (14) coupled to the endoscope (12) for the purpose of moving the endoscope (12); and a control system (22) for controlling the manipulator (14) according to a control command, in such a way that the moving image shown on the viewing device (20) can be influenced by moving the endoscope (12). The assistance device (10) further comprises a sensor unit (32) which detects an object (36, 58) moved for performing the surgical intervention and which generates a movement signal corresponding to the movement of the object, on the basis of which signal the control system (22) generates the control command; and an operating element (28) which can be actuated by the operator in order to set a release state in which the control of the manipulator (14) by the control system (22) is released for moving the endoscope (12).

IPC 8 full level

**A61B 90/00** (2016.01)

CPC (source: EP US)

**A61B 1/00006** (2013.01 - US); **A61B 1/00009** (2013.01 - US); **A61B 1/00016** (2013.01 - US); **A61B 1/00045** (2013.01 - US); **A61B 1/00066** (2013.01 - US); **A61B 1/0661** (2013.01 - US); **A61B 1/3132** (2013.01 - US); **A61B 17/3423** (2013.01 - US); **A61B 34/20** (2016.02 - US); **A61B 34/30** (2016.02 - EP US); **A61B 1/044** (2022.02 - US); **A61B 2017/00296** (2013.01 - US); **A61B 2017/00694** (2013.01 - EP US); **A61B 2034/2048** (2016.02 - US); **A61B 2034/2055** (2016.02 - US); **A61B 2034/2065** (2016.02 - US); **A61B 2034/301** (2016.02 - EP US); **A61B 2090/3983** (2016.02 - US)

Citation (search report)

See references of WO 2015032738A1

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 102013109677 A1 20150305**; CN 105682601 A 20160615; EP 3054888 A1 20160817; JP 2016538089 A 20161208; KR 20160054526 A 20160516; RU 2016112386 A 20171009; RU 2016112386 A3 20180525; US 2016175057 A1 20160623; WO 2015032738 A1 20150312

DOCDB simple family (application)

**DE 102013109677 A 20130905**; CN 201480058766 A 20140902; EP 14777534 A 20140902; EP 2014068585 W 20140902; JP 2016539495 A 20140902; KR 20167008833 A 20140902; RU 2016112386 A 20140902; US 201615054743 A 20160226