

Title (en)
AID 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)
SYSTÈME D'ASSISTANCE POUR L'AIDE PAR IMAGERIE D'UN OPÉRATEUR PENDANT UNE INTERVENTION CHIRURGICALE

Publication
EP 3027105 A1 20160608 (DE)

Application
EP 14755991 A 20140731

Priority
• DE 102013108228 A 20130731
• EP 2014066523 W 20140731

Abstract (en)
[origin: WO2015014952A1] An aid (10) for providing imaging support to an operator during a surgical intervention is described. The aid comprises an endoscope (12) with a camera (16) for generating image data; a viewing device (20) for presenting a moving image based on the image data generated by the camera (16); a manipulator (14) coupled to the endoscope (12), for the purpose of moving the endoscope (12); and a control unit (22) for controlling the manipulator (14) according to one of several operating states, in such a way that the presented moving image can be influenced by movement of the endoscope (12) according to the respectively selected operating state. An operating element is provided, which is coupled to the control unit (22) for the purpose of selecting the respective operating state, wherein the operating element is formed by a single switch element (28) designed as a pushbutton with exactly two switching states, of which one switching state is an actuated state and the other switching state is a non-actuated state; and, on the basis of the two possible switching states of the switch element (28), the operating states are assigned mutually distinguishable, predefined switching patterns which can be generated with the aid of the switch element (28) and, for at least one of the selectable operating states, a predefined control operation of the control unit (22) is provided for moving the endoscope (12) in a manner specific to the operating state; and, after selection of this operating state, the control unit (22) continuously performs the associated control operation while the switch element (28) is located in the actuated state.

IPC 8 full level
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A61B 1/0004 (2022.02 - EP US); **A61B 1/00042** (2022.02 - EP US); **A61B 1/00045** (2013.01 - US); **A61B 1/00066** (2013.01 - US); **A61B 1/00147** (2013.01 - EP US); **A61B 1/00149** (2013.01 - US); **A61B 1/045** (2013.01 - EP US); **B25J 13/06** (2013.01 - EP US); **G06T 7/74** (2016.12 - EP US); **H04N 23/57** (2023.01 - US); **H04N 23/62** (2023.01 - US); **H04N 23/631** (2023.01 - EP US); **H04N 23/667** (2023.01 - US); **H04N 23/69** (2023.01 - US); **A61B 1/00188** (2013.01 - EP); **A61B 34/25** (2016.02 - EP US); **A61B 34/70** (2016.02 - EP US); **A61B 2034/2057** (2016.02 - US); **A61B 2034/301** (2016.02 - US); **H04N 23/555** (2023.01 - US)

Citation (search report)
See references of WO 2015014952A1

Citation (examination)
US 2008239508 A1 20081002 - GUAN QI-DA [CN]

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2015014952 A1 20150205; CN 105517481 A 20160420; DE 102013108228 A1 20150205; EP 3027105 A1 20160608; JP 2016532488 A 20161020; KR 20160037184 A 20160405; RU 2016106640 A 20170904; RU 2016106640 A3 20180320; US 2016135670 A1 20160519

DOCDB simple family (application)
EP 2014066523 W 20140731; CN 201480049524 A 20140731; DE 102013108228 A 20130731; EP 14755991 A 20140731; JP 2016530537 A 20140731; KR 20167004436 A 20140731; RU 2016106640 A 20140731; US 201615006612 A 20160126