

Title (en)

MEDICAL MANIPULATOR AND METHOD FOR CONTROLLING A MEDICAL MANIPULATOR

Title (de)

MEDIZINISCHER MANIPULATOR UND VERFAHREN ZUM STEUERN EINES MEDIZINISCHEN MANIPULATORS

Title (fr)

MANIPULATEUR MÉDICAL ET PROCÉDÉ POUR COMMANDER UN MANIPULATEUR MÉDICAL

Publication

EP 3435905 A1 20190206 (DE)

Application

EP 17714639 A 20170329

Priority

- DE 102016205085 A 20160329
- EP 2017000379 W 20170329

Abstract (en)

[origin: WO2017167444A1] The invention relates to a medical manipulator 1 having a manipulator arm 10, an end effector 20 which is secured to the manipulator arm 10 and which has at least one tool 21, 22, 23 with a changing mass and/or mass distribution 46, and a manipulator controller 30 for controlling the medical manipulator 1. In each control step, the manipulator controller 30 uses a current load data matrix 40 comprising the changing mass and/or mass distribution 46 of the tool 21, 22, 23 in order to prevent deviations from a target position or target path of the tool 21, 22, 23. The invention further relates to a corresponding method for controlling a medical manipulator.

IPC 8 full level

A61B 34/30 (2016.01); **B25J 9/16** (2006.01); **B25J 15/00** (2006.01)

CPC (source: EP US)

A61B 34/30 (2016.02 - EP US); **A61B 34/70** (2016.02 - US); **B25J 9/1638** (2013.01 - EP US); **B25J 15/0066** (2013.01 - EP US);
G05B 2219/39176 (2013.01 - EP US)

Citation (search report)

See references of WO 2017167444A1

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 102016205085 B3 20170330; EP 3435905 A1 20190206; US 2019099228 A1 20190404; WO 2017167444 A1 20171005

DOCDB simple family (application)

DE 102016205085 A 20160329; EP 17714639 A 20170329; EP 2017000379 W 20170329; US 201716086558 A 20170329