

Title (en)

ENGAGEMENT AND/OR HOMING OF A SURGICAL TOOL IN A SURGICAL ROBOTIC SYSTEM

Title (de)

EINRASTUNG UND/ODER HOMING EINES CHIRURGISCHEN INSTRUMENTS IN EINEM CHIRURGISCHEN ROBOTERSYSTEM

Title (fr)

MISE EN PRISE ET/OU RETOUR EN POSITION INITIALE D'UN OUTIL CHIRURGICAL DANS UN SYSTÈME ROBOTIQUE CHIRURGICAL

Publication

EP 4048183 A4 20240403 (EN)

Application

EP 19950081 A 20191029

Priority

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- US 2019058477 W 20191029

Abstract (en)

[origin: WO2021080623A1] Engaging and/or homing is provided for a motor control of a surgical tool in a surgical robotic system. Where two or more motors are to control the same motion, the motors may be used to detect engagement even where no physical stop is provided. The motors operate in opposition to each other or in a way that does not attempt the same motion, resulting in one of the motors acting as a stop for the other motor in engagement. A change in motor operation then indicates the engagement. The known angles of engaged motors and the transmission linking the motor drives to the surgical tool indicate the home or current position of the surgical tool.

IPC 8 full level

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CPC (source: EP KR)

A61B 34/30 (2016.02 - EP KR); **A61B 34/37** (2016.02 - EP); **A61B 34/71** (2016.02 - EP KR); **A61B 90/96** (2016.02 - EP KR); **A61B 90/98** (2016.02 - EP KR); **A61B 2017/00477** (2013.01 - EP KR); **A61B 2034/2059** (2016.02 - EP); **A61B 2034/301** (2016.02 - EP); **A61B 2034/302** (2016.02 - EP KR); **A61B 2034/305** (2016.02 - EP); **A61B 2034/715** (2016.02 - EP); **A61B 2090/066** (2016.02 - EP); **A61B 2090/067** (2016.02 - EP); **A61B 2090/0808** (2016.02 - EP KR)

Citation (search report)

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- See also references of WO 2021080623A1

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US 2019058477 W 20191029; CN 201980103240 A 20191029; EP 19950081 A 20191029; JP 2022523935 A 20191029; KR 20227017113 A 20191029