

Title (en)

SURGICAL INSTRUMENT AND CONTROL MECHANISM THEREFOR

Title (de)

CHIRURGISCHES INSTRUMENT UND LENKGETRIEBE DAFÜR

Title (fr)

INSTRUMENT CHIRURGICAL ET SON MÉCANISME DE COMMANDE

Publication

EP 4376756 A1 20240605 (DE)

Application

EP 22757868 A 20220725

Priority

- DE 102021119533 A 20210728
- EP 2022070836 W 20220725

Abstract (en)

[origin: WO2023006685A1] The present invention relates to a control mechanism (13) for a surgical instrument (1), which instrument comprises a shaft (2), at the distal end (5) of which shaft an angling mechanism (9) is provided for actuating a tool (6). The present invention also relates to a surgical instrument (1) having such a control mechanism. The control mechanism (13) has a shaft element (21) having a longitudinal axis (B), which shaft element forms an extension of the shaft (2) when the control mechanism (13) and the surgical instrument (1) are assembled. The control mechanism comprises a control ring (14), which can be operatively coupled to the distal angling mechanism (9) and has a central-axial through-opening (14') for a bearing device fixed in the axial longitudinal direction on the shaft element (21) of the control mechanism (13), which bearing device can be rotated about the longitudinal axis (B) together with the shaft element (21). Three motorised drives are provided, which are operatively coupled to the control ring (14) in order to transmit the adjustment angle of the three drives to the control ring (14), wherein the control ring (14) can be aligned, spatially with reference to two pivot axes (F, F') extending perpendicularly to one another and to the longitudinal axis (B), via the adjustment angle of two of the three drives, and can be rotated about the longitudinal axis (B) via the adjustment angle of the third of the three drives.

IPC 8 full level

A61B 34/30 (2016.01); **A61B 1/005** (2006.01); **A61B 17/00** (2006.01); **A61B 17/29** (2006.01); **A61B 34/00** (2016.01)

CPC (source: EP)

A61B 34/30 (2016.02); **A61B 34/71** (2016.02); **A61B 1/0052** (2013.01); **A61B 1/0057** (2013.01); **A61B 2017/00323** (2013.01);
A61B 2017/00327 (2013.01); **A61B 2017/2912** (2013.01); **A61B 2017/2923** (2013.01); **A61B 2034/301** (2016.02); **A61B 2034/305** (2016.02)

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102021119533 A1 20230202; DE 102021119533 B4 20230824; EP 4376756 A1 20240605; WO 2023006685 A1 20230202

DOCDB simple family (application)

DE 102021119533 A 20210728; EP 2022070836 W 20220725; EP 22757868 A 20220725