

Title (en)

DEVICE FOR THE SPHERICAL DISPLACEMENT OF AN ELEMENT

Title (de)

VORRICHTUNG ZUR SPHÄRISCHEN VERSTELLUNG EINES ELEMENTES

Title (fr)

DISPOSITIF DE DEPLACEMENT SPHERIQUE D UN ELEMENT

Publication

EP 1476282 A1 20041117 (FR)

Application

EP 03709912 A 20030131

Priority

- FR 0300298 W 20030131
- FR 0201273 A 20020204

Abstract (en)

[origin: WO03066288A1] The invention relates to a device (1) that is used to displace at least one element (2) in a space. The inventive device comprises the element to be displaced (2) and a fixed element (4) which is connected to the element to be displaced (2) by means of three arms (6a, 6b, 6c). Each of said arms comprises numerous segments (8, 14, 18, 22) that are interconnected by means of three linking elements (10, 16, 20) which each authorise at least one degree of rotation freedom along an axis. The axes (10a, 16a, 20a) of the aforementioned linking elements (10, 16, 20) of each arm (6a, 6b, 6c) meet at a fixed point (P) around which the element to be displaced (2) can rotate in a spherical manner with three degrees of freedom. According to the invention, for each arm (6a, 6b, 6c) of the device (1), the sum of the degrees of freedom authorised by the linking elements (10, 16, 20) is greater than or equal to five. The inventive device can be used for robotic surgical wrists in the field of endoscopy.

IPC 1-7

B25J 17/02; A61B 19/00

IPC 8 full level

A61B 19/00 (2006.01); **B25J 17/02** (2006.01)

CPC (source: EP)

A61B 34/70 (2016.02); **B25J 9/0048** (2013.01); **B25J 17/0266** (2013.01)

Citation (search report)

See references of WO 03066288A1

Cited by

CN109015597A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03066288 A1 20030814; EP 1476282 A1 20041117; FR 2835579 A1 20030808; FR 2835579 B1 20040521

DOCDB simple family (application)

FR 0300298 W 20030131; EP 03709912 A 20030131; FR 0201273 A 20020204