

Title (en)

METHOD FOR RELIABLY AND AUTOMATICALLY FOLLOWING AN ENDOSCOPE AND FOR TRACKING A SURGICAL INSTRUMENT WITH AN ELECTRICALLY DRIVEN AND CONTROLLED ENDOSCOPE GUIDE SYSTEM (EFS) FOR PERFORMING MINIMALLY INVASIVE SURGERY

Title (de)

VERFAHREN ZUR SICHEREN AUTOMATISCHEN NACHFÜHRUNG EINES ENDOSKOPS UND VERFOLGUNG EINES CHIRURGISCHEN INSTRUMENTES

Title (fr)

PROCEDE DE POURSUITE AUTOMATIQUE FIABLE D'UN ENDOSCOPE ET PISTAGE (TRACKING) D'UN INSTRUMENT CHIRURGICAL AVEC UN SYSTEME DE GUIDAGE D'ENDOSCOPE (EFS) A ENTRAINEMENT ET A COMMANDE ELECTRIQUES, EN CHIRURGIE A EFFRACTION MINIMALE

Publication

**EP 1240418 A1 20020918 (DE)**

Application

**EP 00977518 A 20001109**

Priority

- DE 19961971 A 19991222
- EP 0011062 W 20001109

Abstract (en)

[origin: WO0146577A2] The invention relates to a method for reliably and automatically following an endoscope and for tracking a surgical instrument with an electrically driven and controlled endoscope guide system (EFS) for performing minimally invasive surgery. The inventive method rests on three pillars: the computer-controlled processing of fault tolerances, the intuitive use by the surgeon, and the sovereignty of the operating surgeon. This is the basis for providing a high degree of reliability during the operation and represents a welcomed relief from carrying out the task of tracking which requires a high level of concentration and from carrying out momentary manipulations of a lower priority.

IPC 1-7

**F02D 1/00**

IPC 8 full level

**A61B 1/313** (2006.01); **A61B 34/20** (2016.01); **A61B 90/50** (2016.01); **A61B 19/00** (2006.01); **A61B 34/30** (2016.01); **A61B 90/00** (2016.01)

CPC (source: EP US)

**A61B 1/00147** (2013.01 - EP US); **A61B 1/313** (2013.01 - EP US); **A61B 34/20** (2016.02 - EP US); **A61B 90/50** (2016.02 - EP US); **A61B 90/361** (2016.02 - EP US); **A61B 2034/301** (2016.02 - EP US); **A61B 2090/367** (2016.02 - EP US)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)

**WO 0146577 A2 20010628**; **WO 0146577 A8 20080117**; DE 19961971 A1 20010726; DE 19961971 B4 20091022; EP 1240418 A1 20020918; US 2002156345 A1 20021024

DOCDB simple family (application)

**EP 0011062 W 20001109**; DE 19961971 A 19991222; EP 00977518 A 20001109; US 17243602 A 20020516