

(12) International Application Status Report

Received at International Bureau: 31 August 2017 (31.08.2017)

Information valid as of: 13 April 2018 (13.04.2018)

Report generated on: 27 March 2019 (27.03.2019)

(10) Publication number:

WO2018/082196

(43) Publication date:

11 May 2018 (11.05.2018)

(26) Publication language:

Chinese (ZH)

(21) Application Number:

PCT/CN2017/000504

(22) Filing Date:

07 August 2017 (07.08.2017)

(25) Filing language:

Chinese (ZH)

(31) Priority number(s):

201610953855.5 (CN)

(31) Priority date(s):

03 November 2016 (03.11.2016)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

A61B 1/31 (2006.01); A61B 1/00 (2006.01)

(71) Applicant(s):

SHANGXIAN MINIMAL INVASIVE INC. [CN/CN]; Linkman: WANG, Yaojuan IT Int'1 Building 501, No.3 West Yuanhang Road, Hunnan District Shenyang, Liaoning 110179 (CN) *(for all designated states)*

(72) Inventor(s):

LI, Jiao; IT Int'1 Building 501, No.3 West Yuanhang Road, Hunnan District Shenyang, Liaoning 110179 (CN)

LIU, Fuzhong; IT Int'1 Building 501, No.3 West Yuanhang Road, Hunnan District Shenyang, Liaoning 110179 (CN)

LI, Hongyi; IT Int'1 Building 501, No.3 West Yuanhang Road, Hunnan District Shenyang, Liaoning 110179 (CN)

WU, Ling; IT Int'1 Building 501, No.3 West Yuanhang Road, Hunnan District Shenyang, Liaoning 110179 (CN)

LI, Shuang; No.3 West Yuanhang Road, It International Mansion Main Building Room 501, Hunnan New Area Shenyang, Liaoning 110179 (CN)

WANG, Yaojuan; IT Int'1 Building 501, No.3 West Yuanhang Road, Hunnan District Shenyang, Liaoning 110179 (CN)

(54) Title (EN): ENDOSCOPE SLEEVE CYLINDER

(54) Title (FR): CYLINDRE DE MANCHON D'ENDOSCOPE

(54) Title (ZH): 内窥镜套筒

(57) Abstract:

(EN): An endoscope sleeve cylinder, used for being sleeved at the front extremity of an endoscope (1), provided with a cylindrical body (2) and several protruding components (3) provided on the cylindrical body (2). Several connecting holes (23) are provided on the cylindrical wall of the cylindrical body (2). The protruding components (3) are provided with first protruding parts (31) extending to the inside of the cylindrical body (2) and second protruding parts (32) extending to the outside of the cylindrical body (2). Connections (33) of the first protruding parts (31) and the second protruding parts (32) are pivotally connected or attached to the cylindrical wall via the connecting holes (23). The protruding components (3) rotate, with the connections (33) as axes, around same in the range of 0° to 180°. The first protruding parts (31) interact with an outer wall (13) of the endoscope. The angles, #, between the first protruding parts (31) and the second protruding parts (32) are 90° to 270°. The angles, #, between the second protruding parts (32) and the central axis line is 25° to 155°. The sleeve provides the advantageous condition of minimal resistance or no resistance for the endoscope entering the body cavity, and provides the endoscope with broadened and clear vision when exiting a body cavity check, thus implementing the goal of painlessness for a patient and increased accuracy of checks.

(FR): L'invention concerne un cylindre de manchon d'endoscope, utilisé pour être emmanché à l'extrémité avant d'un endoscope (1), comportant un corps cylindrique (2) et plusieurs composants saillants (3) disposés sur le corps cylindrique (2). Plusieurs trous de liaison (23) sont ménagés sur la paroi cylindrique du corps cylindrique (2). Les composants saillants (3) comportent des premières parties saillantes (31) s'étendant vers l'intérieur du corps cylindrique (2) et des secondes parties saillantes (32) s'étendant vers l'extérieur du corps cylindrique (2). Des connexions (33) des premières parties saillantes (31) et des secondes parties saillantes (32) sont reliées ou fixées pivotantes à la paroi cylindrique par l'intermédiaire des trous de liaison. Les composants saillants (3) tournent, avec les connexions (33) en tant qu'axes, autour de ceux-ci dans la plage de 0° à 180°. Les premières parties saillantes (31) interagissent avec une paroi externe (13) de l'endoscope. Les angles, #, entre les premières parties saillantes (31) et les secondes parties saillantes (32) sont de 90° à 270°. Les angles, #, entre les secondes parties saillantes (32) et la ligne d'axe central sont de 25° à 155°. Le manchon fournit l'état avantageux d'une résistance minimale ou d'une absence de résistance pour

l'endoscope entrant dans la cavité corporelle, et fournit à l'endoscope une vision élargie et nette lors de la sortie d'un contrôle de cavité corporelle, atteignant ainsi le but de l'absence de douleur pour le patient et augmentant la précision des contrôles.

(ZH): 一种内窥镜套筒,用于套设在内窥镜(1)前端,具有筒状本体(2)和若干个设置在筒状本体(2)上的突出元件(3),筒状本体(2)的筒壁上设有若干个连接孔(23),突出元件(3)具有向筒状本体(2)内部延伸的第一突出部(31)和向筒状本体(2)外部延伸的第二突出部(32),第一突出部(31)和第二突出部(32)的连接处(33)通过连接孔(23)铰接或附连在筒壁上,突出元件(3)以连接处(33)为轴心在 $0^{\circ} \sim 180^{\circ}$ 的范围内绕其转动;第一突出部(31)与内窥镜外壁(13)相互作用;第一突出部(31)和第二突出部(32)的夹角 α 为 $90^{\circ} \sim 270^{\circ}$,第二突出部(32)与中轴线的夹角 β 为 $25^{\circ} \sim 155^{\circ}$ 。套筒为内窥镜在进入体腔内提供极小阻力或无阻力的优势条件,退出体腔检查时,为内窥镜提供更广、更清晰的视野,从而实现患者无痛、检查更为准确目的。

International search report:

Received at International Bureau: 12 October 2017 (12.10.2017) [CN]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

European Patent Office (EPO) : AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM

Declarations:

Declaration made as applicant's entitlement, as at the international filing date, to claim the priority of the earlier application, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii))