

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference C00014975WO0	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2018/049440	International filing date (<i>day/month/year</i>) 05 September 2018 (05.09.2018)	(Earliest) Priority Date (<i>day/month/year</i>) 06 September 2017 (06.09.2017)
Applicant COVIDIEN LP		

This International search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

- the international application in the language in which it was filed
 a translation of the international application into _____, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b. This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6bis(a)).

c. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. **Certain claims were found unsearchable** (See Box No. II)

3. **Unity of invention is lacking** (See Box No. III)

4. With regard to the **title**,

- the text is approved as submitted by the applicant.
 the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant.
 the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 5
 as suggested by the applicant.
 as selected by this Authority, because the applicant failed to suggest a figure.
 as selected by this Authority, because this figure better characterizes the invention.
- b. none of the figures is to be published with the abstract.

A. CLASSIFICATION OF SUBJECT MATTER**A61B 34/00(2016.01)i, A61B 34/35(2016.01)i, A61B 34/20(2016.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61B 34/00; A61B 19/00; A61B 34/30; B25J 13/02; B25J 13/08; G05B 19/427; G06F 3/01; A61B 34/35; A61B 34/20

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: scale, scaling factor, boundary, predetermined distance, surgical robot

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2017-0224428 A1 (COVIDIEN LP) 10 August 2017 See claim 1.	1-4, 6, 11, 13
A	KR 10-2013-0015437 A (EATON, CO. INC.) 14 February 2013 See claims 1, 13-15, 21, 22; paragraphs [0038]-[0077]; fig. 1, 2.	1-4, 6, 11, 13
A	KR 10-2015-0007020 A (SAMSUNG ELECTRONICS CO., LTD.) 20 January 2015 See the whole document.	1-4, 6, 11, 13
A	KR 10-2012-0068597 A (EATON, CO. INC.) 27 June 2012 See the whole document.	1-4, 6, 11, 13
A	US 9582079 B2 (ABB GOMTEC GMBH) 28 February 2017 See the whole document.	1-4, 6, 11, 13

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

02 April 2019 (02.04.2019)

Date of mailing of the international search report

02 April 2019 (02.04.2019)

Name and mailing address of the ISA/KR

International Application Division

Korean Intellectual Property Office

189 Cheongsa-ro, Seo-gu, Daejeon, 35208, Republic of Korea

Facsimile No. +82-42-481-8578

Authorized officer

HAN, Inho

Telephone No. +82-42-481-3362



INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2018/049440

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2017-0224428 A1	10/08/2017	CN 106714722 A EP 3200716 A1 JP 2017-529907 A WO 2016-053657 A1	24/05/2017 09/08/2017 12/10/2017 07/04/2016
KR 10-2013-0015437 A	14/02/2013	KR 10-1802464 B1 WO 2013-018983 A1	28/11/2017 07/02/2013
KR 10-2015-0007020 A	20/01/2015	US 2015-0018841 A1 US 9060796 B2	15/01/2015 23/06/2015
KR 10-2012-0068597 A	27/06/2012	CN 102614019 A CN 102614019 B CN 104473693 A CN 104473693 B CN 106214262 A CN 106214262 B KR 10-1740286 B1	01/08/2012 10/12/2014 01/04/2015 04/07/2017 14/12/2016 01/02/2019 29/05/2017
US 9582079 B2	28/02/2017	DE 102012110190 A1 DE 102012110190 B4 US 2015-0293596 A1 WO 2014-064025 A1	30/04/2014 26/03/2015 15/10/2015 01/05/2014