

## PATENT COOPERATION TREATY


From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

To: HUGHES, Thomas  Medtronic 60 Middletown Avenue c/o Legal Mailstop MS 54 North Haven, Connecticut 06473 USA		Date of mailing (day/month/year) <b>02 April 2019 (02.04.2019)</b>	
Applicant's or agent's file reference C00014975W00		<b>FOR FURTHER ACTION</b> See paragraph 2 below	
International application No. <b>PCT/US2018/049440</b>	International filing date (day/month/year) <b>05 September 2018 (05.09.2018)</b>	Priority date(day/month/year) 06 September 2017 (06.09.2017)	
International Patent Classification (IPC) or both national classification and IPC <b>A61B 34/00(2016.01)i, A61B 34/35(2016.01)i, A61B 34/20(2016.01)i</b>			
Applicant <b>COVIDIEN LP</b>			
<p>1. This opinion contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</p> <p>2. <b>FURTHER ACTION</b></p> <p>If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.</p> <p>If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.</p> <p>For further options, see Form PCT/ISA/220.</p>			

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	Date of completion of this opinion  02 April 2019 (02.04.2019)	Authorized officer  HAN, Inho  Telephone No. +82-42-481-3362	
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International application No.

**PCT/US2018/049440**

**Box No. 1 Basis of this opinion**

1. With regard to the **language**, this opinion has been established 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))
2.  This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43bis.1(a))
3.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing:
  - a.  forming part of the international application as filed:
    - in the form of an Annex C/ST.25 text file.
    - on paper or in the form of an image file.
  - b.  furnished together with the international application under PCT Rule 13ter.1(a) for the purposes of international search only in the form of an Annex C/ST.25 text file.
  - c.  furnished subsequent to the international filing date for the purposes of international search only:
    - in the form of an Annex C/ST.25 text file (Rule 13ter.1(a)).
    - on paper or in the form of an image file (Rule 13ter.1(b) and Administrative Instructions, Section 713).
4.  In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that forming part of the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
5. Additional comments:

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**Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non obvious), or to be industrially applicable have not been examined in respect of:

the entire international application

claims Nos. 5,7-10,12

because:

the said international application, or the said claims Nos. \_\_\_\_\_  
relate to the following subject matter which does not require an international search (*specify*):

the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 5,7-10,12  
are so unclear that no meaningful opinion could be formed (*specify*):

As claims 5, 7-10 and 12 are referring to a nonexistent claim, no meaningful international search can be carried out for claims 5, 7-10 and 12.

the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported  
by the description that no meaningful opinion could be formed (*specify*):

no international search report has been established for said claims Nos. 5,7-10,12

a meaningful opinion could not be formed without the sequence listing; the applicant did not, within the prescribed time limit:

furnish a sequence listing in the form of an Annex C/ST.25 text file, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.

furnish a sequence listing on paper or in the form of an image file complying with the standard provided for in Annex C of the Administrative Instructions, and such listing was not available to the International Searching Authority in the form and manner acceptable to it; or the sequence listing furnished did not comply with the standard provided for in Annex C of the Administrative Instructions.

pay the required late furnishing fee for the furnishing of a sequence listing in response to an invitation under Rule 13ter.1(a) or (b).

See Supplemental Box for further details.

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**Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	<u>1-4,6,11,13</u>	YES
	Claims	<u>NONE</u>	NO
Inventive step (IS)	Claims	<u>1-4,6,11,13</u>	YES
	Claims	<u>NONE</u>	NO
Industrial applicability (IA)	Claims	<u>1-4,6,11,13</u>	YES
	Claims	<u>NONE</u>	NO

2. Citations and explanations :

Reference is made to the following documents:

D1: US 2017-0224428 A1 (COVIDIEN LP) 10 August 2017

D2: KR 10-2013-0015437 A (EATON, CO. INC.) 14 February 2013

D3: KR 10-2015-0007020 A (SAMSUNG ELECTRONICS CO., LTD.) 20 January 2015

D4: KR 10-2012-0068597 A (EATON, CO. INC.) 27 June 2012

D5: US 9582079 B2 (ABB GOMTEC GMBH) 28 February 2017

**2.1 Novelty and Inventive Step**

D1, which is considered to be the closest prior art to the present invention, discloses a surgical robot comprising: an input controller; a tool; and a process unit which transfers the signal received from the input controller to tool(see claim 1 in D1).

None of the prior art documents disclose or suggest the method of scaling a desired velocity of a tool comprising receiving an input signal including a desired velocity of movement of a tool and determining a position of the tool of the present invention. Accordingly, the subject-matter of claims 1-4, 6, 11 and 13 is neither anticipated nor obvious to a person skilled in the art by the prior art documents. Therefore, the subject-matter of claims 1-4, 6, 11 and 13 is novel under PCT Article 33(2) and inventive under PCT Article 33(3).

**2.2 Industrial Applicability**

Claims 1-4, 6, 11 and 13 meet the requirements of industrial applicability under PCT Article 33(4).

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**Box No. VIII Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 5, 7-10 and 12 refer to claim 0, which does not exist in the present application. Therefore, claims 5, 7-10 and 12 are not clear (PCT Article 6).