

## PATENT COOPERATION TREATY

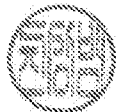
From the  
INTERNATIONAL SEARCHING AUTHORITY

# PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

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| To:<br>JORDAN, B. Delano<br><br>Jordan IP Law, LLC 12501 Prosperity Drive, Suite 401 Silver<br>Spring, Maryland 20904 USA  |   | Date of mailing<br>(day/month/year) <b>25 September 2019 (25.09.2019)</b> |  |
| Applicant's or agent's file reference<br>AB5070-PCT-PCT  |   | <b>FOR FURTHER ACTION</b><br>See paragraph 2 below                        |  |
| International application No.<br><b>PCT/US2019/027659</b>  | International filing date (day/month/year)<br><b>16 April 2019 (16.04.2019)</b> | Priority date(day/month/year)<br>08 November 2018 (08.11.2018)            |  |
| International Patent Classification (IPC) or both national classification and IPC<br><b>G06F 9/50(2006.01)i, G06F 11/30(2006.01)i</b>  |   |   |  |
| Applicant<br><b>INTEL CORPORATION</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 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> |   |   |  |

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|---|--|---|---|
| Name and mailing address of the ISA/KR<br>International Application Division<br>Korean Intellectual Property Office<br>189 Cheongsa-ro, Seo-gu, Daejeon,<br>35208, Republic of Korea<br>Facsimile No. +82-42-481-8578 | Date of completion of this opinion<br><br>25 September 2019 (25.09.2019) | Authorized officer<br><br>CHIN, Sang Bum<br><br>Telephone No. +82-42-481-8398 |  |
|---|--|---|---|

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

**PCT/US2019/027659**

**Box No. I 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 43*bis*. I(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 13*ter*. I(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 13*ter*. I(a)).
    - on paper or in the form of an image file (Rule 13*ter*. I(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. 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>1-30</u> | YES |
|                               | Claims | <u>NONE</u> | NO  |
| Inventive step (IS)           | Claims | <u>1-30</u> | YES |
|                               | Claims | <u>NONE</u> | NO  |
| Industrial applicability (IA) | Claims | <u>1-30</u> | YES |
|                               | Claims | <u>NONE</u> | NO  |

2. Citations and explanations :

Reference is made to the following documents:

D1: US 2018-0034924 A1 (POLYBIT INC.) 01 February 2018

D2: US 2018-0254998 A1 (ALCATEL LUCENT) 06 September 2018

D3: US 2018-0115551 A1 (BRIAN COLE) 26 April 2018

D4: US 10121021 B1 (CAPITAL ONE SERVICES, LLC) 06 November 2018

D5: US 2018-0113793 A1 (INTERNATIONAL BUSINESS MACHINES CORPORATION)  
26 April 2018

I. Novelty and Inventive Step (PCT Article 33(2) and (3))

1. Claims 1-14

The subject matter of claim 1 differs from these prior art documents in that at least one non-transitory computer readable storage medium in claim 1 comprises: analyzing a plurality of parameters associated with a plurality of functions and a plurality of parameters associated with a plurality of computing resources; storing the plurality of functions and analysis of the plurality of parameters associated with the plurality of functions and the plurality of computing resources in one or more networking and storage subsystems in a computing system; and securing the execution of the plurality of functions by one or more security subsystems in the computing system. And it is not obvious to a person skilled in the art by the documents, taken alone or in combination.

Claims 2-14 are dependent on claim 1.

Therefore, claims 1-14 are novel and involve an inventive step.

2. Claims 15-28

Continued on Supplemental Box

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International application No.

**PCT/US2019/027659**

**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:

Claim 1 relates to at least one non-transitory computer readable storage medium, but claims 2-14 directly or indirectly dependent on claim 1 relate to the at least one computer readable storage medium. As claims 2-14 are unclear and do not clearly define the matter for which protection is sought, claims 2-14 do not meet the requirements of PCT Article 6.

(Note: The international search report and the written opinion have been established on the assumption that "the at least one computer readable storage medium" in claims 2-14 is regarded as "the at least one non-transitory computer readable storage medium".)

**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

Continuation of : Box No. V

Claims 15-28 relate to a semiconductor apparatus. Since the features of claims 15-28 are substantially the same as those of claims 1-14, the same reasoning as in claims 1-14 can be applied to claims 15-28.

Therefore, claims 15-28 are novel and involve an inventive step.

3. Claim 29

Claim 29 relates to a system. Since the features of claim 29 are substantially the same as those of claim 1, the same reasoning as in claim 1 can be applied to claim 29.

Therefore, claim 29 is novel and involves an inventive step.

4. Claim 30

Claim 30 relates to a method. Since the features of claim 30 are substantially the same as those of claim 1, the same reasoning as in claim 1 can be applied to claim 30.

Therefore, claim 30 is novel and involves an inventive step.

II. Industrial Applicability (PCT Article 33(4))

Claims 1-30 are industrially applicable.