PATENT COOPERATION TREATY

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

Date of mailing
(day/month/year)

Applicant's or agent's file reference

REPLY DUE
within
from the above date of mailing

International application No.

International filing date (day/month/year)

Priority date (day/month/year)

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

Applicant

1. □ The written opinion established by the International Searching Authority:
   □ is
   □ is not
   considered to be a written opinion of the International Preliminary Examining Authority.

2. This Second opinion contains indications relating to the following items:
   □ Box No. I  Basis of the opinion
   □ Box No. II  Priority
   □ Box No. III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   □ Box No. IV  Lack of unity of invention
   □ Box No. V  Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement
   □ Box No. VI  Certain documents cited
   □ Box No. VII  Certain defects in the international application
   □ Box No. VIII  Certain observations on the international application

3. The applicant is hereby **invited to reply** to this opinion.
   **When?** See the **Reply Due** date indicated above. However, the Australian Patent Office will not establish the Report before the earlier of (i) a response being filed, or (ii) one month before the **Final Date** by which the international preliminary examination report must be established. The Report will take into account any response (including amendments) filed before the Report is established.
   **If no response is filed by 1 month before the Final Date**, the international preliminary examination report will be established on the basis of this opinion.
   Applicants wishing to have the benefit of a further opinion (if needed) before the report is established should ensure that a response is filed at least 3 months before the **Final Date** by which the international preliminary examination report must be established.
   **How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3.
   For the form and the language of the amendments, see Rules 55.3 and 66.8.
   **Also** For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4bis.
   For an informal communication with the examiner, see Rule 66.6
   For an additional opportunity to submit amendments, see Rule 66.4.
   **If no reply is filed**, the international preliminary examination report will be established on the basis of this opinion.

4. The **FINAL DATE** by which the international preliminary report on patentability (Chapter II of the PCT) must be established according to Rule 69.2 is:

<table>
<thead>
<tr>
<th>Name and mailing address of the IPEA</th>
<th>Authorised Officer</th>
</tr>
</thead>
</table>

Form PCT/IPEA/408 (January 2015)

Effective Date: 02 October 2018
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 (under Rules 12.3(a) and 23.1 (b)).
     - publication of the international application (under Rule 12.4(a)).
     - international preliminary examination (Rules 55.2(a) and/or 55.3(a) and (b)).

2. With regard to the **elements** of the international application, this opinion has been established on the basis of (replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."):
   - the international application as originally filed/furnished
   - the description:
     - pages , as originally filed/furnished
     - pages , received by this Authority on with the letter of
     - pages , received by this Authority on with the letter of
   - the claims:
     - Nos. , as originally filed/furnished
     - Nos. , as amended (together with any statement) under Article 19,
     - Nos. , received by this Authority on with the letter of
     - Nos. , received by this Authority on with the letter of
   - the drawings:
     - pages , as originally filed/furnished
     - pages , received by this Authority on with the letter of
     - pages , received by this Authority on with the letter of
   - a sequence listing - see Supplemental Box Relating to Sequence Listing.

3. The amendments have resulted in the cancellation of:
   - the description, pages
   - the claims, Nos.
   - the drawings, sheets/figs
   - the sequence listing (specify):

4. This opinion has been established as if (some of) the amendments listed below had not been made, since either they are considered to go beyond the disclosure as filed, or they were not accompanied by a letter indicating the basis for the amendments in the application as filed, as indicated in the Supplemental Box (Rules 70.2(c) and (c-bis)).
   - the description, pages
   - the claims, Nos.
   - the drawings, sheets/figs
   - the sequence listing (specify):

5. 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 66.1(d-bis)).
   - without taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 66.4bis).

6. Supplementary international search report(s) from Authority(ies)
   has/have been received and taken into account in establishing this opinion (Rule 45 bis.8(b) and (c)).
WRITTEN OPINION OF THE
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

<table>
<thead>
<tr>
<th>Box No. II</th>
<th>Priority</th>
</tr>
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<tbody>
<tr>
<td>1.</td>
<td>□</td>
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</table>

This opinion has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:

- □ copy of the earlier application whose priority has been claimed (Rule 66.7(a))
- □ translation of the earlier application whose priority has been claimed (Rule 66.7(b))

2. □

This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.

3. Additional observations, if necessary:
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:

Because:

- the said international application, or the said claim Nos.
  relate to the following subject matter which does not require an international preliminary examination *(specify):
  the subject matter listed in Rule 67 on which, under Article 34(4)(a)(i), an international preliminary examination [or a written opinion, via the application of Rule 43bis.1(b)], is not required to be carried out, including:

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

- 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.
- 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 Preliminary Examining 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 Preliminary Examining 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) and 13ter.2.

- See Supplemental Box for further details.
<table>
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<tr>
<th>Box No. IV</th>
<th>Lack of unity of invention</th>
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1. In response to the invitation (Form PCT/IPEA/405) to restrict or pay additional fees the applicant has, within the applicable time limit:
   - [ ] restricted the claims
   - [ ] paid additional fees
   - [ ] paid additional fees under protest and, where applicable, the protest fee
   - [ ] paid additional fees under protest but the applicable protest fee was not paid
   - [ ] neither restricted the claims nor paid additional fees

2. This Authority found that the requirement of unity of invention is not complied with for the following reasons and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

   See Supplemental Box

3. Consequently, this opinion has been established in respect of the following parts of the international application:
   - [ ] all parts.
   - [ ] the parts relating to claims Nos.
<table>
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<tr>
<th>Box No. V</th>
<th>Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step and industrial applicability; citations and explanations supporting such statement</th>
</tr>
</thead>
</table>

1. **Statement**

<table>
<thead>
<tr>
<th></th>
<th>Claims</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Novelty (N)</td>
<td>Claims</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inventive step (IS)</td>
<td>Claims</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial applicability (IA)</td>
<td>Claims</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. **CITATIONS AND EXPLANATIONS:**
### Certain documents cited

1. **Certain published documents (Rule 70.10)**
   - **Application No.**
   - **Patent No.**
   - **Publication date** (day/month/year)
   - **Filing date** (day/month/year)
   - **Priority date (valid claim)** (day/month/year)

   See Supplemental Box for Details

2. **Non-written disclosures (Rule 70.9)**
   - **Kind of non-written disclosure**
   - **Date of non-written disclosure** (day/month/year)
   - **Date of written disclosure referring to non-written disclosure** (day/month/year)
The following defects in the form or contents of the international application have been noted:
<table>
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<tr>
<th>Box No. VIII Certain observations on the international application</th>
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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:
Continuation of: **Box IV**

Continuation of: **Box VI**