PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To:
YOO & LEE INTERNATIONAL PATENT & LAW FIRM
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PCT
WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

Date of mailing (day/month/year) 17 July 2018 (17.07.2018)

Applicant's or agent's file reference F201801-0044

FOR FURTHER ACTION
See paragraph 2 below

International application No. PCT/KR2018/004456 International filing date (day/month/year) 17 April 2018 (17.04.2018)

Priority date(day/month/year) 26 April 2017 (26.04.2017)

International Patent Classification (IPC) or both national classification and IPC
G06F 3/0488(2013.01)i, G06F 3/0484(2013.01)i, G06F 3/041(2006.01)i, G06F 3/0481(2013.01)i, G06F 3/0482(2013.01)i, G06F 3/16(2006.01)i

Applicant
SAMSUNG ELECTRONICS CO., LTD.

1. This 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 43bis.1(a)(i) 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

2. FURTHER ACTION

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.

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. For further options, see Form PCT/ISA/220.

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Date of completion of this opinion 16 July 2018 (16.07.2018)

Authorized officer
AHN, Jeong Hwan
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Form PCT/ISA/237 (cover sheet) (January 2015)
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(b)).
      ☐ 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:
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

<table>
<thead>
<tr>
<th></th>
<th>Claims</th>
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<tbody>
<tr>
<td>Novelty (N)</td>
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<tr>
<td>Claim 1-15</td>
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<tr>
<td>Claims</td>
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<td>Inventive step (IS)</td>
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<td>Claim 1-15</td>
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<td>Industrial applicability (IA)</td>
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<td>Claim 1-15</td>
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<tr>
<td>Claims</td>
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</tbody>
</table>

2. Citations and explanations:

Reference is made to the following documents:

D1: US 2010-0220065 A1 (ZHONGMING MA) 02 September 2010

2.1 Novelty (PCT Article 33(2)) and Inventive Step (PCT Article 33(3))

2.1.1 Claims 1-12

D1, which is considered to be the closest prior art to the subject matter of claim 1, discloses a portable electronic device comprising: a housing (see claim 11 in D1); a touch screen display (see claim 11 in D1); a force sensor (see claim 11 in D1); a communication subsystem (see figure 1 in D1); a processor (see claim 11 in D1); and a memory (see claim 11 in D1).

Claim 1 differs from D1 in the features of: displaying a user interface through a display; detecting a first touch input with a pressure lower than a first threshold via a first region of the display; performing a first action associated with an application program in response to the first touch input; detecting a second touch input with a pressure lower than a second threshold via a second region of the display, wherein the second region abuts a periphery of the display; performing a second action associated with the application program in response to the second touch input; detecting a third touch input with a pressure greater than the first threshold via the first region of the display; performing a third action associated with the application program in response to the third touch input; detecting a fourth touch input with a pressure granter than the second threshold via the second region; and performing a generic fourth action associated with an electronic device in response to the fourth touch input. However, the different features can be easily derived from the disclosure of D2 in analogous art considering displaying an operating interface (see claim 1 in D2), executing a first touch command on
<table>
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<tr>
<th>Box No. VIII  Certain observations on the international application</th>
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<tbody>
<tr>
<td>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:</td>
</tr>
<tr>
<td>Claim 13 is unclear because &quot;the application program&quot; has not been previously defined. Therefore, claim 13 does not meet the requirements of PCT Article 6.</td>
</tr>
<tr>
<td>Claim 14 is unclear because &quot;the home button&quot; has not been previously defined. Therefore, claim 14 does not meet the requirements of PCT Article 6.</td>
</tr>
<tr>
<td>Claims 2, 7, 9, 11 are unclear because the vague and imprecise statement &quot;substantially&quot; in said claims makes it difficult to determine the subject matter for which protection is sought (PCT Article 6).</td>
</tr>
</tbody>
</table>
the operating interface according to a touch operation on a touch panel (see claim 1 in D2), and detecting at least one pressure value corresponding to a coordinate value on the touch panel, and executing a second touch command according to the coordinate value and the pressure value when a processing unit determines a pressure average value is greater than or equal to a threshold value (see claims 1-2, 11 in D2), and the disclosure of D3 in analogous art considering performing common tap and touch operations on one of three touch regions which are arranged at bezel edges of a front face of a terminal device and comprise a part of a screen of the terminal device (see page 3, lines 16-19: claims 2, 5; and figure 2 in D3), detecting a pressure exerted on one of the three touch regions, wherein a magnitude of the pressure exceeds a preset value (see claim 1 in D3), and implementing a system navigation function corresponding to the touch region on which the pressure is exerted (see claim 1 in D3). Accordingly, it would be obvious to a person skilled in the art to combine the disclosures of D1-D3, thereby arriving at claim 1. Therefore, claim 1 is novel under PCT Article 33(2), but lacks an inventive step under PCT Article 33(3).

The additional feature of claim 2, dependent on claim 1, is merely a matter of design option in view of the disclosure of D2 considering the threshold value (see claim 11 in D2) and the disclosure of D3 considering the preset value (see claim 1 in D3).

The additional feature of claim 3, dependent on claim 1, can be easily derived from the disclosure of D3 considering that the system navigation function comprises a home function (see claim 1 in D3).

The additional feature of claim 4, dependent on claim 3, is merely a matter of design option in view of the disclosure of D3 considering the system navigation function (see claim 1 in D3).

The additional feature of claim 5, dependent on claim 1, can be easily derived from the disclosure of D2 considering that a user touches a function icon (32) on the operating interface (26) (see paragraph [0070]; and figure 10 in D2).

The additional feature of claim 6, dependent on claim 1, is merely a matter of design option in view of the disclosure of D3 considering performing the common tap and touch operations on one of the three touch regions, detecting the pressure exerted on one of the three touch regions, and implementing the system navigation function corresponding to the touch region on which the pressure is exerted (see page 3, lines 16-19: claims 1-2,
In case the space in any of the preceding boxes is not sufficient.
Continuation of: Previous Page

5: and figure 2 in D3).

The additional feature of claim 7, dependent on claim 6, is merely a matter of design option in view of the disclosure of D2 considering the threshold value (see claim 11 in D2) and the disclosure of D3 considering the preset value (see claim 1 in D3).

The additional feature of claim 8, dependent on claim 1, is merely a matter of design option in view of the disclosure of D3 considering performing the common tap and touch operations on one of the three touch regions, detecting the pressure exerted on one of the three touch regions, and implementing the system navigation function corresponding to the touch region on which the pressure is exerted (see page 3, lines 16-19: claims 1-2, 5: and figure 2 in D3).

The additional feature of claim 9, dependent on claim 8, is merely a matter of design option in view of the disclosure of D2 considering the threshold value (see claim 11 in D2) and the disclosure of D3 considering the preset value (see claim 1 in D3).

The additional feature of claim 10, dependent on claim 1, is merely a matter of design option in view of the disclosure of D3 considering performing the common tap and touch operations on one of the three touch regions, detecting the pressure exerted on one of the three touch regions, and implementing the system navigation function corresponding to the touch region on which the pressure is exerted (see page 3, lines 16-19: claims 1-2, 5: and figure 2 in D3).

The additional feature of claim 11, dependent on claim 10, is merely a matter of design option in view of the disclosure of D2 considering the threshold value (see claim 11 in D2) and the disclosure of D3 considering the preset value (see claim 1 in D3).

The additional feature of claim 12, dependent on claim 10, is merely a matter of design option in view of the disclosure of D3 considering that the system navigation function comprises a recent apps function (see claim 1 in D3).

Accordingly, claims 2-12 would have been obvious over D1 in view of D2 and D3. Therefore, claims 2-12 are novel under PCT Article 33(2), but lack an inventive step under PCT Article 33(3).

2.1.2 Claims 13-15

Continued on The Next Page
Claim 13 is an independent claim and relates to a method of controlling an electronic device. Since the features of claim 13 are substantially the same as those of claim 1 except for the category of invention, the same reasoning as in claim 1 applies to claim 13. Accordingly, claim 13 would have been obvious over D1 in view of D2 and D3. Therefore, claim 13 is novel under PCT Article 33(2), but lacks an inventive step under PCT Article 33(3).

The feature of claim 14 is substantially the same as that of claim 3 except for the category of invention, and the same reasoning as in claim 3 applies to claim 14. Accordingly, claim 14 would have been obvious over D1 in view of D2 and D3. Therefore, claim 14 is novel under PCT Article 33(2), but lacks an inventive step under PCT Article 33(3).

The additional feature of claim 15, dependent on claim 13, is merely a matter of design option in view of the disclosure of D3 considering performing common tap and touch operations on one of three touch regions, detecting a pressure exerted on one of the three touch regions, and implementing a system navigation function corresponding to the touch region on which the pressure is exerted (see page 3, lines 16-19; claims 1-2, 5: and figure 2 in D3). Accordingly, claim 15 would have been obvious over D1 in view of D2 and D3. Therefore, claim 15 is novel under PCT Article 33(2), but lacks an inventive step under PCT Article 33(3).

2.2 Industrial Applicability (PCT Article 33(4))
Claims 1-15 are industrially applicable under PCT Article 33(4).