

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

PCT

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)**

To:

see form PCT/ISA/220

Date of mailing
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference
see form PCT/ISA/220

FOR FURTHER ACTION
See paragraph 2 below

International application No.
PCT/EP2017/072267

International filing date (day/month/year)
05.09.2017

Priority date (day/month/year)

International Patent Classification (IPC) or both national classification and IPC
INV. A47L9/28

Applicant
AKTIEBOLAGET ELECTROLUX

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 usually 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

see form PCT/ISA/210

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Box No. I Basis of the 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:

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)	Yes: Claims	<u>5, 6, 11-14</u>
	No: Claims	<u>1-4, 7-10</u>
Inventive step (IS)	Yes: Claims	
	No: Claims	<u>1-14</u>
Industrial applicability (IA)	Yes: Claims	<u>1-14</u>
	No: Claims	

2. Citations and explanations

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

- D1 US 2015/000068 A1 (TSUBOI MASANORI [JP] ET AL) 1 January 2015
(2015-01-01)
- D2 US 2014/207280 A1 (DUFFLEY SAMUEL [US] ET AL) 24 July 2014
(2014-07-24)
- D3 DE 20 2017 000833 U1 (LG ELECTRONICS INC [KR]) 8 March 2017
(2017-03-08)

1 Lack of novelty: Claims 1-4 and 7-10

The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claims 1-4 and 7-10 is not new in the sense of Article 33(2) PCT.

1.1 With reference to independent method claim 1:

D1, which is considered to represent the most relevant state of the art, discloses:

A method of a robotic cleaning device (1) of controlling operation of a cleaning program in progress, comprising:
receiving (paragraph [0079]) an instruction to pause the cleaning program in progress;
travelling, in response to said instruction to pause, to a charging station (40) to recharge a robotic cleaning device battery (14);
receiving (paragraph [0079]) a further instruction to resume the cleaning program that was in progress upon receiving the instruction to pause; and
resuming (paragraph [0079]), in response to said further instruction, the cleaning program that was in progress upon receiving the instruction to pause.

Therefore the claim 1 of the present application lacks novelty in the sense of Article 33(2) PCT.

1.2 With reference to claims 2-4:

Dependent claims 2-4 do not contain any additional features which, in combination with the features of any claim to which it refers, meet the requirements of the PCT with respect to novelty, because the features of are known from D1 (see paragraphs [0079] and [0173]).

1.3 With reference to independent device claim 7:

D1, which is considered to represent the most relevant state of the art, discloses:

Robotic cleaning device (1) configured to control operation of a cleaning program in progress, comprising:

a propulsion system (29) configured to move the robotic cleaning device (1);

at least one battery (14) configured to power the robotic cleaning device (1);

and a controller (paragraph [0079]) configured to:

receive an instruction to pause the cleaning program in progress;

control, in response to said instruction to pause, the propulsion system (29) to cause the robotic cleaning device (1) to travel to a charging station (40) to

recharge the robotic cleaning device battery (1);

receive a further instruction to resume the cleaning program that was in progress upon receiving the instruction to pause; and

resume, in response to said further instruction, the cleaning program that was in progress upon receiving the instruction to pause (paragraph [0079]).

Therefore the claim 7 of the present application lacks novelty in the sense of Article 33(2) PCT.

1.4 With reference to claims 8-10:

Dependent claims 8-10 do not contain any additional features which, in combination with the features of any claim to which it refers, meet the requirements of the PCT with respect to novelty, because the features of are known from D1 (see figures 1-3 and paragraphs [0079] and [0173]).

2 Inventive step

The additional features of dependent claims 5, 6 and 11-14 do not contain any additional novel features which, in combination with the features of claim 1 and 7 respectively, would contribute to an inventive step as the skilled person would regard it a normal design procedure to combine all the features set out in claims 5, 6 and 11-14.

Re Item VII

Certain defects in the international application

- 1 Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in D1 is not mentioned in the description, nor is this document identified therein.
- 2 The applicant should ensure that it is clear from the description which features of the subject-matter of independent claims 1 and 7 are known from D1, which special technical effect is generated by these special technical features and which objective technical problem is solved by the invention (see Rule 5.1(a)(iii) PCT and Guidelines Chap.4.5).
- 3 The attention of the applicant is drawn to the fact that by introducing D1 and specifying the objective technical problem, the application should not contain subject-matter which extends beyond the content of the application as filed (Article 34(2)b) PCT).
- 4 Independent claims 1 and 7 are not in the two-part form in accordance with Rule 6.3(b) PCT, which in the present case would be appropriate, with those features known in combination from the prior art D1 being placed in the preamble (Rule 6.3(b)(i) PCT) and the remaining features being included in the characterising part (Rule 6.3(b)(ii) PCT).