

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2018/010553

**Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)**

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1.  Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
2.  Claims Nos.:  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
  
3.  Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

**Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)**

This International Searching Authority found multiple inventions in this international application, as follows:

The inventions of group 1: claims 1 to 15 pertain to a cryolipolysis device and a driving method,

The inventions of group 2: claims 16 to 31 pertain to a cooling cup of the cryolipolysis device.

1.  As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2.  As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.
3.  As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
  
4.  No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

**Remark on Protest**

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

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## A. CLASSIFICATION OF SUBJECT MATTER

*A61B 18/02(2006.01)i, A61F 7/00(2006.01)i, A61B 18/00(2006.01)i, A61F 7/02(2006.01)i*

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

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61B 18/02; A61B 17/22; A61B 18/00; A61B 18/18; A61F 7/00; A61F 7/10; A61N 5/06; A61N 7/00; A61F 7/02

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean Utility models and applications for Utility models: IPC as above

Japanese Utility models and applications for Utility models: IPC as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS (KIPO internal) &amp; Keywords: cooling, fat, decomposition, cup, vacuum

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|-----------|---|-----------------------|
| Y         | KR 10-1677325 B1 (HIRONIC CO., LTD.) 29 November 2016<br>See paragraphs [43], [56], [75], claim 1 and figures 1-21.           | 1-15                  |
| A         |   | 16-31                 |
| Y         | KR 10-2012-0041478 A (MEDMIX CO., LTD.) 02 May 2012<br>See paragraphs [06], [14], claim 1 and figures 1-10.                   | 1-15                  |
| X         | KR 10-2016-0123261 A (HIRONIC CO., LTD.) 25 October 2016<br>See paragraphs [22]-[25], [43]-[70], claims 1, 4 and figures 1-7. | 16-19,31              |
| A         | KR 10-1723211 B1 (NCBIO CO., LTD.) 05 April 2017<br>See the entire document.  | 1-31                  |
| A         | KR 10-2014-0141646 A (LOTSCH, Friedemann) 10 December 2014<br>See the entire document.  | 1-31                  |



Further documents are listed in the continuation of Box C.



See patent family annex.

\* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&amp;" document member of the same patent family


Date of the actual completion of the international search

21 JANUARY 2019 (21.01.2019)

Date of mailing of the international search report

22 JANUARY 2019 (22.01.2019)

Name and mailing address of the ISA/KR


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**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.

**PCT/KR2018/010553**

| Patent document cited in search report | Publication date | Patent family member | Publication date |
|--|------------------|----------------------|------------------|
| KR 10-1677325 B1                       | 29/11/2016       | CN 204863452 U       | 16/12/2015       |
|  |                  | CN 205493993 U       | 24/08/2016       |
|  |                  | KR 10-1514389 B1     | 24/04/2015       |
|  |                  | KR 10-1521551 B1     | 19/05/2015       |
|  |                  | KR 10-1907107 B1     | 11/10/2018       |
|  |                  | KR 10-2014-0132999 A | 19/11/2014       |
|  |                  | KR 10-2014-0133659 A | 20/11/2014       |
|  |                  | KR 10-2014-0133785 A | 20/11/2014       |
|  |                  | KR 10-2014-0133786 A | 20/11/2014       |
|  |                  | KR 10-2014-0134122 A | 21/11/2014       |
|  |                  | KR 10-2015-0105274 A | 16/09/2015       |
|  |                  | WO 2014-182046 A1    | 13/11/2014       |
|  |                  | KR 10-2012-0041478 A | 02/05/2012       |
| KR 10-2016-0123261 A                   | 25/10/2016       | NONE                 |                  |
| KR 10-1723211 B1                       | 05/04/2017       | KR 10-2016-0071508 A | 22/06/2016       |
| KR 10-2014-0141646 A                   | 10/12/2014       | CA 2868427 A1        | 12/09/2013       |
|  |                  | CN 104271085 A       | 07/01/2015       |
|  |                  | CN 104271085 B       | 19/10/2016       |
|  |                  | DE 202012002278 U1   | 16/08/2012       |
|  |                  | EP 2822518 A1        | 14/01/2015       |
|  |                  | EP 2822518 B1        | 04/05/2016       |
|  |                  | IL 234524 A          | 30/10/2014       |
|  |                  | JP 2015-512677 A     | 30/04/2015       |
|  |                  | RU 2014140404 A      | 27/04/2016       |
|  |                  | US 2015-0080769 A1   | 19/03/2015       |
| WO 2013-131653 A1                      | 12/09/2013       |                      |                  |