

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR2019/016724

## A. CLASSIFICATION OF SUBJECT MATTER

*F24F 3/16(2006.01)i, B01D 53/04(2006.01)i, C01B 13/02(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)

F24F 3/16; B01D 53/02; B01D 53/22; F24F 1/00; F24F 11/02; F24F 7/00; F24F 7/08; B01D 53/04; C01B 13/02

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: air conditioner, carbon dioxide, indoor unit, oxygen, outdoor unit, filtration, processor, supply, discharge

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 2005-055058 A (MITSUBISHI ELECTRIC CORP.) 03 March 2005 See paragraphs [0010]-[0034]; and figures 1-16.	1-15
A	JP 2005-147484 A (HITACHI LTD.) 09 June 2005 See paragraphs [0008]-[0029]; and figures 1-5.	1-15
A	KR 20-0406805 Y1 (CHO, Bum Jong) 24 January 2006 See claims 1-5; and figures 2-3.	1-15
A	KR 10-2011-0077702 A (ANYTECH) 07 July 2011 See paragraphs [0022]-[0038]; and figures 1-3.	1-15
A	US 7658786 B2 (LIN, Loufei) 09 February 2010 See claims 1-16; and figures 1-3.	1-15



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

18 MARCH 2020 (18.03.2020)

Date of mailing of the international search report

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Name and mailing address of the ISA/KR


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

International application No.

**PCT/KR2019/016724**

Patent document cited in search report	Publication date	Patent family member	Publication date
JP 2005-055058 A	03/03/2005	JP 3873945 B2	31/01/2007
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US 7658786 B2	09/02/2010	CN 1202384 C	18/05/2005
		CN 1270912 C	23/08/2006
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		JP 2007-524056 A	23/08/2007
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		WO 2004-106815 A1	09/12/2004