

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2018/074391

A. CLASSIFICATION OF SUBJECT MATTER

F04D 29/42 (2006.01) i; F04D 29/66 (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)

F04D

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

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

CNABS; VEN; CNKI: 中山大洋电机股份有限公司, 蜗壳, 减压, 增压, 静压, 动压, 空腔, 凸起, 隆起, volute, spiral, case, housed, board, pressure, protrude, heave, cavity

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 201588817 U (MIDEA GROUP) 22 September 2010 (22.09.2010), description, paragraphs [0018]-[0020], and figures 1 and 2	1-4, 6, 7, 9
Y	CN 201588817 U (MIDEA GROUP) 22 September 2010 (22.09.2010), description, paragraphs [0018]-[0020], and figures 1 and 2	5, 8, 10
Y	CN 201953682 U (GUANGDONG FANS-TECH ELECTRIC CO., LTD.) 31 August 2011 (31.08.2011), description, paragraphs [0011] and [0012], and figures 1 and 2	5, 8, 10
A	CN 103334960 A (FOSHAN NAIHAIJIUZHOU HUIPU FANS CO., LTD.) 02 October 2013 (02.10.2013), entire document	1-10
A	CN 200982317 Y (NINGBO FOTILE KITCHEN WARE CO., LTD.) 28 November 2007 (28.11.2007), entire document	1-10

Further documents are listed in the continuation of Box C.

See patent family annex.

<p>* Special categories of cited documents:</p> <p>“A” document defining the general state of the art which is not considered to be of particular relevance</p> <p>“E” earlier application or patent but published on or after the international filing date</p> <p>“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)</p> <p>“O” document referring to an oral disclosure, use, exhibition or other means</p> <p>“P” document published prior to the international filing date but later than the priority date claimed</p>	<p>“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</p> <p>“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</p> <p>“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</p> <p>“&” document member of the same patent family</p>
---	---

Date of the actual completion of the international search 08 May 2018	Date of mailing of the international search report 28 May 2018
--	---

<p>Name and mailing address of the ISA State Intellectual Property Office of the P. R. China No. 6, Xitucheng Road, Jimenqiao Haidian District, Beijing 100088, China Facsimile No. (86-10) 62019451</p>	<p>Authorized officer LI, Xiufang Telephone No. (86-10) 62085885</p>
--	--

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2018/074391

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN 202596807 U (CHANGZHOU DEMEI MACHINERY CO., LTD.) 12 December 2012 (12.12.2012), entire document	1-10
A	WO 2004097225 A1 (DAIKIN IND LTD. et al.) 11 November 2004 (11.11.2004), entire document	1-10
A	US 2004131465 A1 (DENSO CORP. et al.) 08 July 2004 (08.07.2004), entire document	1-10

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2018/074391

Patent Documents referred in the Report	Publication Date	Patent Family	Publication Date
CN 201588817 U	22 September 2010	None	
CN 201953682 U	31 August 2011	None	
CN 103334960 A	02 October 2013	WO 2015000207 A1	08 January 2015
		CN 103334960 B	20 April 2016
CN 200982317 Y	28 November 2007	None	
CN 202596807 U	12 December 2012	None	
WO 2004097225 A1	11 November 2004	EP 1624193 A4	01 December 2010
		US 7244099 B2	17 July 2007
		CN 1784547 B	20 July 2011
		CN 1784547 A	07 June 2006
		US 2006198729 A1	07 September 2006
		EP 1624193 A1	08 February 2006
		JP 2004353665 A	16 December 2004
US 2004131465 A1	08 July 2004	US 6964555 B2	15 November 2005
		JP 3843941 B2	08 November 2006
		JP 2004204756 A	22 July 2004