

**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/JP2020/003200

**A. CLASSIFICATION OF SUBJECT MATTER**

Int. Cl. F04D29/056 (2006.01) i, F04D29/28 (2006.01) i  
 FI: F04D29/056 B, F04D29/28 C

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)

Int. Cl. F04D29/056, F04D29/28

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

Published examined utility model applications of Japan 1922-1996  
 Published unexamined utility model applications of Japan 1971-2020  
 Registered utility model specifications of Japan 1996-2020  
 Published registered utility model applications of Japan 1994-2020

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

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JP 2012-251529 A (DAIKIN INDUSTRIES, LTD.) 20 December 2012, fig. 1-6	1-5
Y	US 2016/0201686 A1 (ROBERT BOSCH GMBH) 14 July 2016, paragraph [0001], fig. 1-3	1-5
Y	JP 2004-162559 A (ISHIKAWAJIMA-HARIMA HEAVY INDUSTRIES CO., LTD.) 10 June 2004, paragraphs [0025]-[0027], fig. 2-4	1-5
A	JP 53-28801 Y1 (HITACHI, LTD.) 20 July 1978, fig. 1	1-5
A	JP 48-12964 Y1 (HITACHI, LTD.) 09 April 1973, fig. 1, 2	1-5

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
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- “P” document published prior to the international filing date but later than the priority date claimed

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Date of the actual completion of the international search  
 10.03.2020

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 31.03.2020

Name and mailing address of the ISA/  
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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 11-62877 A (KOBE STEEL, LTD.) 05 March 1999, fig. 2	1-5
A	JP 2003-247426 A (FUJI HEAVY INDUSTRIES LTD.) 05 September 2003, fig. 1	1-5

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

International application No.  
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Patent Documents referred to in the Report	Publication Date	Patent Family	Publication Date
JP 2012-251529 A	20.12.2012	(Family: none)	
US 2016/0201686 A1	14.07.2016	WO 2015/028169 A1 description, page 1, lines 10-21, fig. 1-3 DE 102013217261 A1 CN 105492777 A	
JP 2004-162559 A	10.06.2004	(Family: none)	
JP 53-28801 Y1	20.07.1978	(Family: none)	
JP 48-12964 Y1	09.04.1973	(Family: none)	
JP 11-62877 A	05.03.1999	(Family: none)	
JP 2003-247426 A	05.09.2003	(Family: none)	