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- (88) **Date of publication of the international search report:**
2 February 2017

(54) **Title:** METHOD OF RUNNING AN AIR INLET SYSTEM

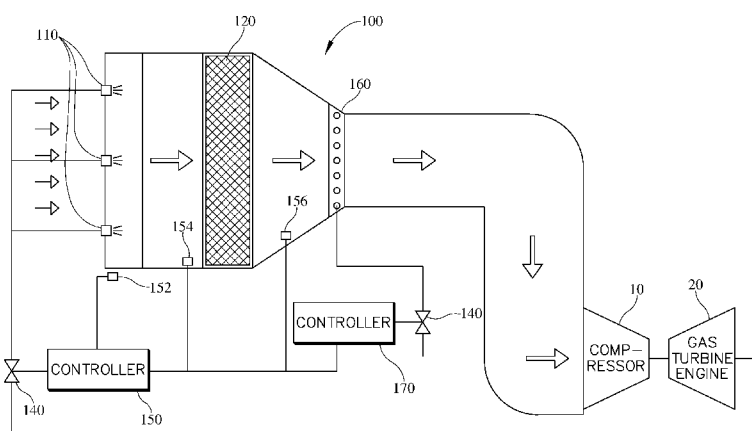


FIG. 1

(57) **Abstract:** The present embodiments disclose a method of running an air inlet system upstream of one or more inlet air filters of a device protected by air filtration, wherein the method comprises: regulating the relative air humidity of the inlet air at the one or more inlet air filters in dependence of the inlet air filters differential pressure.

INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2016/053744

A. CLASSIFICATION OF SUBJECT MATTER

INV. F02C7/057 F02C7/143
 ADD. F02C7/047

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)
 F02C

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)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP H06 341356 A (ISHIKAWAJIMA HARIMA HEAVY IND) 13 December 1994 (1994-12-13)	1-4,17
Y	figure 1	5-9
A	automated translation	10-16

X	JP 2011 214476 A (MITSUBISHI HEAVY IND LTD) 27 October 2011 (2011-10-27)	1-3, 10-16
	figure 1	
	automated translation	

X,P	JP 2016 053343 A (TOKYO ELECTRIC POWER CO INC:THE) 14 April 2016 (2016-04-14)	1,17
	figure 14	
	passages relevant to fig. 14 in automated translation.	

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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

"&" document member of the same patent family

Date of the actual completion of the international search

21 September 2016

Date of mailing of the international search report

02/12/2016

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

International application No

PCT/IB2016/053744

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 03/089770 A1 (MEE IND INC [US]; MEE THOMAS R [US]; PETERSEN ROSS A [US]) 30 October 2003 (2003-10-30) figure 3 page 5, line 7 - page 5, line 14 page 6, line 35 - page 7, line 2 page 9, line 34 - page 10, line 9 -----	5-9

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IB2016/053744

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:

see additional sheet

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 an 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.:

1-17

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.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-17

Method of regulating the relative humidity of an air flow in an air inlet duct equipped with air filters, based on a differential pressure across the filters.

2. claim: 18

System for reducing an inlet air temperature of a device protected by air filters.
Cooling is provided by a two stage fogging system, one stage upstream of the filters, the second stage downstream.
The second stage fogging is controlled to reach wet bulb temperature of the air.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IB2016/053744

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP H06341356	A	13-12-1994	NONE	

JP 2011214476	A	27-10-2011	JP 5484992 B2	07-05-2014
			JP 2011214476 A	27-10-2011

JP 2016053343	A	14-04-2016	NONE	

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			WO 03089770 A1	30-10-2003
