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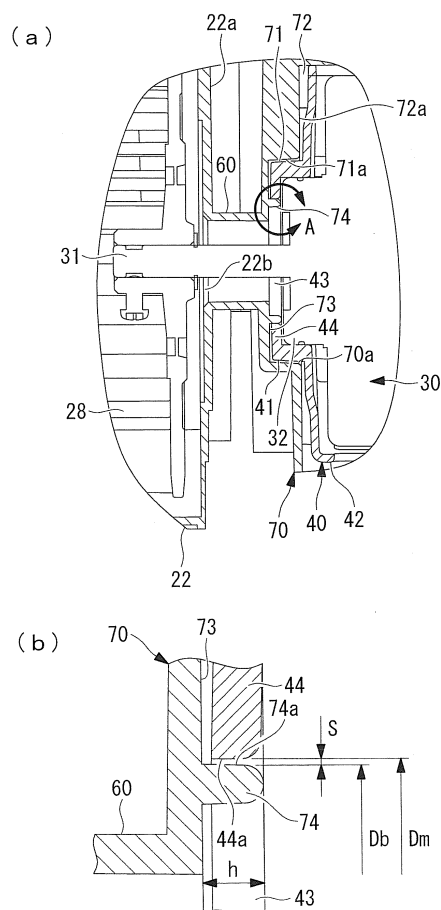
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(30) Priority: **08.09.2014 JP 2014182090**

(54) **INDOOR UNIT AND AIR CONDITIONER**

(57) Provided is an indoor unit (20) that has a shaft-portion air shielding structure of a cross-flow fan which does not adversely affect the vibration-isolating performance of a vibration-isolating member. In an indoor unit, a ring-shaped protruding portion (74) that is provided at a side-wall surface (73) of the motor-installing portion (70) so as to protrude therefrom in a motor-installing direction and a vibration-isolating-member receiving portion (44) in which an end portion of the motor bracket (40) is bent in a direction of a motor-shaft center are provided. Between an outer-circumferential surface (74a) of the ring-shaped protruding portion (74) and a distal-end surface (44a) of the vibration-isolating-member receiving portion (44), a minute gap (S) is formed, and a protruding height (h) of the ring-shaped protruding portion (74) is set so as not to be in contact with a vibration-isolating member (32).

FIG. 1



**PARTIAL EUROPEAN SEARCH REPORT**

Application Number

under Rule 62a and/or 63 of the European Patent Convention.
This report shall be considered, for the purposes of
subsequent proceedings, as the European search report

EP 15 18 3785

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A,D	JP 2004 144318 A (MITSUBISHI ELECTRIC CORP) 20 May 2004 (2004-05-20) * the whole document *	4	INV. F24F13/24 F24F1/00
A	JP 2008 121688 A (DAIKIN IND LTD) 29 May 2008 (2008-05-29) * abstract *	1,4	
A	JP H10 61964 A (FUJITSU GENERAL LTD) 6 March 1998 (1998-03-06) * abstract *	1,4	
A	JP 2007 120836 A (MITSUBISHI ELECTRIC CORP) 17 May 2007 (2007-05-17) * abstract *	1,4	
			TECHNICAL FIELDS SEARCHED (IPC)
			F24F

INCOMPLETE SEARCH

The Search Division considers that the present application, or one or more of its claims, does/do not comply with the EPC so that only a partial search (R.62a, 63) has been carried out.

Claims searched completely :

Claims searched incompletely :

Claims not searched :

Reason for the limitation of the search:

see sheet C

Place of search

Munich

Date of completion of the search

15 June 2016

Examiner

Lienhard, Dominique

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
A : technological background
O : non-written disclosure
P : intermediate document

T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

**INCOMPLETE SEARCH
SHEET C**

Application Number

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Claim(s) completely searchable:

1, 4

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Claim(s) not searched:

2, 3

Reason for the limitation of the search:

15

The search has been restricted to the subject-matter indicated by the applicant in his letter of date 27th April 2016 filed in reply to the invitation pursuant to Rule 62a(1) EPC. Hence the search report and the written opinion have been drawn up on the basis of claims 1 and 4 (which depends on 1).

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

15-06-2016

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
JP 2004144318 A	20-05-2004	JP 3846583 B2 JP 2004144318 A	15-11-2006 20-05-2004
JP 2008121688 A	29-05-2008	JP 4618292 B2 JP 2008121688 A	26-01-2011 29-05-2008
JP H1061964 A	06-03-1998	NONE	
JP 2007120836 A	17-05-2007	JP 4513718 B2 JP 2007120836 A	28-07-2010 17-05-2007