



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
19.05.2010 Bulletin 2010/20

(51) Int Cl.:
D06F 58/24 ^(2006.01) **F24F 3/14** ^(2006.01)
F28D 7/00 ^(2006.01)

(43) Date of publication A2:
17.03.2010 Bulletin 2010/11

(21) Application number: **09161352.1**

(22) Date of filing: **28.05.2009**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR
Designated Extension States:
AL BA RS

(30) Priority: **11.09.2008 JP 2008233610**

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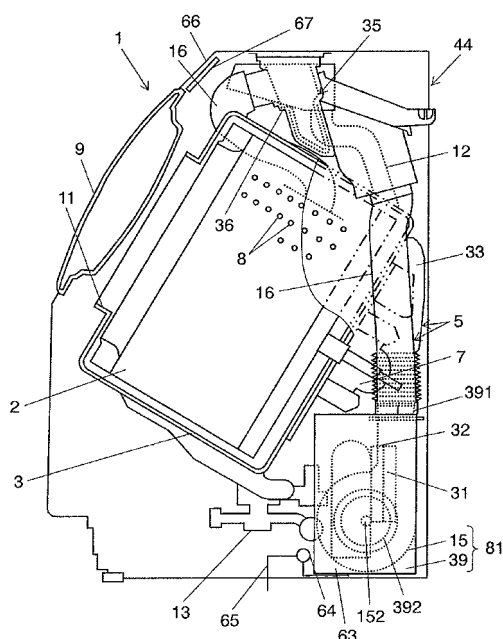
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(54) **Air conditioning unit**

(57) There is provided an air conditioning unit (39) in which an evaporator (31) and a condenser (32) located in the middle of an air passage (5) from a suction inlet port (391) to a suction outlet port (392) for dehumidifying and heating a circulating air, and a compressor (37) for circulating a cooling medium therethrough are build inside a unit case (38) having the suction inlet port (391) and the suction outlet port (392), wherein the evaporator and the condenser compose a heat exchanger (395) in which each other's fins are aligned in parallel, and the heat exchanger is installed inside the air passage of the unit case in which a suction outlet port surface formed by the suction outlet port is opposed to an opening surface of the evaporator or the condenser so as to form an angle (θ) smaller than a right angle.

FIG. 1





EUROPEAN SEARCH REPORT

Application Number
EP 09 16 1352

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	JP 2005 296155 A (MATSUSHITA ELECTRIC IND CO LTD) 27 October 2005 (2005-10-27) * the whole document *	1,3-5	INV. D06F58/24 F24F3/14 F28D7/00
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A	US 5 115 645 A (ABRAHAM ANTHONY W [US]) 26 May 1992 (1992-05-26) * the whole document *	2	
			TECHNICAL FIELDS SEARCHED (IPC)
			D06F F24F F28D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 12 April 2010	Examiner Spitzer, Bettina
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			

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EPO FORM 1503 03.92 (P04C01)



Application Number

EP 09 16 1352

CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 09 16 1352

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 2-5

Fins of evaporator and condensor are integrated

2. claims: 1, 3-5

Fins of evaporator and condensor are aligned in parallel

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

EP 09 16 1352

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
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12-04-2010

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