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(54) Indoor unit of air conditioner

(57) An indoor unit of an air conditioner is disclosed. The air conditioner is an apparatus that cools or heats an indoor space by circulating refrigerant in one direction or another. The indoor unit of the air conditioner comprises a case spaced apart from the ceiling of a room by a predetermined distance, an indoor heat exchanger provided in the case to heat or cool the room, and a fan and fan motor provided in the case to suction and discharge air.

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EUROPEAN SEARCH REPORT

Application Number
EP 05 02 4653

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	EP 0 849 543 A1 (RICAGNI CONDIZIONATORI SPA [IT]) 24 June 1998 (1998-06-24) * the whole document *	1-14	INV. F24F1/00
X	US 2 756 569 A (KRITZER RICHARD W) 31 July 1956 (1956-07-31) * column 1, line 49 - column 4, line 49 * * figures *	1,14	
A	US 5 524 450 A (CHEN TZE L [TW]) 11 June 1996 (1996-06-11) * column 1, line 62 - column 2, line 50 * * figures *	1,14	
A	DD 1 507 A1 (CURT TAUBENHEIM) 31 July 1952 (1952-07-31) * abstract; figures *	1	
A	US 6 240 247 B1 (REIKER KENNETH H [US]) 29 May 2001 (2001-05-29) * abstract; figures *	1	

TECHNICAL FIELDS SEARCHED (IPC)

F24F

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	8 July 2010	Mattias Grenbäck

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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08-07-2010

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0849543 A1	24-06-1998	IT MI962699 A1	22-06-1998
US 2756569 A	31-07-1956	NONE	
US 5524450 A	11-06-1996	NONE	
DD 1507 A1		NONE	
US 6240247 B1	29-05-2001	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82