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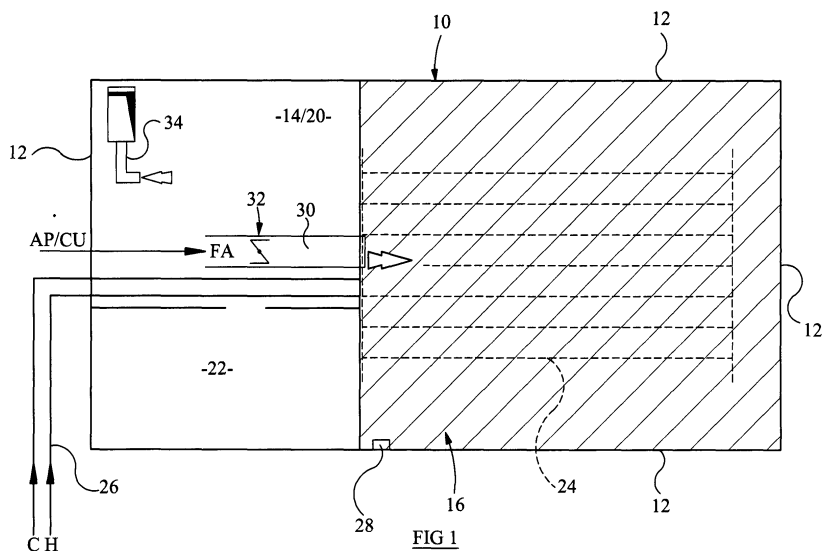
(54) **Method and device for rapidly controlling room air temperature**

(57) A method of rapidly controlling room temperature, comprises the steps of:

- providing primary heating and cooling means which is or includes a radiant ceiling coil (24) as hereinbefore defined in or on a ceiling (16) of a room (10); and
- providing secondary heating and cooling means which is or includes supplementary air (SA) which is dischargeable into the room (10). The supplementary air (SA) is or

includes forced air (FA) from a forced air supply external of the room (10). The supplementary air (SA) is selectively pre-heated or pre-cooled to accelerate a heating or cooling effect of the primary heating and cooling means.

A building having a room (10) in which the method is implemented, and a system for rapidly controlling the room temperature are also provided.





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 25 1451

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	US 3 120 866 A (MILLS CLARENCE A) 11 February 1964 (1964-02-11) * column 3, line 35 - column 6, line 32; figures 1,2,7,8 *	1-3,5, 9-12,15	INV. F24F3/044 F24F5/00
X	DE 14 54 561 A1 (FRENGER INTERNAT CORP) 29 January 1970 (1970-01-29) * page 4, line 4 - page 11, line 5; figures 1-3 *	1,2,9, 10,15	
X	JP 2005 024197 A (SHINKO KOGYO CO LTD) 27 January 2005 (2005-01-27) * the whole document * * abstract *	1,5, 8-10,15	
X	US 2 190 822 A (HANS BYLAND) 20 February 1940 (1940-02-20) * the whole document *	1,15	
			TECHNICAL FIELDS SEARCHED (IPC)
			F24F F24D
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 23 April 2008	Examiner Lienhard, Dominique
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

2
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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 07 25 1451

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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23-04-2008

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3120866	A	11-02-1964	NONE
DE 1454561	A1	29-01-1970	AT 255086 B 26-06-1967
		BE 660507 A 01-07-1965	
		CH 409301 A 15-03-1966	
		FI 46013 B 31-07-1972	
		FR 1425240 A 06-04-1966	
		GB 1065921 A 19-04-1967	
		IL 23039 A 27-11-1968	
		IS 1465 A7 06-09-1965	
		MY 13370 A 31-12-1970	
		NL 6502812 A 06-09-1965	
		NO 117500 B 18-08-1969	
		OA 1544 A 21-07-1969	
		SE 315994 B 13-10-1969	
		US 3292388 A 20-12-1966	
JP 2005024197	A	27-01-2005	NONE
US 2190822	A	20-02-1940	NONE