



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**04.07.2012 Bulletin 2012/27**

(51) Int Cl.:  
**F24D 19/00** (2006.01) **F24D 19/10** (2006.01)  
**F24H 9/12** (2006.01)

(43) Date of publication A2:  
**29.02.2012 Bulletin 2012/09**

(21) Application number: **11004694.3**

(22) Date of filing: **09.06.2011**

(84) Designated Contracting States:  
**AL 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 RS SE SI SK SM TR**  
Designated Extension States:  
**BA ME**

(71) Applicant: **Danfoss A/S**  
**6430 Nordborg (DK)**

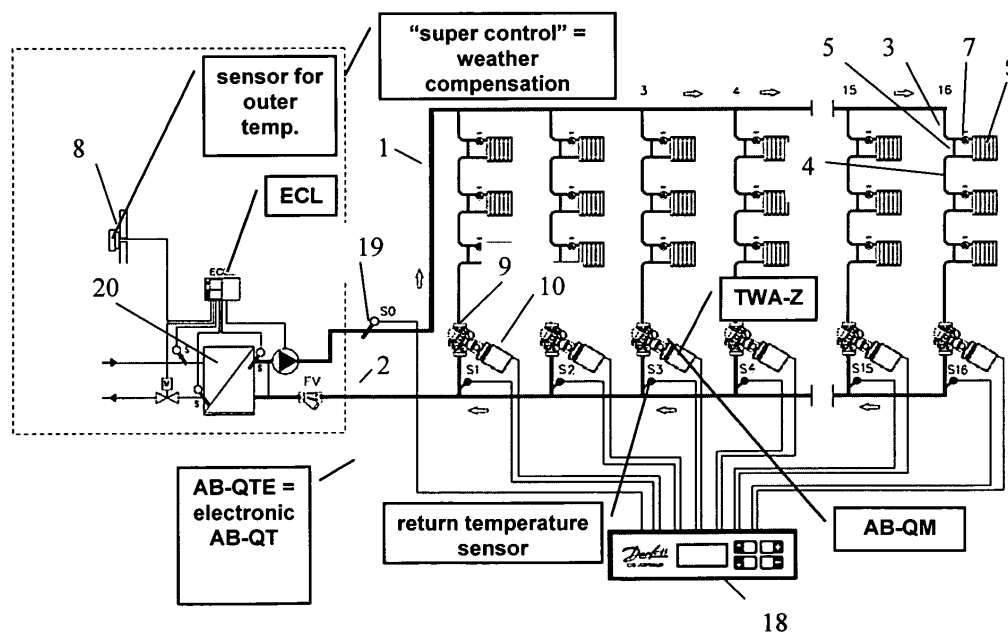
(72) Inventors:  
• **Hartmann, Michael**  
**63526 Erlensee (DE)**  
• **Jedrzejewski, Mariusz**  
**71-693 Szczecin (PL)**  
• **Osojnik, Matjaz**  
**1000 Ljubljana (SI)**

(30) Priority: **10.06.2010 DK 201000504**

(54) **One-pipe heat supply system with flow regulation**

(57) System introducing the means to control the flow rate and of a heat exchanging fluid medium to a riser in a one-pipe system being a typical pipe set up in for example building cooperatives for supplying heat to the radiators of the flats. The control method being to regulate

the temperature of the supplied heat exchanging fluid medium in response to changes in external parameters (temperature) and the flow rate in response to the temperature of the heat exchanging fluid medium in an return line.



**Fig. 6**



## EUROPEAN SEARCH REPORT

Application Number  
EP 11 00 4694

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	DE 296 13 632 U1 (NEHEIM GOEKE & CO METALL [DE]) 19 September 1996 (1996-09-19)	1,2, 10-13	INV. F24D19/00
Y	* pages 2-3; figure 4 *	3-9	
A	-----	14,15	ADD. F24D19/10 F24H9/12
Y	US 2008/179415 A1 (JOHNSON DAVID E [US]) JOHNSON JR DAVID E [US] 31 July 2008 (2008-07-31) * pages 1-4; figures 1-2 * -----	3-9	
			TECHNICAL FIELDS SEARCHED (IPC)
			F24D F24H
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>25 May 2012</b>	Examiner <b>Blot, Pierre-Edouard</b>
<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 ..... &amp; : member of the same patent family, corresponding document</p>			

2

EPO FORM 1503 03.02 (P04C01)

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

EP 11 00 4694

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.

25-05-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 29613632	U1	19-09-1996	NONE
-----			
US 2008179415	A1	31-07-2008	NONE
-----			

EPO FORM P0459

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