(11) **EP 2 362 154 A3**

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3: 15.01.2014 Bulletin 2014/03

(51) Int Cl.: **F24H 9/14** (2006.01)

(43) Date of publication A2: 31.08.2011 Bulletin 2011/35

(21) Application number: 10191992.6

(22) Date of filing: 20.11.2010

(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

(30) Priority: 20.11.2009 IT BO20090757

(71) Applicant: O.T.M.A. s.n.c. di Spaggiari & C. Brescello (RE) (IT)

(72) Inventors:

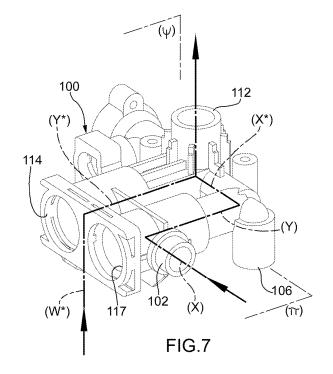
 Spaggiari, Remo 43058 Sorbolo (IT)

 Bacchini, Mirko 43058 Sorbolo (IT)

(74) Representative: Bergadano, Mirko et al Studio Torta S.p.A.Via Viotti, 910121 Torino (IT)

(54) Hollow monolithic header unit for heating systems

(57) "A hollow enbloc header unit (100) having a plurality of connectors designed to be hydraulically connected to a heating system (10). The hollow enbloc header unit (100) is in the form of plate made of a single piece, and comprises a by-pass branch (200) as a whole substantially Z-shaped, in such a way that at least a portion thereof (103) faces a pipe (108) belonging to a cold-water return branch (250) (or else a hot-water delivery branch (250)), which is also as a whole substantially Z-shaped. In addition, the by-pass branch (200) and the cold-water return branch (250) (or else the hot-water delivery branch (250)) cross one another in a point (P)."





EUROPEAN SEARCH REPORT

Application Number EP 10 19 1992

		ERED TO BE RELEVANT		
Category	Citation of document with in of relevant pass	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	DE 91 01 260 U1 (JC 25 April 1991 (1991 * page 2 - page 5;	-04-25)	1-9	INV. F24H9/14
Х	GB 2 388 422 A (HEA [GB]) 12 November 2 * page 3 - page 10;	TRAE SADIA HEATING LTD 003 (2003-11-12) figures 1-8 *	1-9	
Х	FR 2 755 752 A1 (AR 15 May 1998 (1998-0 * page 6 - page 10;	5-15)	1-9	
X	DE 196 23 807 A1 (T [KR]) 19 June 1997 * column 2 - column	ONG YANG MAGIC CORP (1997-06-19) 3; figures 1-4 *	1-9	
A	DE 199 12 284 A1 (G [DK] GRUNDFOS AS [D 28 September 2000 (* figures 1-8 *		1	TECHNICAL FIELDS SEARCHED (IPC) F24H
	The present search report has	peen drawn up for all claims Date of completion of the search		Examiner
	Munich	6 December 2013	Gar	cía Moncayo, O
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS ioularly relevant if taken alone icularly relevant if combined with anotiment of the same category inological background written disclosure mediate document	T : theory or principle E : earlier patent doc after the filing dat ner D : document cited in L : document cited fo	e underlying the in nument, but publis e n the application or other reasons	nvention shed on, or

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

EP 10 19 1992

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.

06-12-2013

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
DE 9101260	U1	25-04-1991	NONE			
GB 2388422	Α	12-11-2003	NONE			
FR 2755752	A1	15-05-1998	AU FR WO	5058298 2755752 9821529	A1	03-06-19 15-05-19 22-05-19
DE 19623807	A1	19-06-1997	DE JP JP	19623807 2761478 H09159275	B2	19-06-19 04-06-19 20-06-19
DE 19912284	A1	28-09-2000	NONE			

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