# 

# (11) **EP 2 532 978 A3**

(12)

#### **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3: 21.05.2014 Bulletin 2014/21

(51) Int Cl.: F24D 5/08 (2006.01) F24C 3/04 (2006.01)

F24D 11/00 (2006.01) F24C 13/00 (2006.01)

(43) Date of publication A2: 12.12.2012 Bulletin 2012/50

(21) Application number: 12171337.4

(22) Date of filing: 08.06.2012

(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: 09.06.2011 NL 2006919

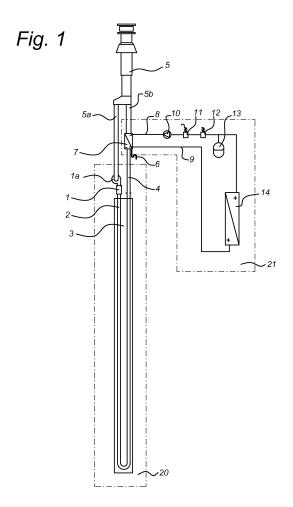
(71) Applicant: Mark Holding B.V. 9645 BM Veendam (NL)

(72) Inventor: Bruinsma, Pieter Hendrik 4182 PB Neerijnen (NL)

(74) Representative: Nederlandsch Octrooibureau P.O. Box 29720 2502 LS The Hague (NL)

## (54) Direct gas fired heating system

(57) Heating system with a gas fired radiant heater (20) and a primary heat exchanger (7) which is in thermal contact with the gas fired radiant heater (20). Furthermore, a fluid based radiant heater (21) is present, and the primary heat exchanger (7) is comprised in a fluid circuit of the fluid based radiant heater (21). An extension set is furthermore provided for a gas fired radiant heater (20) with a fluid based radiant heater (21) and a primary heat exchanger (7) which is comprised in a fluid circuit of the fluid based radiant heater (21), which extension set is thermally connectable with the at least one gas fired radiant heater (20).



P 2 532 978 A3



## **EUROPEAN SEARCH REPORT**

Application Number

EP 12 17 1337

Category	Citation of document with ir of relevant pass	ndication, where appropriate, ages		evant Iaim	CLASSIFICATION OF THE APPLICATION (IPC)
X	WO 2011/036645 A1 ( S R L OFF [IT]; FRA 31 March 2011 (2011 * page 6, line 5 - figures 1-4 *	03-31)		,5,6, 1,13	INV. F24D5/08 F24D11/00 F24C3/04 F24C13/00
X	DE 10 2007 047661 A 26 March 2009 (2009 * the whole documer	1 (KUEBLER GMBH [DE]) 0-03-26) ut *	1-3	,5-13	
X	EP 0 643 273 A1 (VE 15 March 1995 (1995 * the whole documer	5-03-15)	1-3 10-1	,5,6, 13	
					TECHNICAL FIELDS SEARCHED (IPC)
	The present search report has	· ·			
	Place of search Munich	Date of completion of the search 11 April 2014		Δνη	Examiner dt, Markus
X : part Y : part docu	ATEGORY OF CITED DOCUMENTS icularly relevant if taken alone icularly relevant if combined with anotiment of the same category inological background	T : theory or princip E : earlier patent do after the filing da	cument, i te in the app or other r	ring the in out publis olication easons	ivention hed on, or

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

EP 12 17 1337

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.

11-04-2014

W0 2011036645 A1 31-03-2  DE 102007047661 A1 26-03-2009 DE 102007047661 A1 26-03-2  DE 202007018972 U1 04-03-2  EP 2208002 A2 21-07-2  US 2010260490 A1 14-10-2  W0 2009036927 A2 26-03-2  EP 0643273 A1 15-03-1995 AT 173810 T 15-12-1		Patent document ed in search repo	rt	Publication date		Patent family member(s)		Publication date
DE 202007018972 U1 04-03-2 EP 2208002 A2 21-07-2 US 2010260490 A1 14-10-2 WO 2009036927 A2 26-03-2 EP 0643273 A1 15-03-1995 AT 173810 T 15-12-1	WO	201103664	5 A1	31-03-2011				15-08-20 31-03-20
	DE	102007047	561 A1	26-03-2009	DE EP US	202007018972 2208002 2010260490	U1 A2 A1	26-03-20 04-03-20 21-07-20 14-10-20 26-03-20
	EP	0643273	A1	15-03-1995	DE	4331121	Α1	15-12-19 16-03-19 15-03-19

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

FORM P0459