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(54) **A liquid hydrocarbon or bioethanol heating appliance**

(57) A liquid hydrocarbon or bioethanol heating appliance (10), typically and non critically shaped as a movable fireplace with parallelepiped configuration, comprises a base (16), opposite side bands (12) with vertical development and a top connection panel (14) extended crosswise. Said base is provided with an opening (20) on the exposed top front, which can be screened with movable separators (32) and incorporates a tank (22)

and a combustion chamber or burner (24) connected to said tank by a conduit (26). The appliance comprises a valve or solenoid valve (30) or (42) provided with or combined to means that detect the fuel level in the burner (24) and temporarily activate the same valves for allowing the passage of the amount of fuel required for restoring a given level in said burner.

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## EUROPEAN SEARCH REPORT

Application Number  
EP 12 00 0639

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,D	FR 2 927 149 A1 (BRISACH SOC PAR ACTIONS SIMPLI [FR]) 7 August 2009 (2009-08-07) * the whole document *	1-3,6-12	INV. F23D5/04 F23D5/14 F23D5/16
A,D	FR 2 931 538 A1 (PEINTURES ET TECH APPLIQUEES P [FR]; BOUMATI MARCEL [FR]) 27 November 2009 (2009-11-27) * page 8, lines 6-28 * * page 9, lines 5-35; figure 1 *	1-3,6-12	F23N1/00 F23N5/20 F24C5/02 F24C5/18
A	NL 2 002 762 C (D & J HOLDING B V [NL]) 19 October 2010 (2010-10-19) * page 8, lines 21-30; claims 9-11; figures 1,2 *	1-3,6-12	
A	FR 2 948 441 A1 (PASSE AU PRESENT DU [FR]) 28 January 2011 (2011-01-28) * the whole document *	1-3,6-12	
A	FR 2 106 774 A5 (DEVILLE SA) 5 May 1972 (1972-05-05) * page 1, line 18 - page 2, line 14; figure *	1-3,6-12	TECHNICAL FIELDS SEARCHED (IPC) F23D F23N F24C
<del>The present search report has been drawn up for all claims</del>			
Place of search The Hague		Date of completion of the search 22 May 2012	Examiner Coli, Enrico
<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>			

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EPO FORM 1503.03.82 (P04C01)



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**CLAIMS INCURRING FEES**

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

**LACK OF UNITY OF INVENTION**

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:

1-3, 6-12

☐ The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



**LACK OF UNITY OF INVENTION  
SHEET B**

Application Number

EP 12 00 0639

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-3, 6-12

Ethanol heating appliance provided with means for detecting fuel level in the burner and adjusting it according to the needs

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2. claims: 4, 5

Ethanol heating appliance provided with quick coupling device for refilling the fuel tank

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

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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.

22-05-2012

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
FR 2927149	A1	07-08-2009	EP	2250438 A1	17-11-2010
			FR	2927149 A1	07-08-2009
			WO	2009098167 A1	13-08-2009
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FR 2931538	A1	27-11-2009	FR	2931538 A1	27-11-2009
			FR	2931539 A1	27-11-2009
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NL 2002762	C	19-10-2010	-----		
FR 2948441	A1	28-01-2011	NONE		
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FR 2106774	A5	05-05-1972	NONE		
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