



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:  
**20.11.2013 Bulletin 2013/47**

(51) Int Cl.:  
**D06F 37/42** (2006.01) **A47L 15/42** (2006.01)  
**D06F 39/14** (2006.01) **D06F 37/28** (2006.01)  
**E05B 65/00** (2006.01) **E05B 47/00** (2006.01)  
**E05B 47/06** (2006.01)

(43) Date of publication A2:  
**28.09.2011 Bulletin 2011/39**

(21) Application number: **11425067.3**

(22) Date of filing: **21.03.2011**

(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**

(72) Inventor: **Promutico, Fabrizio ,**  
**Bitron S.p.A.**  
**10122 Torino (IT)**

(74) Representative: **Tiburzi, Andrea et al**  
**Barzanò & Zanardo Roma S.p.A.**  
**Via Piemonte 26**  
**00187 Roma (IT)**

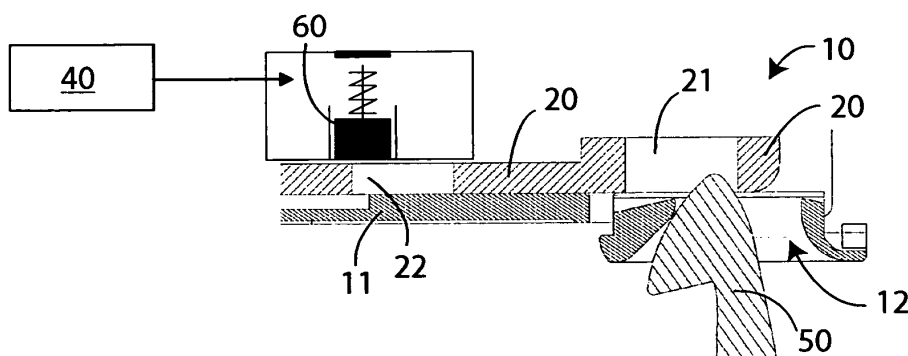
(30) Priority: **22.03.2010 IT RM20100128**

(71) Applicant: **BITRON S.p.A.**  
**10122 Torino (IT)**

(54) **Improved door-locking device**

(57) The present invention relates to a door-locking device (10), comprising a frame (11) provided with an opening (12) wherein a hook (50), associated with a door of a washing machine or of an electric household appliance in general, can introduce and engage with said frame (11) when said door is closed, a locking pawl (60), that can take a first position, wherein it is withdrawn preventing supply of said household appliance, and a second position, wherein its is extracted, permitting supply of said household appliance; and a moving slider (20)

arranged within said frame (11), said slider (20) having a first slot (21) suitable to interact with said hook (50), a second slot (22) with which can be engaged said locking pawl (60) in said second position, when said slider (20) is in said locking position, to keep said hook (50) engaged with said frame (11) by said first slot (21) when said door is closed, said door-locking device (10) further comprises safety means (30) provided with control means (32,34) provided with control means (32,34), said safety means (30) being suitable to interact with said slider (20) to control its position.



**Fig. 2**



## EUROPEAN SEARCH REPORT

Application Number  
EP 11 42 5067

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	EP 2 154 287 A1 (ELETTROTECNICA ROLD SRL [IT]) 17 February 2010 (2010-02-17)	1-3	INV.
A	* paragraphs [0013] - [0087]; figures * -----	4	D06F37/42
A	US 2004/083769 A1 (KIM JONG SEOK [KR] ET AL) 6 May 2004 (2004-05-06)	1-4	A47L15/42
	* paragraphs [0001], [0012], [0016] - [0017], [0079] - [0099] * -----		D06F39/14
A	EP 1 544 387 A2 (BITRON SPA [IT]) 22 June 2005 (2005-06-22)	1-4	D06F37/28
	* paragraphs [0009] - [0027] * -----		E05B65/00
A	DE 198 48 275 A1 (ZANGENSTEIN ELEKTRO [DE]) 27 April 2000 (2000-04-27)	1-4	E05B47/00
	* the whole document * -----		E05B47/06
			TECHNICAL FIELDS SEARCHED (IPC)
			D06F A47L
The present search report has been drawn up for all claims			
Place of search <b>Munich</b>		Date of completion of the search <b>16 October 2013</b>	Examiner <b>Clivio, Eugenio</b>
CATEGORY OF CITED DOCUMENTS		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	
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			

 1  
EPO FORM 1503 03.82 (P04C01)

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

EP 11 42 5067

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.

16-10-2013

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 2154287	A1	17-02-2010	NONE	
-----				
US 2004083769	A1	06-05-2004	KR 20030060556 A	16-07-2003
			US 2004083769 A1	06-05-2004
-----				
EP 1544387	A2	22-06-2005	EP 1544387 A2	22-06-2005
			ES 2358108 T3	05-05-2011
-----				
DE 19848275	A1	27-04-2000	DE 19848275 A1	27-04-2000
			GB 2346926 A	23-08-2000
			IT T0990907 A1	19-04-2001
-----				