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(54) **A door lock device, particularly for domestic electrical appliances**

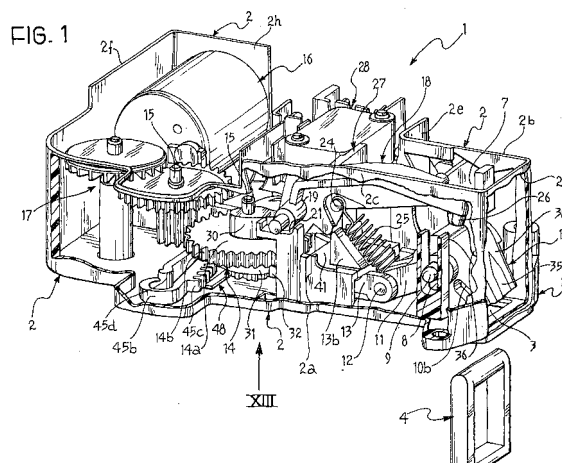
(57) The device comprises:

- a support structure (2) in which is defined an aperture (3) for the introduction in a predetermined direction of a door catch (4) connected to a door;
- a retainer member (10) movably mounted in the said structure (2) and having a seat (10) for receiving and retaining the door catch (4);
- a conditioning mechanism (11-13, 18, 25, 33) cooperating with the retainer member (10) and operable to assume

* a first condition in which it allows engagement of the door catch (4) with the retainer member (10) to retain the door in a closure position, and release of this coupling to allow opening of this door by application of a force on it; and

* a second condition in which the retainer member (10) is maintained in a locked position in which it is able to retain the door in a locked closure position; and

- a motorised control device (14-17) associated with the conditioning mechanism and electrically operable to cause passage of this mechanism from the first to the second condition and vice versa.





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EUROPEAN SEARCH REPORT

Application Number
EP 03 02 9559

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	DE 196 01 230 A (ZANGENSTEIN ELEKTRO) 17 July 1997 (1997-07-17)	1,2,10, 20	D06F37/42 D06F39/14
A	* the whole document *	3-9,11, 12	E05B47/06 E05C3/24
X	US 5 520 424 A (HAPKE KENYON A ET AL) 28 May 1996 (1996-05-28)	1,3,10, 20	
A	* the whole document *	2,4,5, 11,12	
X	US 4 082 078 A (THULEEN RICHARD A ET AL) 4 April 1978 (1978-04-04)	1,3,4, 10,20	
A	* the whole document *	2,5,11, 12	
X	EP 1 217 117 A (ZANGENSTEIN ELEKTRO) 26 June 2002 (2002-06-26)	1,10	
A	* column 5, paragraph 18 - column 6, paragraph 21 * * column 9, paragraph 34 - column 14, paragraph 56; figures 1A-1D *	2-6	
X	DE 44 26 611 A (BOSCH SIEMENS HAUSGERAETE) 1 February 1996 (1996-02-01)	1,3,4,20	D06F E05C A47L F24C E05B
A	* column 3, line 53 - column 7, line 67; figures *	10	
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-The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 25 March 2004	Examiner Falkentoft, C
CATEGORY OF CITED DOCUMENTS 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 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			

EPO FORM 1503 03/82 (P04/C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims 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 the first ten claims.

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:

1-12, 18-20



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LACK OF UNITY OF INVENTION
SHEET B

Application Number

EP 03 02 9559

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: 1-12, 18-20

1.1. claims: 1-3

A door lock with a closure condition, wherein the door is closed but can be opened, and a locked condition, wherein the door is closed and retained in a locked condition. A motorised control device being operable to cause passage from the one to the other condition and vice versa. The door being openable by a pushing or pulling force acting on it.

1.2. claims: 4, 20

A door lock controlled by a rotatable cam member coupled to an electrical drive motor.

1.3. claims: 5-9, 11, 12, 18, 19

A door lock with a rotatable and translatable retainer. The retainer cooperating with a slide member, an interconnection member, a stop lever and a resilient member so that the retainer is retained in a position wherein the door is closed, but may be disengaged.

1.4. claim: 10

A door lock with signalling means, signalling when the door is closed versus closed and locked.

2. claims: 13-17

A door lock with a release member associated to a motor controlled rotatable cam member.

3. claims: 21, 23

A door lock operated by a rotatable cam member associated with a feeler member. The feeler member being in turn associated with a movable and at least two fixed contact members for signalling closed or locked condition of the door.

4. claims: 22, 24



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**LACK OF UNITY OF INVENTION
SHEET B**

Application Number
EP 03 02 9559

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:

A door lock with electrical energy detector means and motorised control. The motorised control being associated with the detector means to pass the door lock to its openable condition upon detection of an electricity failure.

Please note that all inventions mentioned under item 1, although not necessarily linked by a common inventive concept, could be searched without effort justifying an additional fee.

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

EP 03 02 9559

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
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25-03-2004

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