(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 0 859 197 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
24.02.1999 Bulletin 1999/08

(43) Date of publication A2:
19.08.1998 Bulletin 1998/34

(21) Application number: **98102687.5**

(22) Date of filing: **17.02.1998**

(51) Int. Cl.[6]: **F24C 15/02**

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **17.02.1997 IT BO970069**

(71) Applicant: **C.M.I. S.r.l.**
Crespellano, (Bologna) (IT)

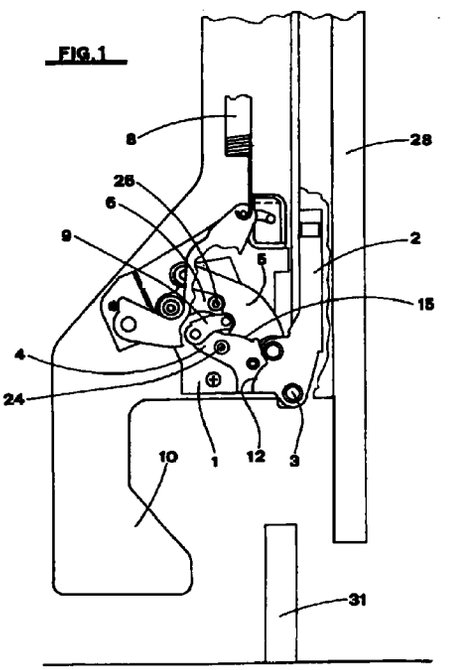
(72) Inventors:
- **Gherardi, Eros**
  Bologna (IT)
- **Ghidini, Teresa**
  Bologna (IT)
- **Degli Esposti, Ermes**
  Bologna (IT)

(74) Representative: **Negrini, Elena**
Studio Ing. Giampaolo Agazzani
Via Varthema 21
40137 Bologna (IT)

(54) Hinge device, particularly for the door of household electric appliances and the like, having upward and outward movement of the door during opening

(57) The hinge device, particularly fit to be used with a door (28) of household electric appliances and the like, includes a coupling element (1), fastened to the appliance structure (10), with a rocker arm element (4) joined thereto and having a pivot (3) for the door support by means of a support element (2). The coupling element also bind a pivoting plate (6) to which is connected a shaped segment (5) hinged with an end to the support element (2). A connection element (9) joins the pivoting plate (6) to the rocker arm element (4) in opposite position with respect to the pivot (3) connected to the support element (2). The door opening defines, by means of the shaped segment (5), the oscillation of the plate (6) that, by means of connencion element (9), rotate the rocker arm element (4) moving the pivot (3) upward and outward, while a counterbalancing spring (8) acts on the plate (6) by means of a L-lever (11). In this way the bottom of the door (28) can pass above a baseboard (31) placed for covering the free space under the appliance (10).

FIG.1



EP 0 859 197 A3

European Patent Office

EUROPEAN SEARCH REPORT

Application Number
EP 98 10 2687

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.6)
X	DE 26 02 275 A (LICENTIA PATENT-VERWALTUNGS-GMBH) 28 July 1977 * page 4, paragraph 1 - paragraph 2; figures 2,3 *	1,2	F24C15/02
X	EP 0 565 809 A (NUOVA STAR) 20 October 1993	1	
A	* column 6, line 12 - line 57; figures 5-7 *	2	

TECHNICAL FIELDS SEARCHED (Int.Cl.6)

F24C

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	4 January 1999	Guillaume, G

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 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 98 10 2687

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.

04-01-1999

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE 2602275 A	28-07-1977	NONE	
EP 565809 A	20-10-1993	DE 69214429 D	14-11-1996
		DE 69214429 T	24-04-1997

EPO FORM P0459

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