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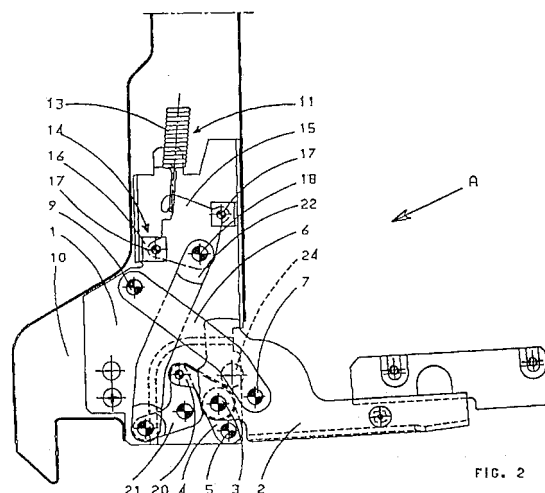
(54) **Counterbalanced hinge device with vertical and frontal movement of a door particularly for dishwashing machine**

(57) A counterbalanced hinge device with vertical and frontal movement for a door particularly for dishwashing machine, includes a connection mean (1) to fixing means (10) of the dishwashing machine and a support mean (2) to which it is connected the door.

The hinge device includes a crank (4) pivoted on the connection mean (1) and rotatably connected to the support mean (2), a first arm (6) pivoted on the connection mean (1) and rotatably connected to the support mean (2) and balancing means (11) connected to the fixing means (10) and to the support mean (2).

The hinge device also includes cam means (15) rotatably connected to the balancing means (11) and articulated members (8), these latter being linked to the support mean (2). The hinge further includes friction means (14) connected to the cam means (15) and fit for friction mating the connection mean (1) for the door counterbalancing in correspondence of its change from a closing condition (C) to an opening condition (A) and vice versa.

The cam means (15) are subject at least to a couple of opposed and misaligned forces, respectively of the balancing means (11) and the articulated members (8), in such a way to produce friction forces of the friction means (14) on said support mean (2) for contributing in counterbalancing the door.



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EUROPEAN SEARCH REPORT

Application Number
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			A47L F24C E05F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 29 January 2003	Examiner Courrier, 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			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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