

Title (en)

Programmer with three mechanical timing means.

Title (de)

Programmiergerät mit drei mechanischen Zeitverzögerungen.

Title (fr)

Programmateurs à trois temporisations mécaniques.

Publication

EP 0014640 A1 19800820 (FR)

Application

EP 80400150 A 19800131

Priority

FR 7903685 A 19790212

Abstract (en)

1. Programmer, particularly for electric household appliance, comprising a motor (3), a programming cam unit, a reversing cam driven in continuous rotation by the motor, a pawl (4) for driving the programming cam unit (12, 35) step by step upon each revolution of the reversing cam, and timing means for preventing the pawl (4) from driving the programming cam unit during predetermined timer-delays, comprising at least one timing wheel (5) which may be driven in rotation by the motor, against the action of elastic biasing means (51), a first lever (8), a timing cam (12) of the cam unit which may actuate the first lever so that it opposes the action of the elastic biasing means of the timing wheel, and a second lever (9), actuated by the first lever (8), for actuating the pawl (4) and preventing it from driving the cam unit, programmer characterized in that said timing means comprise a second timing wheel (6) which may, at the same time as the first wheel (5), be driven in rotation by the motor, against the action of elastic biasing means (61), in that said second lever (9) is arranged to be able to oppose the action of the biasing means of the second wheel, in that a stop (1a) is provided in the programmer against which the two timing wheels may abut under the action of their respective biasing means, and in that the two wheels (5, 6) each possess a cam surface (5b, 6b) adapted to cooperate, one with the first lever (8), the other with the second lever (9), to release the pawl (4), the angular distance between the cam surface of the first wheel (5) and the point of contact between this wheel and the first lever (8) being shorter than that between the cam surface of the second wheel (6) and the point of contact between this wheel and the second lever (9), and the release of the pawl by the first lever being effected via the second lever.

Abstract (fr)

Programmateurs pour machine à laver automatique comprenant une came d'inversion à rotation continue commandant par un cliquet (4) l'avance en pas à pas du bloc came (35) et permettant plusieurs temporisations sur le passage du pas. Les diverses temporisations étant obtenues par plusieurs roues de décomptage (5,6) montées sur un même axe (38) et possédant une origine commune matérialisée par une butée fixe (1a). Ce dispositif permet la réalisation de programmeurs à affichage manuel des programmes.

IPC 1-7

H01H 43/00

IPC 8 full level

D06F 33/06 (2006.01); **H01H 43/00** (2006.01)

CPC (source: EP)

H01H 43/005 (2013.01)

Citation (search report)

- US 3997742 A 19761214 - MARQUIS EDGAR E
- FR 2082486 A5 19711210 - CROUZET & CIE
- FR 1258062 A 19610407 - HELIOWATT WERKE ELEK ZITATS AG

Cited by

FR2630557A1

Designated contracting state (EPC)

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EP 0014640 A1 19800820; EP 0014640 B1 19820512; AT E1036 T1 19820515; DE 3060386 D1 19820701; ES 488438 A1 19801001; FI 67276 B 19841031; FI 67276 C 19850211; FI 800409 A 19800813; FR 2448593 A1 19800905; FR 2448593 B1 19820219; NO 150336 B 19840618; NO 150336 C 19840926; NO 800348 L 19800813

DOCDB simple family (application)

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