

Title (en)
MECHANICAL PRESET COUNTING DEVICE FOR A COPYING MACHINE

Publication
EP 0065308 B1 19840808 (DE)

Application
EP 82104315 A 19820517

Priority
HU 139381 A 19810518

Abstract (en)
[origin: EP0065308A1] 1. Mechanical preset counting device for a copying machine, with a rotatable presetting ring (3) which is provided with a plurality of numeral markings (33) distributed at equal angular spacing and is detainable in rotational positions predetermined by the markings by means of a spring detent (2) co-operating with detent notches (34), an indicator knob (21) arranged coaxially in the presetting ring (3) for rotation out of an initial position determined by a stop (26) in the direction of rotation of the presetting ring (3) and for displacement from an axial initial position against the force of a return spring to an actuation position, the knob having an indicator marking (22) co-operating with the markings (33) of the presetting ring (3) and a spindle (4) on which an engaging disc (8) is arranged fast in rotation and carries an axial engaging pin (27) which, in the actuation position of the indicator knob (21), engages in an engagement hole (35) of a ratchet wheel (10) which is drivable in counting steps by angular increments corresponding to the angular spacing of the markings (33) of the presetting ring in the forward direction of rotation thereof, a switch (11) actuatable by means of the spindle (4) of the indicator knob (21) in its actuation position and triggering the stepwise drive of the ratchet wheel (10), a spring-loaded arresting pawl (6) rotatable with the presetting ring (3) for arresting the spindle (4) by the engagement of the pawl in a groove (28) in the actuation position of the indicator knob (21), an actuating peg (14) projecting axially from the engaging disc (8) co-operating with the pawl (6) for lifting the latter out of the groove (28) after the rotation of the ratchet wheel (10) by an angle of rotation of corresponding to the counting steps preset on the presetting ring (3), and a return spring (9) which turns back the engaging disc (18), as well as the actuating knob (21), on being released by the pawl (6) and pushed back under the force of the axial return spring (5) into its axial initial position, into their initial rotary positions, characterised in that the presetting ring (3) is formed on a sleeve (17) that has the detent notches (34), said sleeve (17), having in the middle region of its length an internal collar (31) in which a hollow hub (32) is guided fast in rotation but axially displaceably, the hub rotatably accommodating the spindle (4) of the indicator knob (21) and having on its side facing the presetting ring (3) within the sleeve (17) an outer collar (15) upon the outside of which the indicator knob (21) abuts axially and upon the inner side of which the return spring (5) supported on the internal collar (31) acts, as well as having the groove (28) co-operating with the arresting pawl (6), which is mounted on the side of the internal collar (31) remote from the presetting ring (3), and in that the engaging disc (8) abutting axially on the hollow hub (32) at its end remote from the presetting ring (3) and projecting axially out of the end of the sleeve (17) remote from the presetting ring (3) and upon which disc the return torsion spring (9) acts, is shifted in the initial position of the indicator knob (21) with its engaging pin (27) out of the ratched wheel (10) which latter comprises a plurality of engagement holes (35) for the engaging pin (27), the holes being distributed in a circle in accordance with the angular spacing of the markings (33) of the presetting ring (3).

IPC 1-7
G06M 3/02; G03G 15/00

IPC 8 full level
B41L 39/02 (2006.01); **G06M 3/02** (2006.01)

CPC (source: EP)
G06M 3/027 (2013.01)

Designated contracting state (EPC)
CH DE FR GB IT LI NL SE

DOCDB simple family (publication)
EP 0065308 A1 19821124; **EP 0065308 B1 19840808**; CS 235014 B2 19850416; DD 202409 A5 19830914; DE 3260535 D1 19840913; HU 182327 B 19831228; PL 129960 B1 19840630; PL 236487 A1 19821206; RO 84484 A 19840621; RO 84484 B 19840830

DOCDB simple family (application)
EP 82104315 A 19820517; CS 336382 A 19820510; DD 23990782 A 19820517; DE 3260535 T 19820517; HU 139381 A 19810518; PL 23648782 A 19820518; RO 10757782 A 19820518