

Title (en)
Electrical push button switch.

Title (de)
Elektrischer Tastschalter.

Title (fr)
Interrupteur à bouton-poussoir.

Publication
EP 0344625 B1 19941214 (DE)

Application
EP 89109486 A 19890526

Priority
DE 3818810 A 19880603

Abstract (en)
[origin: EP0344625A2] Electrical pushbutton switch, particularly for the step-by-step actuation of window lifting motors in motor vehicles. Known two-step pushbutton switches are equipped with two snap springs arranged above one another which are activated in steps after one another by means of a single rigid switching plunger. The low number of switching positions, the production disadvantages occurring because of the production tolerances to be maintained and the design-related low rating with respect to switching performance and life are disadvantageous. According to the invention, it is proposed to implement a multi-pole step pushbutton by the fact that the step pushbutton is constructed as a rocking button by means of an operating rocker (5). Furthermore, at least one switching plunger (9) with variable length due to actuating forces acting with different strength is also provided in addition to a rigid switching plunger (8), in which variable-length switching plunger a compression-spring-loaded sliding member (7) is displaceably arranged. The switching plungers (8, 9) are formed next to one another on one rocker arm (A, A') in each case and load, proceeding step by step away from the pivoting axis (16), snap springs (SF_n, SF_{n'}) located underneath plunger points (S_n, S_{n'}), which springs are arranged flat on a conductor panel (3), the spring constants (D_c, D_{n-1}) of the snap springs (SF_n, SF_{n'}) and of the compression springs (DF_{n-1}, DF_{n-1'}) being dimensioned in accordance with D_{n-1} > D_{n-2} > ... > D₂ > D₁ > D₀. This creates a multi-pole rocker step button of flat construction which offers production advantages particularly in automated production. <IMAGE>

IPC 1-7
H01H 23/02

IPC 8 full level
H01H 23/00 (2006.01); **H01H 23/02** (2006.01); **H01H 5/30** (2006.01); **H01H 13/64** (2006.01)

CPC (source: EP)
H01H 23/003 (2013.01); **E05F 15/00** (2013.01); **E05Y 2400/854** (2013.01); **E05Y 2400/86** (2013.01); **E05Y 2900/55** (2013.01); **H01H 5/30** (2013.01); **H01H 13/64** (2013.01); **H01H 2300/01** (2013.01)

Cited by
US5796056A; EP0809266A3; EP1333459A1; FR2835649A1; WO9520232A1

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DE ES FR IT SE

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