

Title (en)

CONTROL ELEMENT BASED ON A MEMBRANE SWITCH

Title (de)

STELLELEMENT AUF DER BASIS EINES FOLIENSCHALTERS

Title (fr)

ELEMENT DE REGLAGE A BASE D'UN INTERRUPTEUR A MEMBRANE

Publication

EP 1485929 B1 20101027 (DE)

Application

EP 03731668 A 20030111

Priority

- DE 10203114 A 20020125
- EP 0300209 W 20030111

Abstract (en)

[origin: WO03063193A1] The aim of the invention is to improve a control element which is used to operate an electronically controlled electrical appliance, said control element being suitable for combining with digital circuits and operating on the basis of a membrane switch. To this end, a movable knob (14, 15, 16, 17) comprising elastic contact springs (19) on its lower side is arranged in an opening of a front plate (11), and a membrane switching element (13) comprising a base layer, an upper layer consisting of a deformable material, and an elastic spacer layer is provided. The base layer and the upper layer are provided with strip conductors on their opposing surfaces, said strip conductors comprising contact points at defined points of intersection. The inventive control element is provided with an integrated circuit which continuously scans the electrical connections of all contact points in quick succession and is always operative, even in standby mode, in addition to an electronic, non-volatile memory which is used to store information about the respective switching position of the knob.

IPC 8 full level

H01H 19/00 (2006.01); **H01H 15/00** (2006.01); **H01H 3/02** (2006.01)

CPC (source: EP)

H01H 15/00 (2013.01); **H01H 19/00** (2013.01); **H01H 3/0213** (2013.01); **H01H 2221/008** (2013.01); **H01H 2221/01** (2013.01); **H01H 2221/014** (2013.01); **H01H 2225/016** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

WO 03063193 A1 20030731; AT E486358 T1 20101115; DE 10203114 A1 20030731; DE 50313219 D1 20101209; DK 1485929 T3 20110131; EP 1485929 A1 20041215; EP 1485929 B1 20101027; ES 2355189 T3 20110323

DOCDB simple family (application)

EP 0300209 W 20030111; AT 03731668 T 20030111; DE 10203114 A 20020125; DE 50313219 T 20030111; DK 03731668 T 20030111; EP 03731668 A 20030111; ES 03731668 T 20030111