

Title (en)  
INPUT KEYBOARD FOR A CONSUMER ELECTRONIC DEVICE

Publication  
**EP 0451676 A3 19911211 (DE)**

Application  
**EP 91105225 A 19910330**

Priority  
DE 4011636 A 19900411

Abstract (en)  
[origin: JPH04230918A] PURPOSE: To lower a keyboard height by changing resistance with a contact pressure while switching a contact.  
CONSTITUTION: A spring element 20 is deformed by applying a pressure P onto a working surface 29 of a pushbutton 22 on an input keyboard so that a contact surface 18 for a facing contact 16 located on an edge 26 of a cut out 25 of an insulation plate 13 is in contact with contact surfaces 15.1, 15.2 for contact linings 11.1, 11.2. In this condition, contact resistance between the contact surface 18 and 15.1, 15.2 depends on a working pressure to the pushbutton 22. Thickness and elasticity of the spring element 20 not only provide a substantially even pressure to a whole supporting area between the contact surface 18 and the linings 11.1, 11.2 of the switching device 3, but also transmit to a user a sense of pressure which increases as a pushbutton is pressed further via function as a pressure-sensitive converter of the element to for the input keyboard user. Therefore, a keyboard height can be lowered.

IPC 1-7  
**H01H 1/02**; **H01H 13/70**

IPC 8 full level  
**H01H 13/00** (2006.01); **H01H 13/702** (2006.01)

CPC (source: EP US)  
**H01H 13/702** (2013.01 - EP US); **H01H 2215/004** (2013.01 - EP US); **H01H 2239/078** (2013.01 - EP US)

Citation (search report)  
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• [AD] EP 0050231 A2 19820428 - BOSCH SIEMENS HAUSGERAETE [DE]  
• [AD] Radio Mentor Elektronik no. 11, 1980, Seiten 311 - 315; "Von der Klickfeder zur Kontaktgummimatte"

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Designated contracting state (EPC)  
DE FR GB IT NL

DOCDB simple family (publication)  
**EP 0451676 A2 19911016**; **EP 0451676 A3 19911211**; DE 4011636 A1 19911024; JP H04230918 A 19920819; US 5164697 A 19921117

DOCDB simple family (application)  
**EP 91105225 A 19910330**; DE 4011636 A 19900411; JP 10671891 A 19910411; US 67960991 A 19910403