

Title (en)

Depressible contactless key for generating electric signals in an electronic keyboard.

Title (de)

Kontaktfreier Drücktaster zur Verwendung in einer elektronischen Tastatur.

Title (fr)

Touche à pression sans contact utilisable dans un clavier électronique.

Publication

EP 0001882 A1 19790516 (EN)

Application

EP 78300393 A 19780918

Priority

IT 6948677 A 19771107

Abstract (en)

An elastomeric material conductive under pressure is suitable for use in a keyboard. When not compressed the material is insulating. When a key (21) is depressed, the pressure renders the material (11) conductive and completes a circuit (14, 11, 16, 17, 15). In order to prolong the life of the material when it is repeatedly compressed, a magnetic field is used during polymerization of an elastomer in which magnetic powder is dispersed. The material becomes piezoconductive in a preferred direction parallel to the applied field.

IPC 1-7

H01H 1/02; **H01B 5/16**; **H01H 13/10**; **H01H 13/70**; **H01H 35/00**

IPC 8 full level

H01C 10/10 (2006.01); **H01H 13/702** (2006.01); **H01H 13/785** (2006.01)

CPC (source: EP)

H01C 10/106 (2013.01); **H01H 13/702** (2013.01); **H01H 13/785** (2013.01); **H01H 2201/036** (2013.01); **H01H 2207/008** (2013.01); **H01H 2227/012** (2013.01); **H01H 2227/014** (2013.01)

Citation (search report)

- [XP] DE 2729959 A1 19780105 - JAPAN SYNTHETIC RUBBER CO LTD
- CH 547007 A 19740315 - WIFO FORSCHUNGSINST AG
- DE 1939642 B2 19750109
- DE 2006176 B2 19730419
- [A] FR 2182099 A1 19731207 - BATTELLE MEMORIAL INSTITUTE [CH]
- [D] JOURNAL OF APPLIED PHYSICS, vol. 44, no. 6, June 1973, B.E. SPRINGETT: "Conductivity of a system of metallic particles dispersed in an insulating medium", pages 2925 to 2926
- [D] SEVENTH ANNUAL CONNECTOR SYMPOSIUM PROCEEDINGS, October 1974, Camden, New Jersey, (USA) CH. KUIST: "Anisotropic Conduction in Elastomeric Composites, pages 203 to 209

Cited by

DE3543890A1; EP0088132A4; DE3034523A1; US5216316A; WO9304491A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0001882 A1 19790516; **EP 0001882 B1 19811209**; DE 2861435 D1 19820204; IT 1091947 B 19850706

DOCDB simple family (application)

EP 78300393 A 19780918; DE 2861435 T 19780918; IT 6948677 A 19771107