

Title (en)
Insulating structure of switch

Title (de)
Isolierende Struktur eines elektrischen Schalters

Title (fr)
Structure isolante d'un interrupteur électrique

Publication
EP 0717423 A1 19960619 (EN)

Application
EP 95113404 A 19950825

Priority
JP 31325994 A 19941216

Abstract (en)
A molded insulating structure of a switch, i.e., a housing or an inside part, which comprises a molded article of an organic/inorganic composite material, withstands a rise of pressure inside the switch due to decomposition gas generated from the organic material of the structure at the time of high capacity cut-off of the switch without undergoing deformation, cracking or breakage after the cut-off, and exhibits heat resistance, low hygroscopicity, moldability, machinability, and the like, by incorporating an impact-absorbing component into the molded insulating structure, the organic/inorganic composite material comprising nylon 6, nylon 66, an ionomer of a polyolefin copolymer, and a reinforcement; or an organic/inorganic composite material comprising nylon 6, nylon 66, nylon MXD 6, an ethylene/ alpha -olefin copolymer, and a reinforcement.

IPC 1-7
H01H 9/02; **C08L 77/00**; **C08L 23/00**

IPC 8 full level
C08L 77/00 (2006.01); **H01B 3/00** (2006.01); **H01H 9/00** (2006.01); **H01H 9/04** (2006.01); **H01H 73/02** (2006.01); **H01H 73/06** (2006.01)

CPC (source: EP KR)
H01H 9/00 (2013.01 - EP); **H01H 9/02** (2013.01 - KR)

Citation (applicant)
JP H05202277 A 19930810 - MITSUBISHI ELECTRIC CORP

Citation (search report)
• [X] WO 9215644 A1 19920917 - ALLIED SIGNAL INC [US]
• [X] US 4299744 A 19811110 - STEWART DAVID E
• [A] DE 3900460 A1 19900712 - BASF AG [DE]
• [X] DATABASE WPI Section Ch Week 7847, Derwent World Patents Index; Class A23, AN 78-85077A
• [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 528 (C - 1258) 6 October 1994 (1994-10-06)
• [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 455 (E - 1595) 24 August 1994 (1994-08-24)
• [A] DATABASE WPI Section Ch Week 8542, Derwent World Patents Index; Class A23, AN 85-258638
• [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 047 (C - 0682) 29 January 1990 (1990-01-29)

Cited by
ES2441257A1; EP1244128A3

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 0717423 A1 19960619; **EP 0717423 B1 19991124**; CN 1046054 C 19991027; CN 1129343 A 19960821; DE 69513493 D1 19991230; DE 69513493 T2 20000427; JP 3298340 B2 20020702; JP H08171831 A 19960702; KR 100197052 B1 19990615; KR 960025886 A 19960720; TW 291564 B 19961121

DOCDB simple family (application)
EP 95113404 A 19950825; CN 95116870 A 19950912; DE 69513493 T 19950825; JP 31325994 A 19941216; KR 19950029555 A 19950911; TW 84108908 A 19950826