Title (en)

ELECTRIC INSULATION COMPOSITIONS BASED ON EPOXY-SILICONE HYBRID RESINS

Title (de)

ELEKTRISCHE ISOLIERZUSAMMENSETZUNGEN AUF BASIS VON EPOXYSILICONHYBRIDHARZEN

Title (fr)

COMPOSITIONS ELECTRIQUES ISOLANTES A BASE DE RESINES HYBRIDES CONTENANT DE L'EPOXYDE ET DU SILICONE

Publication

EP 0896723 A1 19990217 (EN)

Application

EP 98902143 A 19980121

Priority

- HU 9800007 W 19980121
- HU P9700191 A 19970121

Abstract (en)

[origin: WO9832138A1] The essence of the disclosed composition is the combination of materials of excellent insulating properties. The cheaper price and the easy processability of epoxy resins are combined with the advantageous surface properties (hydrophobicity, recovery after dry band arcing) and good weather resistance of silicone rubbers. The new composition can be processed by low pressure casting or by pressure gelation. Due to its low viscosity the base resin can take up a large amount of fillers. The silicone component modifying the epoxy resin is not simply a plasticizer, but it is built into the network structure and its effect is permanent. The main components of the composition are cycloaliphatic, aliphatic (or aromatic) epoxy resin, cycloaliphatic (or aromatic) anhydride (perhaps amine or polyamino-amide) cross-linker, accelerator, and a silicone oligomer containing epoxy end-group. Further components may be low molecular or macromolecular active diluent (flexibilizer) and filler. By changing the ratio of the components one can produce several compositions from a rigid, load-bearing structure up to the soft, rubber-like structures.

IPC 1-7

H01B 3/40; H01B 3/46

CPC (source: EP)

C08L 63/00 (2013.01); **H01B 3/40** (2013.01); **H01B 3/46** (2013.01)

C-Set (source: EP)

C08L 63/00 + **C08L 83/00**

Designated contracting state (EPC)

CH DE FR IT LI

DOCDB simple family (publication)

WO 9832138 A1 19980723; EP 0896723 A1 19990217; HU 217112 B 19991129; HU 9700191 D0 19970328; HU P9700191 A2 19980828; HU P9700191 A3 19990428; JP 2001502470 A 20010220

DOCDB simple family (application)

HU 9800007 W 19980121; EP 98902143 A 19980121; HU P9700191 A 19970121; JP 53402298 A 19980121