

Title (en)

Radiation cross-linking of ptc conductive polymers.

Title (de)

Vernetzung von PTC-leitfähigen Polymeren durch Strahlung.

Title (fr)

Réticulation par irradiation des polymères conducteurs PTC.

Publication

**EP 0311142 B1 19931215 (EN)**

Application

**EP 88117360 A 19820402**

Priority

- US 25049181 A 19810402
- US 25435281 A 19810415

Abstract (en)

[origin: EP0311142A2] The higher the voltage applied to an electrical device comprising a PTC conductive polymer, the more likely it is that intermittent application of the voltage will cause the device to fail. According to the invention, the likelihood of such failure is substantially reduced by irradiating the PTC conductive polymer (1) so that it is very highly cross-linked, for example to a dosage of at least 50 Mrads, preferably at least 80 Mrads, especially at least 120 Mrads. In this way, for example, it is possible to make a circuit protection device which will continue to provide effective protection even after repeated exposure to a voltage of 200 volts.

IPC 1-7

**H01C 7/02**; **H01C 1/14**

IPC 8 full level

**H01B 1/20** (2006.01); **H01C 7/02** (2006.01)

CPC (source: EP)

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Cited by

US6130597A; US5814264A; CN1090087C; DE19548741A1; US7820950B2; WO2020016853A1; DE102007007617A1; EP0780849A2; WO9739461A1; WO9805503A1; WO9629711A1; WO9706660A3; US10373745B2; US10822513B1; US11859094B2; EP2224784A1; DE102009010437A1; US8283612B2; EP2148337A1; DE102008034748A1; US9560697B2; DE102008063849A1; US8383997B2

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