

Title (en)  
CORONA SHIELD MATERIAL FOR AN ELECTRIC MACHINE

Title (de)  
GLIMMSCHUTZWERKSTOFF FÜR EINE ELEKTRISCHE MASCHINE

Title (fr)  
MATIÈRE DE PROTECTION ANTI-EFFLUVES POUR UNE MACHINE ÉLECTRIQUE

Publication  
**EP 2810359 A2 20141210 (DE)**

Application  
**EP 13713768 A 20130318**

Priority

- EP 12161774 A 20120328
- EP 2013055512 W 20130318
- EP 13713768 A 20130318

Abstract (en)

[origin: EP2645540A1] The corona shield material comprises an initially flowable matrix material (23), which is cured in a curing reaction to form a solid, photosensitive initiators (24), which are transferred by an electromagnetic radiation (26) into a reactive state triggering the curing reaction, and an electrically conductive filler (25) that is present in particulate form. The matrix material is curable in a radical or cationic crosslinking mechanism. Each initiator is transferred to the other initiators of different wavelength range of the radiation used to activate in its respective reactive state. The corona shield material comprises an initially flowable matrix material (23), which is cured in a curing reaction to form a solid, photosensitive initiators (24), which are transferred by an electromagnetic radiation (26) into a reactive state triggering the curing reaction, and an electrically conductive filler (25) that is present in particulate form. The matrix material is curable in a radical or cationic crosslinking mechanism. Each initiator is transferred to the other initiators of different wavelength range of the radiation used to activate in its respective reactive state. The initiator has a mass fraction of 1% in the flowable state of the corona shield material. The corona shield material further comprises: an accelerator, which accelerates the curing reaction and changes an activation wavelength of the initiator; a temperature-sensitive initiator, which is convertible by an increase of temperature to its reactive state; and a phosphorus compound as additives. The particles of the filler have an average particle diameter of 10  $\mu$ m. The filler is present in an amount of 80 mass%. An independent claim is included for an electrical machine.

IPC 8 full level  
**H02K 3/40** (2006.01); **G03F 7/029** (2006.01); **G03F 7/031** (2006.01); **G03F 7/038** (2006.01); **H01B 1/24** (2006.01); **H01B 3/40** (2006.01); **H01B 3/44** (2006.01)

CPC (source: EP US)  
**G03F 7/0047** (2013.01 - EP US); **G03F 7/027** (2013.01 - EP US); **G03F 7/038** (2013.01 - EP US); **H01B 1/24** (2013.01 - EP US); **H01B 3/40** (2013.01 - EP US); **H02K 3/40** (2013.01 - EP US); **H02K 3/42** (2013.01 - US); **H05K 9/0079** (2013.01 - US); **Y10T 428/31511** (2015.04 - EP US); **Y10T 428/31551** (2015.04 - EP US)

Citation (search report)  
See references of WO 2013143895A2

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