

Title (en)

Apparatus for reducing electrostatic charge storage and EMI on dielectric surfaces.

Title (de)

Gerät zur Reduktion von elektrostatisch gespeicherter Ladung und elektromagnetischen Einflüssen auf isolierenden Oberflächen.

Title (fr)

Appareil pour la réduction de l'accumulation de charges électrostatiques et du parasitage électromagnétique sur une surface isolante.

Publication

EP 0081019 A1 19830615 (EN)

Application

EP 81305776 A 19811207

Priority

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Abstract (en)

The present invention relates generally to passive and active devices for reducing electrostatic charge levels on dielectric surfaces (13) and particularly to the use of a plurality of conductors (11) projecting through a dielectric body to reduce the electrostatic charge on a surface (13) of the dielectric body. Passive and active devices reduce stored electrostatic charge levels on the dielectric surfaces (13) while at the same time reducing electromagnetic interference due to streamer currents, by means of appropriately applied conductors (11), use of direct or alternating power sources (18, 20), ion flooding (27), fluid flooding (31) and boundary layer control. In addition, the devices detect the presence, polarity and magnitude of triboelectric charging or stored charges on a dielectric surface (13) for the purpose of signaling or of controlling active charge reduction devices. Moreover, the devices can be used to discourage lightning strikes. The devices can be applied with little if any impairment to optical or radio frequency energy transmission or reception.

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H05F 3/00

IPC 8 full level

H05F 3/00 (2006.01)

CPC (source: EP)

H05F 3/00 (2013.01)

Citation (search report)

- [A] FR 1372819 A 19640918 - LICENTIA GMBH
- [A] GB 879380 A 19611011 - LIBBEY OWENS FORD GLASS CO
- [X] NAVY TECHNICAL DISCLOSURE BULLETIN, vol. 2, no. 11, November 1977, pages 1-4, Navy Case No. 61048, Navy Technical Catalogue No. 1534, Arlington (USA);

Cited by

GB2133935A; WO9309650A1

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