

Title (en)
CORONA CHARGING APPARATUS

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Application
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• US 24483381 A 19810317

Abstract (en)
[origin: WO8202983A1] A corona charging device including a dielectric-coated elongate conductor (11) contacting or closely spaced from a control electrode. In the first version of this device, the control electrode comprises a conductive grid (17), which is mounted against an insulating support (15). In a second version, the control electrode consists of a slotted conductor (94), with the dielectric-coated elongate conductor (11) embedded in the slot (96). A high voltage varying potential (25) between the elongate conductor (11) and control electrode induces a glow discharge in an air region in proximity to the two conductors. The control electrode may act as a grounding member to provide a corona discharge device with respect to a proximate surface (20). Alternatively, the control electrode may be maintained at a desired potential (27) to provide a charging device with an automatically limited voltage. The corona charging devices of the invention are characterized by a linear relationship between output ion currents and a direct current extraction potential. In further versions of the second corona device, the slotted conductor and dielectric-coated conductor may be replaced with alternative structures which provide an equivalent enclosure.

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WO 8202983 A1 19820902; AU 586531 B2 19890713; AU 6793587 A 19870507; AU 8273282 A 19820914; CA 1176695 A 19841023; DE 3279781 D1 19890727; EP 0072862 A1 19830302; EP 0072862 A4 19830704; EP 0072862 B1 19890621; ES 510454 A0 19830601; ES 8306289 A1 19830601; IL 65099 A0 19820430; IT 1195781 B 19881027; IT 8219826 A0 19820224; MX 151414 A 19841114; NZ 199827 A 19851213; PT 74473 A 19820301; PT 74473 B 19841119

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