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(71) Applicant (for all designated States except US): **ROSE-MOUNT TANKRADAR AB** [SE/SE]; Box 13045, S-402 51 Goteborg (SE).

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(75) Inventor/Applicant (for US only): **EDVARDSSON, Olov** [SE/SE]; Backgatan 4, S-582 45 Linkoping (SE).

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(74) Agent: **AWAPATENTAB**; Box 11394, S-404 28 Goteborg (SE).

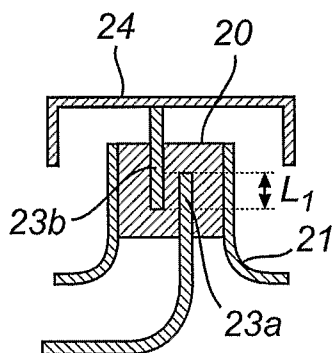
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(54) Title: DIELECTRIC CONNECTOR, DC-INSULATING THROUGH-CONNECTION AND ELECTRONIC SYSTEM



(57) Abstract: A dielectric connector, for coupling radio-frequency signals from a signal generating device disposed inside an explosion-proof housing to a signal receiving device arranged outside the housing. The connector is configured to be sealingly inserted in an opening in the housing, and adapted to receive, from the inside of the housing, at least one internal conducting member, and receive, from the outside of the housing, at least one external conducting member. At least one of the conducting members is partly inserted in the connector and reactive (capacitive and/or inductive) coupling and galvanic separation is provided between the signal generating device and the signal receiving device. A combination of strong reactive coupling and secure operation in hazardous environments is enabled through the dielectric connector according to the present invention.

WO 2007/011275 A1