

Title (en)
RADIOFREQUENCY GENERATOR FOR CONNECTING A PROBE FOR INSERTION INTO BODY MEDIA

Title (de)
HOCHFREQUENZGENERATOR ZUM ANSCHLUSS EINER SONDE ZUM EINFÜHREN IN KÖRPERMEDIEN

Title (fr)
GÉNÉRATEUR À HAUTE FRÉQUENCE POUR LE RACCORDEMENT D'UNE SONDE DESTINÉE À ÊTRE INTRODUITE DANS DES MILIEUX CORPORELS

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Abstract (en)
[origin: WO2016079207A1] The invention relates to a radiofrequency generator (12) for connecting a probe (10) for insertion into body media. The probe (10) to be connected has an elongate shaft (16) with a proximal end and a distal end (16.2, 16.1) and an electrical conductor (42, 44), extending along the shaft (16), with an inductive conduction layer and a capacitive conduction layer which determine a respective local wave impedance of the electrical conductor (42, 44). The radiofrequency generator (12) has a connector for a respective probe (10) to be connected to the radiofrequency generator (12), which connector is embodied, together with a connector of a respective probe (10), to feed an electrical signal into the electrical conductor of the probe (10) and decouple reflected signal portions of the electrical signal from the electrical conductor (42, 44). Moreover, the radiofrequency generator (12) has a measurement signal generator (24) and an evaluation unit (28), of which the measurement signal generator (24) is embodied to generate an electrical measurement signal to be fed to a probe (10) connected to the radiofrequency generator (12) during operation and the evaluation unit (28) is embodied to evaluate signal portions of the electrical measurement signal reflected by the probe (10) connected to the radiofrequency generator (12) during operation and supply a distance signal which identifies the location on the shaft of a probe (10) connected to the radiofrequency generator (12) during operation at which the permittivity of the immediate surroundings along the shaft changes as a result of a transition between the media surrounding the shaft.

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