

Title (en)  
MULTI-FUNCTION ELECTRODE STRUCTURES FOR ELECTRICALLY ANALYZING AND HEATING BODY TISSUE

Title (de)  
MULTIFUNKTIONELLE ELEKTRODENSTRUKTUREN ZUM ANALYSIEREN UND ERWÄRMEN VON KÖRPERGEWEBE

Title (fr)  
STRUCTURES MULTIFONCTIONNELLES D'ELECTRODES DESTINEES A L'ANALYSE ET AU CHAUFFAGE ELECTRIQUES DE TISSUS CORPORELS

Publication  
**EP 0879015 A4 19991117 (EN)**

Application  
**EP 97903022 A 19970117**

Priority

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- US 1022396 P 19960119
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- US 62901496 A 19960408

Abstract (en)  
[origin: WO9725917A1] Systems and methods for heating body tissue places a multi-function structure (22) having an exterior wall in contact with body tissue. The structure includes an array of electrically conducting electrode segments (44) carried by the exterior wall. An electrically conductive network is coupled to the electrode segments, including at least one electrically conductive path (32) individually coupled to each electrode segment. The systems and methods operate in a first mode during which the network is electrically conditioned to individually sense at each electrode segment local electrical events in tissue, such as electrical potentials, resistivity, or impedance. The systems and methods operate in a second mode during which the network is electrically conditioned, based at least in part upon local electrical events sensed by the electrode segments, to couple at least two electrode segments together to simultaneously transmit electrical energy to heat or ablate a region of body tissue.

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**A61B 5/04; A61B 17/39**

IPC 8 full level  
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Citation (search report)

- [A] WO 9316632 A1 19930902 - AVITALL BOAZ [US]
- [A] US 5462545 A 19951031 - WANG PAUL J [US], et al
- See references of WO 9725917A1

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