

Title (en)

MEDICAL HEATING DEVICE AND METHOD WITH SELF-LIMITING ELECTRICAL HEATING ELEMENT

Title (de)

MEDIZINISCHE ERWÄRMUNGSVORRICHTUNG UND VERFAHREN DAFÜR MIT EINEM SELBSTBEGRENZENDEN ELEKTRISCHEN ERWÄRMUNGSELEMENT

Title (fr)

DISPOSITIF MÉDICAL CHAUFFANT ET MÉTHODE COMPORTANT UN ÉLÉMENT CHAUFFANT ÉLECTRIQUE AUTOLIMITANT

Publication

EP 2521503 A4 20170208 (EN)

Application

EP 11732051 A 20110104

Priority

- US 78371410 A 20100520
- US 65226210 A 20100105
- US 2011020136 W 20110104

Abstract (en)

[origin: WO2011084957A1] Miniaturized, handheld medical heating devices utilize an electrical heater formed from a self-limiting conductive material, such as a conductive polymer or ceramic. The material has an electrical resistance that gradually changes with temperature such that heat production from electrical current through the material varies the resistance. A thermally insulating jacket contains the self-limiting heater element, which can be coupled to an electrical power supply. In one embodiment, a probe thermally coupled to the heater extends outward from the jacket. In another embodiment, the self-limiting conductive material is in series with one electrode of an electrode pair (or three electrodes) adapted to deliver radio frequency energy to tissue.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

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- [Y] US 6168593 B1 20010102 - SHARKEY HUGH R [US], et al
- [Y] US 4616660 A 19861014 - JOHNS DAVID L [US]
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Designated contracting state (EPC)

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DOCDB simple family (publication)

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