(11) **EP 1 428 481 A8**

(12) CORRECTED EUROPEAN PATENT APPLICATION

(15) Correction information:

Corrected version no 1 (W1 A1)

INID code(s) 71

(48) Corrigendum issued on: **20.10.2004 Bulletin 2004/43**

(43) Date of publication:

16.06.2004 Bulletin 2004/25

(21) Application number: 03028156.2

(22) Date of filing: 08.12.2003

(84) Designated Contracting States:

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR Designated Extension States:

AL LT LV MK

(30) Priority: 10.12.2002 US 432385 P

(71) Applicant: Sherwood Services AG 8200 Schaffhausen (CH)

(51) Int Cl.7: **A61B 18/14**

Note: Bibliography reflects the latest situation

(72) Inventor: Keppel, David S. Longmont CO 80501 (US)

(74) Representative: HOFFMANN EITLE
Patent- und Rechtsanwälte
Arabellastrasse 4
81925 München (DE)

(54) Electrosurgical electrode having a non-conductive porous ceramic coating

(57) An electrosurgical electrode and electrosurgical generator system utilizing an electrosurgical electrode are disclosed capable of controlling or limiting the current per arc in real-time during an electrosurgical procedure. The conductive electrosurgical electrode is configured for being connected to an electrosurgical generator system and has a non-conductive, porous ceramic coating that "pinches" or splits the arc current generated by the electrosurgical generator system into the smaller

diameter pores of the coating, effectively keeping the same current and voltage, but creating several smaller diameter arcs from one larger diameter arc. This has the effect of separating the arc current, effectively increasing the current frequency, resulting in a finer cut or other surgical effect. That is, the non-conductive, porous ceramic coating enables a low frequency current to achieve surgical results indicative of a high frequency current, while minimizing or preventing thermal damage to adjacent tissue.

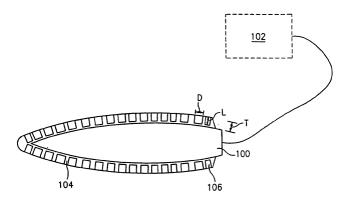


FIG. 1