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- (71) Applicant (for all designated States except US): **ELECTROMEDICAL ASSOCIATES LLC** [US/US]; 6006 Massachusetts Avenue, Bethesda, Maryland 20816 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **CARMEL, Yuval** [US/US]; 6006 Massachusetts Avenue, Bethesda, Maryland 20816 (US). **VAN WYK, Robert** [US/US]; P.O. Box 66155, St. Pete Beach, Florida 33736 (US). **SHKVARUNETS, Anatoly** [US/US]; 618 Ivy League Lane, Rockville, Maryland 20850 (US).
- (74) Agent: **MCNETT, John C.**; Woodard, Emhardt, Moriarty, McNett & Henry LLP, 111 Monument Circle, Suite 3700, Indianapolis, IN 46204 (US).

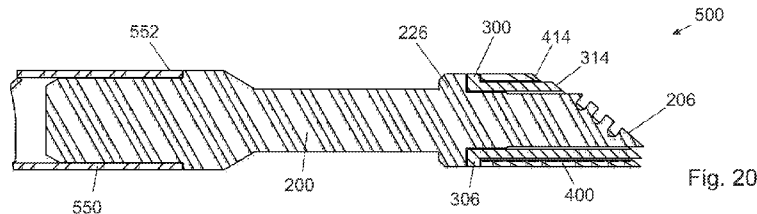
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(54) Title: BRAZED ELECTROSURGICAL DEVICE



(57) Abstract: Disclosed herein is a distal end electrode assembly for use in connection with electro surgical devices, particularly those adapted for the modification, sculpting, resection, removal, or vaporization of tissue, configured for coagulation, cauterization or hemostasis purposes, or utilized for thermal treatment of normal and tumorous tissues. In the context of the present invention, mechanical fastening means, epoxies and other high-temperature adhesives connecting electrode(s) to insulator(s) are replaced with brazed joints to yield electro surgical devices capable of safely and reliably operating at high power densities and elevated temperatures without thermal failure of the bonds between the electrode and the insulator. The use of brazed joints further permits the construction of miniaturized, compact electro surgical devices, of both monopolar and bipolar configurations, having utility in a number of divergent fields, from arthroscopy to otolaryngology to oncology, and applicable to both laparoscopic and open surgery techniques.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - A61B 18/14 (2012.01) USPC - 606/41 According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) A61B 18/14 (2012.01) 606/41 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched A61B 18/00, 18/04, 18/12 606/1, 27, 28, 29, 32, 34, 39, 40, 45; 219/85.1, 129; 228/262.31, 262.42, 262.45, 262.51, 262.61, 262.72, 262.8, 262.9 Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) PatBase, Google Scholar Search Terms: braze; solder; electrode; insulator; slide; tubular; coaxial; sleeve; sheath; mate; connect; flange; rim; lip; shield; ceramic; and non-conduct.		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 5,300,068 A (Rosar et al.) 05 April 1994 (05.04.1994), Fig. 6; col 2, ln 54-57; col 10, ln 25-58; col 11, ln 3-6; Abstract	1-17, 35-47 ----- 18, 19, 21-34
Y	US 2008/0077129 A1 (Van Wyk et al.) 27 March 2008 (27.05.2008), Figs. 19-26; para [0119], [0131]-[0134], [0139]-[0141]	18, 19, 21-34
X	US 6,461,357 B1 (Sharkey et al.) 08 October 2002 (08.10.2002), col 7, ln 4-30; col 8, ln 11-13; col 9, ln 49-58; Fig. 19A	1, 18, 20
A	US 4,180,700 A (Kraska et al.) 25 December 1979 (25.12.1979), Abstract; col 1, ln 8-20; col 4, ln 64-65; col 5, ln 64-68, col 6, ln 1-7, 37-51	1-47
A	US 7,150,746 B2 (DeCesare et al.) 19 December 2006 (19.12.2006), entire document	1, 2
A	US 6,471,700 B1 (Burbank et al.) 29 October 2002 (29.10.2002), entire document	1, 2
A	US 6,149,646 A (West, Jr. et al.) 21 November 2000 (21.11.2000), col 4, ln 35-37, 64-65; col 5, ln 5-19, 52-61; Fig. 5	1, 5, 6
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