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(54) Title: IMPEDANCE MATCHING CIRCUIT

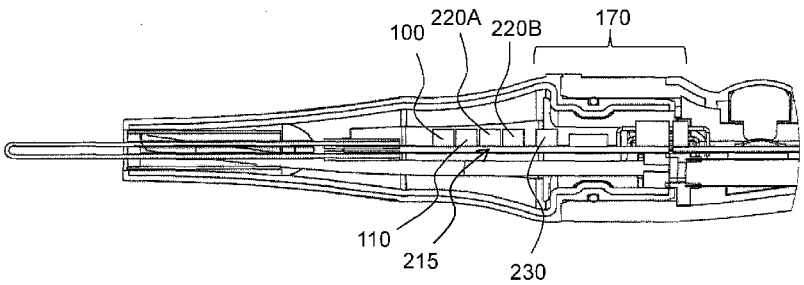


FIG. 9

(57) Abstract: An impedance matching circuit may be used to adjust for manufacturing and design tolerances in a surgical instrument. The matching circuit may match the load of a thermal element with the impedance of a power source used to deliver electrical energy to the surgical instrument. The matching circuit may include capacitors, inductors, coaxial cables, varactors, transformers, resistors, and/or combinations thereof. The matching circuit may also comprise a circuit board or flex board layers which may be modified to adjust the impedance of the load.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

A61B 18/08(2006.01)i, A61B 18/10(2006.01)i

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 18/08; A61B 18/14; A61N 1/32; A61B 17/39; A61B 18/18; A61F 7/00; A61B 18/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: impedance, matching circuit, thermal surgical instrument, circuit board

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010-0268218 A1 (ORMSBY, T. C. et al.) 21 October 2010 See abstract: paragraphs 22 and 27; claims 1, 2, 4, 5, 10, 11, and 17.	1-9,12-15,17,19,21,22
A		10,11,16,18,20
A	US 2007-0270924 A1 (MCCANN, C. et al.) 22 November 2007 See abstract; claim 1.	1-22
A	US 5964759 A (YAMANASHI, W. S. et al.) 12 October 1999 See abstract; claims 1 and 23.	1-22
A	US 2008-0281315 A1 (GINES, D. L.) 13 November 2008 See abstract; claims 1, 11, and 14.	1-22
A	US 5003991 A (TAKAYAMA, S. et al.) 2 April 1991 See abstract; claims 1 and 2.	1-22

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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