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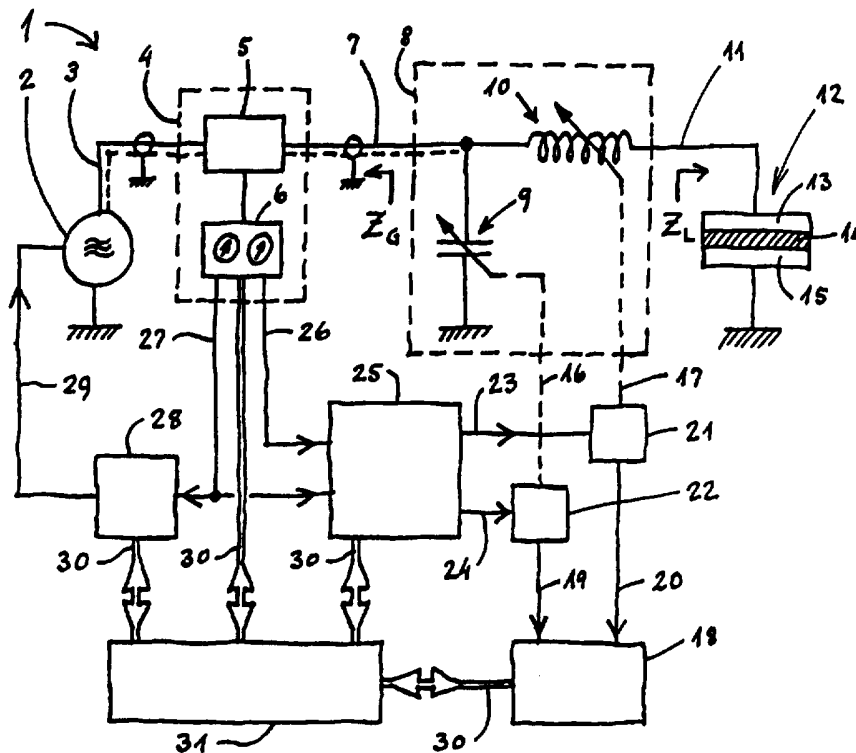
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(54) Title: A METHOD AND AN APPARATUS FOR CONTROLLING THE TRANSFER OF HIGH FREQUENCY POWER FROM
AN ELECTRIC AC GENERATOR TO AN ITEM TO BE TREATED**(57) Abstract**

When treating items with high-frequency electric power there is a need for making a correct impedance matching can be made between a generator and a tool holding the item to be treated, and there is a need to avoid the formation of standing waves in transmission lines, etc.. In addition there is a need to be able to treat items having a dimension which is comparable with the wave length at the frequency used, and to be able to exactly measure the power transmitted to the treated item. This object is attained by means of a method which comprises tuning of a circuit to resonance and adjustment of an impedance transforming ratio to correct impedance matching, as well as correction of said adjustments during the treatment of the item. For carrying out the method an apparatus is provided which comprises at least two variable impedances as well as means for detecting deviation from resonance and from correct impedance matching. The two variable impedances are preferably a continuously variable capacitor and a continuously variable coil, and the detection is performed by measuring of the standing wave ratio on the transmission line.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/DK 95/00219

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H05B 6/46, H05B 6/50

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)

IPC6: B29C, H05B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4499358 A (BURTON W. SCOTT), 14 February 1985 (14.02.85), column 3, line 27 - column 4, line 68	1-3
Y	--	4-5,9-10
Y	US 2415799 A (H. REIFEL ET AL), 11 February 1947 (11.02.47), column 1 - column 3, line 26; column 6, line 4 - line 21	4-5,9-10
A	EP 0546502 A2 (W.R. GRACE & CO.-CONN.), 16 June 1993 (16.06.93), column 10, line 17 - column 12, line 52	1-10
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☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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INTERNATIONAL SEARCH REPORT
Information on patent family members

30/10/95

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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
US-A-	4499358	14/02/85	CA-A-	1244645	15/11/88
			EP-A, A-	0157534	09/10/85
			JP-A-	60214021	26/10/85

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