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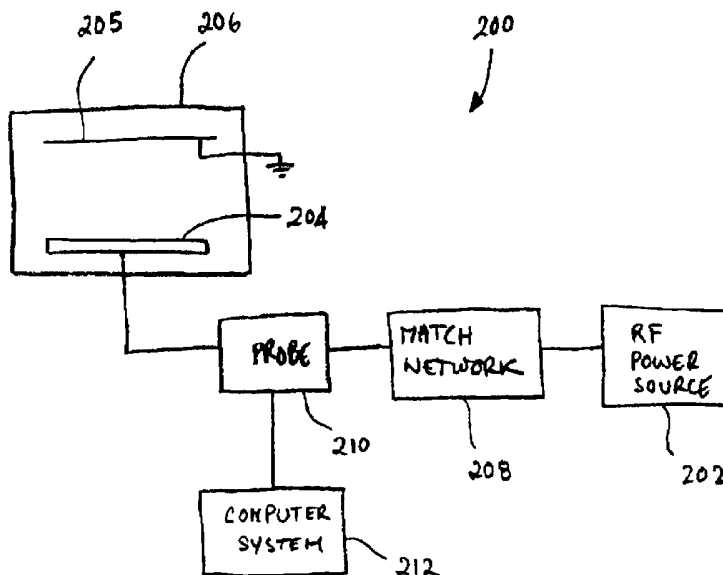
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(54) Title: METHOD FOR TOOLMATCHING AND TROUBLESHOOTING A PLASMA PROCESSING SYSTEM



(57) Abstract: A method tests a plasma processing system having a chamber, an RF power source, and a matching network. An RF power signal is generated from the RF power source to the chamber without igniting any plasma within the chamber. The voltage of the RF power signal, the current of the RF power signal, and the phase of the RF power signal, received by the chamber is measured while holding other parameters affecting the chamber constant. A value representative of an impedance of the chamber is computed based on the voltage, the current, and the phase. The value is then compared with a reference value to determine any defects in the plasma processing system. The reference value is representative of the impedance of a defect-free chamber.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

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Patent family members are listed in annex.

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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