

Title (en)

METHOD FOR AUTOMATICALLY MATCHING AN X-RAY DIAGNOSTIC GENERATOR WITH THE MAINS RESISTANCE, AND THE X-RAY DIAGNOSTIC GENERATOR

Publication

EP 0351508 A3 19910320 (DE)

Application

EP 89108298 A 19890509

Priority

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Abstract (en)

[origin: EP0351508A2] The invention relates to a method for automatically matching an X-ray diagnostic generator to the mains resistance and also a corresponding X-ray diagnostic generator which has a load resistor (4) which can be connected to the mains by means of a switch (3), a measured value detecting element (16) for detecting the voltage collapse and the no-load mains voltage, and also a computer unit (12) which is assigned setting means for the X-ray tube voltage and the milliamperere second product and computes, before triggering recording, in each case the maximum permissible X-ray tube current for the shortest recording time in accordance with stored X-ray tube load data. According to the invention, the value of the collapsed voltage (UNetz/Last) and also the no-load voltage (UNetz/leer) is measured by the computer unit (12) and from this the mains internal resistance (Ri/Netz) is computed, the value of which, as well as the respective current value of the no-load voltage, is stored in a memory (13), whereupon a comparison is carried out between a computed mains voltage, to be expected during the X-ray recording, and the stored value of a reference mains voltage and, depending on the result of the comparison, either a control signal is formed for releasing the X-ray recording, or a correspondingly reduced X-ray tube current value and a correspondingly lengthened recording time is output. <IMAGE>

IPC 1-7

H05G 1/26; **H05G 1/46**

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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