

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 milliampere 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)

- [A] DE 2756869 A1 19780713 - ELIN UNION AG
- [A] FR 2134403 A1 19721208 - SIEMENS AG
- [A] DE 3610438 A1 19871001 - SIEMENS AG [DE]
- [XP] US 4811374 A 19890307 - KASA ZOLTAN [US], et al
- [A] PATENT ABSTRACTS OF JAPAN, Band 6, Nr. 230 (E-142)[1108], 16. November 1982; & JP-A-57 132 700 (TOKYO SHIBAURA DENKI K.K.) 17-08-1982

Cited by

FR2857818A1; EP2624667B1

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