

Title (en)

PROCESS FOR CONTROLLING THE ELECTRIC POWER APPLIED TO AN X-RAY TUBE WITH ROTATING ANODE

Publication

EP 0022295 B1 19831228 (DE)

Application

EP 80200625 A 19800701

Priority

DE 2927207 A 19790705

Abstract (en)

[origin: US4363971A] The temperature of the anode disc of a rotary-anode X-ray tube is continuously determined by means of the method apparatus in accordance with the invention. When the temperature exceeds a first limit value, the power of the X-ray tube is reduced to a fraction (for example, 80%) of the otherwise permissible power. When a second limit value of the anode disc temperature is exceeded, exposures are completely inhibited. In the case of exposures which are performed in rapid succession with a comparatively low power, it may occur that the anode disc temperature does not reach the second limit value, but that the mean value of the applied electric power is so high that the bearing of the rotary anode, and possibly also the joint between the anode shaft and the rotor, is overloaded. Overloading is prevented by generating a bearing-temperature signal indicative of the rotary anode bearing temperature and comparing it with a third limit value.

IPC 1-7

H05G 1/36; **H05G 1/26**

IPC 8 full level

H05G 1/26 (2006.01); **H05G 1/36** (2006.01)

CPC (source: EP US)

H05G 1/26 (2013.01 - EP US); **H05G 1/36** (2013.01 - EP US)

Cited by

EP0624052A1; FR2530019A1; FR2635633A1; FR2585917A1; EP0214887A1; US4774720A

Designated contracting state (EPC)

DE FR GB NL SE

DOCDB simple family (publication)

EP 0022295 A1 19810114; **EP 0022295 B1 19831228**; CA 1165008 A 19840403; DE 2927207 A1 19810108; DE 3065995 D1 19840202; US 4363971 A 19821214

DOCDB simple family (application)

EP 80200625 A 19800701; CA 355562 A 19800707; DE 2927207 A 19790705; DE 3065995 T 19800701; US 16790880 A 19800714