

Title (en)

X-RAY IMAGING APPARATUS AND CONSUMPTION LEVEL ESTIMATION METHOD FOR X-RAY SOURCE

Title (de)

RÖNTGENBILDGEBUNGSVORRICHTUNG UND VERBRAUCHSSCHÄTZUNGSVERFAHREN FÜR RÖNTGENQUELLE

Title (fr)

APPAREIL D'IMAGERIE À RAYONS X ET PROCÉDÉ D'ESTIMATION DU NIVEAU DE CONSOMMATION DE SOURCE DE RAYONS X

Publication

**EP 3627976 A1 20200325 (EN)**

Application

**EP 19198313 A 20190919**

Priority

JP 2018175609 A 20180920

Abstract (en)

Provided are an X-ray imaging apparatus and a consumption level estimation method for an X-ray source, which are capable of estimating the consumption level of an X-ray source without measuring grid voltage. An X-ray control part includes: a tube current value setting part for setting a tube current value to be supplied to an X-ray source; a tube current value measurement part that measures a cathode current value as the tube current value by a cathode current detector 15; a time measurement part that measures the time when the tube current value is set by the tube current value setting part and the time when the tube current value measured by the tube current value measurement part reaches the set value; and a consumption level estimation part that estimates the consumption level of a cathode 12 in the X-ray source on the basis of the time until the tube current value reaches the set value after the tube current value has been set.

IPC 8 full level

**H05G 1/08** (2006.01); **H05G 1/34** (2006.01); **H05G 1/54** (2006.01)

CPC (source: CN EP)

**H05G 1/085** (2013.01 - EP); **H05G 1/265** (2013.01 - CN); **H05G 1/32** (2013.01 - CN); **H05G 1/34** (2013.01 - EP); **H05G 1/54** (2013.01 - EP); **H05G 1/60** (2013.01 - CN)

Citation (applicant)

WO 03092336 A1 20031106 - HAMAMATSU PHOTONICS KK [JP], et al

Citation (search report)

- [AD] WO 03092336 A1 20031106 - HAMAMATSU PHOTONICS KK [JP], et al
- [A] JP 2001284096 A 20011012 - TOSHIBA F A SYSTEM ENG

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**EP 3627976 A1 20200325**; **EP 3627976 B1 20211027**; CN 110933827 A 20200327; CN 110933827 B 20231103; JP 2020047498 A 20200326; JP 7040377 B2 20220323

DOCDB simple family (application)

**EP 19198313 A 20190919**; CN 201910688808 A 20190729; JP 2018175609 A 20180920