

Title (en)

X-RAY ANODE HAVING IMPROVED HEAT DISSIPATION

Title (de)

RÖNTGENANODE MIT VERBESSERTER WÄRMEABLEITUNG

Title (fr)

ANODE À RAYONS X À DISSIPATION THERMIQUE AMÉLIORÉE

Publication

**EP 2193538 A1 20100609 (DE)**

Application

**EP 08799932 A 20080925**

Priority

- AT 2008000343 W 20080925
- AT 5832007 U 20070928

Abstract (en)

[origin: WO2009039545A1] The invention relates to an X-ray anode having a coating and a carrier body. In addition to a region providing strength, the carrier body comprises a region comprising a diamond-metal composite material. The diamond-metal composite material comprises 40 to 90% by vol. diamond particles, 10 to 60% by vol. binding phase(s) comprising a metal or an alloy of the metals of the group consisting of Cu, Ag, Al, and at least one carbide of the elements of the group consisting of Ti, Zr, Hf, V, Nb, Ta, Cr, Mo, W, B, and Si. The highly heat-conductive region can be positively connected at the back to a heat-dissipating region, for example comprising Cu or a Cu alloy. The X-ray anode has improved heat dissipation and lower composite stress.

IPC 8 full level

**H01J 35/08** (2006.01)

CPC (source: EP US)

**C22C 26/00** (2013.01 - EP US); **H01J 35/10** (2013.01 - EP US); **H01J 2235/081** (2013.01 - EP US); **H01J 2235/083** (2013.01 - EP US); **H01J 2235/086** (2013.01 - EP US); **H01J 2235/1204** (2013.01 - EP US); **H01J 2235/1291** (2013.01 - EP US); **H01J 2235/1295** (2013.01 - EP US)

Citation (search report)

See references of WO 2009039545A1

Designated contracting state (EPC)

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

**WO 2009039545 A1 20090402**; AT 10598 U1 20090615; AT E522920 T1 20110915; EP 2193538 A1 20100609; EP 2193538 B1 20110831; JP 2010541134 A 20101224; JP 5450421 B2 20140326; US 2010316193 A1 20101216; US 8243884 B2 20120814

DOCDB simple family (application)

**AT 2008000343 W 20080925**; AT 08799932 T 20080925; AT 5832007 U 20070928; EP 08799932 A 20080925; JP 2010526109 A 20080925; US 68042708 A 20080925