

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

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Application

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Priority

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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

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