

Title (en)

Rotary anode for an X-ray tube.

Title (de)

Drehanode für Röntgenröhren.

Title (fr)

Anode tournante pour tube à rayons X.

Publication

EP 0323365 A1 19890705 (FR)

Application

EP 88403377 A 19881230

Priority

FR 8718367 A 19871230

Abstract (en)

The rotary anode (1) for an X-ray tube has a circular carbon base (15), with a partly sloping top surface (6) giving the form of a flattened truncated cone. This slope carries an intermediate layer of rhenium (16) on which is deposited a target layer (17) of tungsten. Radial slots (F1-n) are cut into the tungsten at intervals of between five and ten degrees, to a depth of between one and two thirds of its thickness. These may be inclined (27,28) to avoid problems of obliquely incident electrons, and are kept as narrow as possible to avoid loss of target efficiency. In operation, compression stresses due to surface expansion, particularly in the beam impact zone ring (19), are relieved by the radial slots. Cracking of the target material is thus prevented.

Abstract (fr)

L'invention concerne une anode tournante de tube à rayons X, particulièrement des moyens pour éviter la création anarchique de fissures dans une cible (17) portée par l'anode (1). A cet effet, selon une caractéristique de l'invention, une surface (21) de la cible (17) est creusée par une pluralité de fentes (F1..., Fn) disposées de manière symétrique par rapport à un axe de symétrie (3) de l'anode (1)

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CPC (source: EP US)

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Citation (search report)

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