

Title (en)

BEAM HARDENING FILTER FOR X-RAY SOURCE

Title (de)

STRAHLUNGSHÄRTENFILTER FÜR EINE RÖNTGENSTRAHLUNGSQUELLE

Title (fr)

FILTRE DE D'AUGMENTATION DE LA DURETE D'UN FAISCEAU, DESTINE A UNE SOURCE DE RAYONS X

Publication

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Application

EP 99953008 A 19990930

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Abstract (en)

[origin: WO0021096A1] An x-ray beam hardening filter (100) is disclosed. The X-ray beam hardening filter (100) comprises a support member (110) and a beam hardening sheet (120), the beam hardening sheet (120) having a multidimensional array of regularly spaced apertures (130). The apertures (130) are configured to have an x-ray transmissive quality. An actuator (300), engaging the support member (110), is capable of moving the multidimensional array of apertures (130) into or out of a path of an X-ray beam, thereby selectively introducing varying levels of X-ray energy filtration. In one embodiment, multiple layers of beam hardening sheets (610, 620) are added to the X-ray beam hardening filter (100) to create additional levels of X-ray energy filtration. Advantages of the X-ray beam hardening filter (100) include the relatively small distance the X-ray beam hardening filter (100) must move in order to absorb the incident X-ray beam, the ability to introduce varying levels of X-ray filtration, and the compact structure of the X-ray beam hardening filter (100).

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G21K 3/00

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