

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
EP 1119864 A1 20010801 (EN)

Application
EP 99953008 A 19990930

Priority

- US 9922800 W 19990930
- US 16763998 A 19981006
- US 16763898 A 19981006

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).

IPC 1-7
G21K 3/00

IPC 8 full level
G21K 3/00 (2006.01); **A61B 6/00** (2006.01); **G21K 1/00** (2006.01); **G21K 1/10** (2006.01)

CPC (source: EP)
G21K 1/10 (2013.01)

Citation (search report)
See references of WO 0021096A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 0021096 A1 20000413; WO 0021096 A9 20000824; AU 6504699 A 20000426; EP 1119864 A1 20010801; IL 142370 A0 20020310;
JP 2003517577 A 20030527

DOCDB simple family (application)
US 9922800 W 19990930; AU 6504699 A 19990930; EP 99953008 A 19990930; IL 14237099 A 19990930; JP 2000575133 A 19990930