

Title (en)
Focal point oriented aperture

Title (de)
Brennpunktorientierte Blende

Title (fr)
Diaphragme orienté vers le foyer

Publication
EP 1772874 A3 20070822 (DE)

Application
EP 06121864 A 20061006

Priority
DE 102005048519 A 20051006

Abstract (en)
[origin: EP1772874A2] A focus orientating aperture for a high energy radiation beam from a source (16) comprises, an absorption cylinder (10) capable of periodic motion, e.g. axial rotation, and provided with one or more apertures (14), such that all radiation incident on the cylinder surface is absorbed, but a uni-directional ray (18) along the axis of the aperture is transmitted to an investigated sample or work surface. an INDEPENDENT CLAIM is included for a method of manufacturing a perforated absorption cylinder, particularly by the use of a high pressure (approx.3800 bar) water cutting jet. Dependent on the application, the absorption cylinder may comprise e.g. a cylindrical outer sheath of copper, tungsten, or heavy metal, with an inner core of polyethylene or boron. The collimation device can be used in the reverse sense to handle radiation scattered from a surface, with a detection element positioned at the focal point (16).

IPC 8 full level
G21K 1/02 (2006.01)

CPC (source: EP)
G21K 1/02 (2013.01)

Citation (search report)
• [XY] EP 0357146 A2 19900307 - PHILIPS PATENTVERWALTUNG [DE], et al
• [XY] EP 0389033 A2 19900926 - PHILIPS PATENTVERWALTUNG [DE], et al
• [XY] EP 0311177 A2 19890412 - PHILIPS PATENTVERWALTUNG [DE], et al
• [XY] EP 0074021 A1 19830316 - SIEMENS AG [DE]
• [XY] JP S5293384 A 19770805 - SHIMADZU CORP
• [XY] WO 02082065 A2 20021017 - KONINKL PHILIPS ELECTRONICS NV [NL]
• [XA] US 4031401 A 19770621 - JACOB DANIEL
• [AY] US 2005092928 A1 20050505 - GERSTENMAYER JEAN-LOUIS [FR], et al
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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA HR MK YU

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 06121864 A 20061006; AT 06121864 T 20061006; DE 102005048519 A 20051006; DE 502006002637 T 20061006