

Title (en)
Focal point oriented aperture

Title (de)
Brennpunktorientierte Blende

Title (fr)
Diaphragme orienté vers le foyer

Publication
EP 1772874 B1 20090114 (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)

Cited by
WO2017178568A1; CN105810281A; EP2548012A4; CN113936838A; CN102565110A; CN103776847A; CN103728326A; EP2548207A4; US10082473B2; WO2010130668A1; US10720300B2; US11280898B2; DE102017005302A1; WO2018220053A1; WO2011115923A1; DE102015008272A1; DE102016004624A1; US10134254B2; US10713914B2

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