

Title (en)

X-ray optical system with aperture in the focus of a X-ray mirror

Title (de)

Röntgen-optisches System mit Blende im Fokus eines Röntgen-Spiegels

Title (fr)

Système optique à rayons X avec ouverture dans le focus d'un miroir à rayons X

Publication

EP 1324351 A3 20070718 (DE)

Application

EP 02027472 A 20021210

Priority

DE 10162093 A 20011218

Abstract (en)

[origin: EP1324351A2] The system has a first graded multilayered mirror (A) an X-ray source which is positioned such that the extension of X-ray radiation (Q_x) in X-axis, is larger than the region of acceptance of the mirror along X-axis. A collimator is positioned between the X-ray source and the mirror such that the distance between the collimator and the source satisfies preset relation including angle subtended by the mirror along X-axis. <??>Independent claims are also included for the following: <??>(1) X-ray spectrometer; <??>(2) X-ray diffractometer; and <??>(3) X-ray microscope.

IPC 8 full level

G21K 1/06 (2006.01)

CPC (source: EP US)

G21K 1/06 (2013.01 - EP US)

Citation (search report)

- [XA] DE 4407278 A1 19950907 - SIEMENS AG [DE]
- [XA] DE 19833524 A1 20000224 - BRUKER AXS ANALYTICAL X RAY SY [DE]
- [A] EP 0459833 A2 19911204 - CANON KK [JP]
- [PA] WO 02065481 A1 20020822 - FRAUNHOFER GES FORSCHUNG [DE], et al
- [XA] SAUNEUF R ET AL: "LARGE-FIELD HIGH-RESOLUTION X-RAY MICROSCOPE FOR STUDYING LASER PLASMAS", REVIEW OF SCIENTIFIC INSTRUMENTS, AIP, MELVILLE, NY, US, vol. 68, no. 9, September 1997 (1997-09-01), pages 3412 - 3420, XP000723533, ISSN: 0034-6748
- [A] ARNDT U W: "FOCUSING OPTICS FOR LABORATORY SOURCES IN X-RAY CRYSTALLOGRAPHY", JOURNAL OF APPLIED CRYSTALLOGRAPHY, COPENHAGEN, DK, vol. 23, 1990, pages 161 - 168, XP009041316, ISSN: 0021-8898
- [A] SUZUKI Y ET AL: "X-Ray focusing with elliptical Kirkpatrick-Baez mirror system", JAPANESE JOURNAL OF APPLIED PHYSICS, PART 1 (REGULAR PAPERS & SHORT NOTES) JAPAN, vol. 30, no. 5, May 1991 (1991-05-01), pages 1127 - 1130, XP002436248, ISSN: 0021-4922

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SI SK TR

Designated extension state (EPC)

AL LT LV MK RO

DOCDB simple family (publication)

EP 1324351 A2 20030702; EP 1324351 A3 20070718; EP 1324351 B1 20100421; DE 10162093 A1 20030710; DE 50214385 D1 20100602; US 2003112923 A1 20030619; US 6898270 B2 20050524

DOCDB simple family (application)

EP 02027472 A 20021210; DE 10162093 A 20011218; DE 50214385 T 20021210; US 31419702 A 20021209