

Title (en)
Monochromatic x-ray source

Title (de)
Monochromatische Röntgenstrahlenquelle

Title (fr)
Source monochromatique à rayons X

Publication
EP 1102302 B1 20060301 (DE)

Application
EP 00203920 A 20001109

Priority
DE 19955392 A 19991118

Abstract (en)
[origin: EP1102302A1] A primary target (10) is provided in the form of a liquid metal or a liquid metal alloy. The primary target is disposed between a first electron-permeable window (2), and a second x-ray permeable window (6). A secondary target (11) adjoins the second window. Electrons that are incident on the primary target having passed through the first window generate x-rays which, when reaching the secondary target, have a maximum energy that corresponds to an absorption edge of the secondary target, so that substantially monochromatic fluorescence-x-ray radiation is excited in the secondary target.

IPC 8 full level
G21K 5/00 (2006.01); **H01J 35/08** (2006.01); **G21K 5/08** (2006.01); **H01J 35/18** (2006.01)

CPC (source: EP US)
H01J 35/186 (2019.04 - EP US); **H01J 2235/082** (2013.01 - EP US)

Cited by
GB2403388A; WO03077276A1; WO2005091326A3; WO2004102609A1

Designated contracting state (EPC)
DE FR GB NL

DOCDB simple family (publication)
EP 1102302 A1 20010523; EP 1102302 B1 20060301; DE 19955392 A1 20010523; DE 50012305 D1 20060427; JP 2001155670 A 20010608; US 6560313 B1 20030506

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EP 00203920 A 20001109; DE 19955392 A 19991118; DE 50012305 T 20001109; JP 2000348545 A 20001115; US 71387700 A 20001116