

Title (en)

METHOD AND RADIATION GENERATING SYSTEM USING MICROTARGETS

Title (de)

VERFAHREN UND STRAHLERZEUGUNGSVORRICHTUNG MITTELS MIKROTARGETS

Title (fr)

PROCEDE ET SYSTEME DE GENERATION DE RAYONNEMENTS AU MOYEN DE MICROCIBLES

Publication

EP 1232516 A4 20030312 (EN)

Application

EP 00973974 A 20001027

Priority

- US 0029743 W 20001027
- US 16189199 P 19991027

Abstract (en)

[origin: WO0131678A1] A system and method for generating radiation of a desired wavelength is provided by irradiating microtargets (101, 210). These microtargets (101, 210) are selected from any material that will emit radiation of the desired wavelength. A dispensing apparatus (100, 200) delivers a microtarget into an irradiation zone, where the microtarget is irradiated by an energy source (132). The microtarget (101, 210) may be dispensed in liquid or solid form. Once formed, the desired radiation is directed from the irradiation zone to a beamline while a debris removal arrangement that is in communication with the irradiation zone (117), the energy source (132), and the beamline (142) substantially prevents debris and other pollutants from contaminating the system equipment.

IPC 1-7

H01J 35/08; **H05G 2/00**

IPC 8 full level

H05G 1/02 (2006.01); **G03F 7/20** (2006.01); **H01J 35/08** (2006.01); **H01J 35/16** (2006.01); **H05G 1/00** (2006.01); **H05G 2/00** (2006.01); **H05H 6/00** (2006.01)

CPC (source: EP)

G03F 7/70916 (2013.01); **H05G 2/003** (2013.01); **H05G 2/008** (2013.01); **H05H 6/00** (2013.01)

Citation (search report)

- [E] WO 0130122 A1 20010426 - COMMISSARIAT ENERGIE ATOMIQUE [FR], et al
- [X] US 4866517 A 19890912 - MOCHIZUKI TAKAYASU [JP], et al
- [A] US 5577092 A 19961119 - KUBLAK GLENN D [US], et al
- [A] US 5459771 A 19951017 - RICHARDSON MARTIN [US], et al
- [E] US 6285743 B1 20010904 - KONDO HIROYUKI [JP], et al
- [X] HERTZ H M ET AL: "DEBRIS-FREE SOFT X-RAY GENERATION USING A LIQUID DROPLET LASER-PLASMA TARGET", PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, VOL. 2523, PAGE(S) 88-93, XP000998767
- [X] RYMELL L ET AL: "DROPLET TARGET FOR LOW-DEBRIS LASER-PLASMA SOFT X-RAY GENERATION", OPTICS COMMUNICATIONS, NORTH-HOLLAND PUBLISHING CO. AMSTERDAM, NL, VOL. 103, NR. 1/2, PAGE(S) 105-110, ISSN: 0030-4018, XP000398619
- See references of WO 0131678A1

Cited by

US10395881B2; US10847340B2

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 0131678 A1 20010503; AU 1241401 A 20010508; EP 1232516 A1 20020821; EP 1232516 A4 20030312; JP 2003513418 A 20030408

DOCDB simple family (application)

US 0029743 W 20001027; AU 1241401 A 20001027; EP 00973974 A 20001027; JP 2001534180 A 20001027