

Title (en)

COMPACT, IONISING RAY-GENERATING SOURCE, ASSEMBLY COMPRISING A PLURALITY OF SOURCES AND METHOD FOR PRODUCING THE SOURCE

Title (de)

KOMPAKTE QUELLE MIT ERZEUGUNG VON IONISIERENDEN STRAHLEN, ANORDNUNG MIT EINER VIELZAHL VON QUELLEN UND VERFAHREN ZUR HERSTELLUNG DER QUELLE

Title (fr)

SOURCE GÉNÉRATRICE DE RAYONS IONISANTS COMPACTE, ENSEMBLE COMPRENANT PLUSIEURS SOURCES ET PROCÉDÉ DE RÉALISATION DE LA SOURCE

Publication

EP 3652774 A1 20200520 (FR)

Application

EP 18736949 A 20180711

Priority

- FR 1700743 A 20170711
- EP 2018068815 W 20180711

Abstract (en)

[origin: WO2019011997A1] The invention relates to a source generating ionising rays, and in particular X-rays, an assembly comprising a plurality of sources and a method for producing the source. The source comprises: · a vacuum chamber (12), · a cathode capable of emitting an electron beam (18) in the vacuum chamber (12), the electron beam (18) developing around an axis (19), and · an anode (76) receiving the electron beam (18) and comprising a target (20) capable of generating ionising radiation (22) from the energy received from the electron beam (18), the ionising radiation (22) being generated towards the outside of the vacuum chamber (12); wherein the anode (76) comprises a cavity (80) in which the electron beam (18) is intended to penetrate to reach the target (20), and the walls (88, 90) of the cavity (80) form a Faraday cage surrounding parasitic ions (91) that can be emitted by the target (20) inside the vacuum chamber (12); at least one getter (92), separate from the walls (88, 90) of the cavity (80) and intended to trap the parasitic ions (91), is arranged in the cavity (80).

IPC 8 full level

H01J 35/16 (2006.01); **H01J 35/08** (2006.01); **H01J 35/14** (2006.01)

CPC (source: EP KR US)

H01J 35/08 (2013.01 - US); **H01J 35/147** (2019.05 - EP US); **H01J 35/16** (2013.01 - EP KR US); **H01J 35/065** (2013.01 - US); **H01J 35/08** (2013.01 - EP KR); **H01J 35/14** (2013.01 - EP KR); **H01J 2235/168** (2013.01 - EP KR US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019011997 A1 20190117; AU 2018298826 A1 20191219; CN 110870037 A 20200306; EP 3652774 A1 20200520; FR 3069099 A1 20190118; FR 3069099 B1 20230721; IL 271798 A 20200227; JP 2020526866 A 20200831; KR 20200024213 A 20200306; SG 11201912210R A 20200130; TW 201909228 A 20190301; US 2020194213 A1 20200618

DOCDB simple family (application)

EP 2018068815 W 20180711; AU 2018298826 A 20180711; CN 201880045832 A 20180711; EP 18736949 A 20180711; FR 1700743 A 20170711; IL 27179820 A 20200101; JP 2019561219 A 20180711; KR 20207000375 A 20180711; SG 11201912210R A 20180711; TW 107123872 A 20180710; US 201816611181 A 20180711