Title (en)

COMPACT SOURCE FOR GENERATING IONIZING RAYS

Title (de)

KOMPAKTE QUELLE ZUR ERZEUGUNG VON IONISIERENDEN STRAHLEN

Title (fr)

SOURCE GENERATRICE DE RAYONS IONISANTS COMPACTE

Publication

EP 3652772 B1 20210825 (FR)

Application

EP 18736947 A 20180711

Priority

- FR 1700742 A 20170711
- EP 2018068811 W 20180711

Abstract (en)

[origin: WO2019011993A1] The invention relates to a source for generating ionizing 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 (14) that is able to emit an electron beam (18) into the chamber (12), · an anode (16) that receives the electron beam and that comprises a target (20) that is able to generate ionizing radiation (22) from the energy received from the electron beam (18), · an electrode (24) that is placed in the vicinity of the cathode (14) and that allows the electron beam 18 to be focused, · a stopper (32) ensuring the tightness of the vacuum chamber (12), · a mechanical part (28) made of dielectric material and forming a portion of the vacuum chamber; the stopper (32) is fastened to the mechanical part (28) by means of a conductive solder film (42) used to electrically connect the electrode (24).

IPC 8 full level

H01J 35/06 (2006.01); **H01J 5/46** (2006.01); **H01J 35/16** (2006.01)

CPC (source: EP IL KR US)

H01J 5/46 (2013.01 - EP IL KR); **H01J 35/06** (2013.01 - IL KR); **H01J 35/064** (2019.04 - IL); **H01J 35/066** (2019.04 - EP IL US); **H01J 35/165** (2013.01 - EP IL KR US); **H01J 35/186** (2019.04 - IL); H01J 35/064 (2019.04 - US); H01J 35/186 (2019.04 - US); H01J 2235/023 (2013.01 - EP IL 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

DOCDB simple family (publication)

WO 2019011993 A1 20190117; AU 2018298822 A1 20191219; AU 2018298822 B2 20230202; CN 110870035 A 20200306; CN 110870035 B 20230602; EP 3652772 A1 20200520; EP 3652772 B1 20210825; FR 3069100 A1 20190118; FR 3069100 B1 20190823; IL 271797 A 20200227; IL 271797 B1 20230601; IL 271797 B2 20231001; JP 2020526867 A 20200831; JP 7073406 B2 20220523; KR 102584668 B1 20231004; KR 20200024212 A 20200306; SG 11201912213Q A 20200130; TW 201909227 A 20190301; US 11101097 B2 20210824; US 2021142974 A1 20210513

DOCDB simple family (application)

EP 2018068811 W 20180711; AU 2018298822 A 20180711; CN 201880045830 A 20180711; EP 18736947 A 20180711; FR 1700742 A 20170711; IL 27179720 A 20200101; JP 2019561229 A 20180711; KR 20207000374 A 20180711; SG 11201912213Q A 20180711; TW 107123871 A 20180710; US 201816610879 A 20180711