Title (en)

Compact charged particle generation source

Title (de)

Kompakte Quelle zur Erzeugung von geladenen Teilchen

Title (fr)

Source compacte de génération de particules portant une charge

Publication

EP 2339899 B1 20151216 (FR)

Application

EP 10195945 A 20101220

Priority

FR 0906261 A 20091222

Abstract (en)

[origin: EP2339899A1] The device has elements arranged in a single evacuation enclosure using an evacuation system, where the elements comprise a cathode support (6) receiving a cathode (7) i.e. hermionic cathode, and a nanotube based cathode (8). A particle generating unit of a charged particle accelerator part generates particles accelerated in an accelerator part. The particle accelerator part is supplied with radio frequency (RF) high voltage power generated by another part of particle packet generation unit generating the RF power different from the power produced by the modulation speed of the particles. The element comprises an accelerating structure (9) comprising a set of cavities (9-1, 9-2) arranged in series.

IPC 8 full level

H01J 25/10 (2006.01); **H01J 37/30** (2006.01); **H05H 7/02** (2006.01); **H05H 7/22** (2006.01); **H05H 15/00** (2006.01)

CPC (source: EP)

H01J 25/10 (2013.01); **H05H 7/02** (2013.01); **H05H 7/22** (2013.01); **H05H 15/00** (2013.01)

Cited by

US2021307152A1; US11576252B2

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)

EP 2339899 A1 20110629; **EP 2339899 B1 20151216**; DK 2339899 T3 20160307; FR 2954666 A1 20110624; FR 2954666 B1 20120727; PL 2339899 T3 20160429

DOCDB simple family (application)

EP 10195945 A 20101220; DK 10195945 T 20101220; FR 0906261 A 20091222; PL 10195945 T 20101220