

Title (en)

Method for the manufacture of windows transparent to electron beams and windows transparent to electron beams

Title (de)

Verfahren zur Herstellung eines elektronenstrahltransparenten Fensters sowie elektronenstrahltransparentes Fenster

Title (fr)

Procédé de fabrication de fenêtres transparentes aux faisceaux d'électrons et fenêtres transparentes aux faisceaux d'électrons

Publication

EP 1197470 A3 20041201 (DE)

Application

EP 01124511 A 20011012

Priority

DE 10050810 A 20001013

Abstract (en)

[origin: EP1197470A2] Production of an electron beam-transparent window comprises forming an electron beam-transparent film (1); and joining the film with a holding element (2) via an intermediate layer (4) made of a material having a linear heat expansion coefficient which is similar to the linear heat expansion coefficient of the material of the film but less than the linear heat expansion coefficient of the material of the holding element. The intermediate layer buffers the different linear heat expansion coefficient behavior of the holding element compared to the film. An Independent claim is also included for an X-ray radiator comprising an electron source for emitting electrons and a liquid metal X-ray emitting target having an electron beam-transparent window as separating element between the electron source and the target. Preferred Features: The film, intermediate layer and holding element are joined together in a common step.

IPC 1-7

B81B 3/00; **B81B 7/00**; **H01J 33/04**

IPC 8 full level

G21K 5/08 (2006.01); **B81B 3/00** (2006.01); **G01T 7/00** (2006.01); **H01J 9/02** (2006.01); **H01J 9/24** (2006.01); **H01J 33/04** (2006.01); **H01J 35/08** (2006.01); **H01J 35/16** (2006.01)

CPC (source: EP US)

H01J 33/04 (2013.01 - EP US); **H01J 35/16** (2013.01 - EP US); **H01J 2235/082** (2013.01 - EP US); **H01J 2235/168** (2013.01 - EP US)

Citation (search report)

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DOCDB simple family (publication)

EP 1197470 A2 20020417; **EP 1197470 A3 20041201**; DE 10050810 A1 20020418; JP 2002197973 A 20020712; US 2002048344 A1 20020425; US 6580781 B2 20030617

DOCDB simple family (application)

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