

Title (en)

Hydronic cooling of particle accelerator window.

Title (de)

Flüssigkeitsverdampfungskühlung des Fensters eines Teilbeschleunigers.

Title (fr)

Refroidissement par vaporisation de la fenêtre d'un accélérateur de particules.

Publication

**EP 0651398 A1 19950503 (EN)**

Application

**EP 93308518 A 19931026**

Priority

EP 93308518 A 19931026

Abstract (en)

A novel electron beam apparatus window (35) having improved cooling associated therewith, which is in the form of heat pipes (37,39,41) located on the window of such apparatus for the cooling of such window by such heat pipes, whereby the heat pipes eliminates the need for air cooling and thus eliminate the production of ozone. <IMAGE>

IPC 1-7

**G21K 5/04**; **H01J 33/04**

IPC 8 full level

**G21K 5/04** (2006.01); **H01J 33/04** (2006.01)

CPC (source: EP)

**G21K 5/04** (2013.01); **H01J 33/04** (2013.01)

Citation (search report)

- [A] US 4409511 A 19831011 - LODA GARY K [US], et al
- [A] US 3105916 A 19631001 - MARKER ROY C, et al
- [X] DATABASE WPI Week 8149, Derwent World Patents Index; AN 81-M5523D
- [A] DATABASE INSPEC INSTITUTE OF ELECTRICAL ENGINEERS, STEVENAGE, GB; "COLWELL ET AL.: Performance of a heat pipe in a microwave field" & JOURNAL OF MICROWAVE POWER, vol. 10, no. 4, December 1975 (1975-12-01), pages 369 - 390
- [A] DATABASE INSPEC INSTITUTE OF ELECTRICAL ENGINEERS, STEVENAGE, GB; "BASSETT ET AL. : High power microwave window design" & MICROWAVE SYMPOSIUM. DIGEST OF TECHNICAL PAPERS , 12-14 JUNE 1974, ATLANTA, USA, pages 145 - 147

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EP0957506A1; KR19990088266A

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU NL PT SE

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