

Title (en)  
Micropoint cathode electron source.

Title (de)  
Elektronenquelle mit Mikropunktkathoden.

Title (fr)  
Source d'électrons à cathodes émissives à micropointes.

Publication  
**EP 0461990 A1 19911218 (FR)**

Application  
**EP 91401536 A 19910611**

Priority  
FR 9007347 A 19900613

Abstract (en)  
[origin: JPH04229922A] PURPOSE: To prevent an electric breakdown without increasing the thickness of a resistance coating material in an electron emission source which has a microdot discharge cathode. CONSTITUTION: Since a lattice-like negative electrode is used so that the negative electrode and the related resistance coating material may be arranged in almost the same surface, a breakdown resistance does not depend on the thickness of a resistance coating material 7, but depends on the distance between a cathode conductor 5 and microdots 12. Therefore, an adequate distance is kept between the cathode conductor 5 and microdots 12 to prevent the resistance breakdown, and, meanwhile, the resistance coating material 7 keeps a uniformity effect of an electron emission.

Abstract (fr)  
Source d'électrons à cathodes (12) émissives à micropointes possédant des électrodes en forme de treillis ; ces électrodes peuvent être soit les conducteurs cathodiques (5), soit les grilles (10). Application à l'excitation d'écran de visualisation.

IPC 1-7  
**H01J 1/30**

IPC 8 full level  
**H01J 1/30** (2006.01); **H01J 1/304** (2006.01)

CPC (source: EP KR US)  
**H01J 1/3042** (2013.01 - EP US); **H01L 29/40** (2013.01 - KR); **H01J 2201/319** (2013.01 - EP US)

Citation (search report)  
• [AD] US 4857161 A 19890815 - BOREL MICHEL [FR], et al  
• [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 259 (E-773)(3607) 15 Juin 1989 & JP-A-01 54 637 (MATSUSHITA ) 2 Mars 1989

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