

Title (en)  
THERMIONIC HAIR-NEEDLE CATHODE

Publication  
**EP 0287774 A3 19900307 (DE)**

Application  
**EP 88102556 A 19880222**

Priority  
CH 158287 A 19870424

Abstract (en)  
[origin: US4899078A] A thermionic hairpin cathode with a long operating life is made of a high melting metal wire, in which the temperature distribution along the legs is influenced either by locally increasing the radiation at a distance of 10 to 50% of the leg length from the crown or by decreasing the radiation in the immediate vicinity of the crown without changing the wire legs, possibly also by combining both measures, so that by increasing the temperature gradient in the crown region the maximum temperature is shifted close to or at the emission center.

IPC 1-7  
**H01J 37/06**; **H01J 1/16**

IPC 8 full level  
**H01J 37/063** (2006.01); **H01J 1/16** (2006.01)

CPC (source: EP US)  
**H01J 1/16** (2013.01 - EP US)

Citation (search report)  
[A] GB 1377544 A 19741218 - PHILIPS ELECTRONIC ASSOCIATED

Designated contracting state (EPC)  
CH DE FR GB LI NL

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**EP 0287774 A2 19881026**; **EP 0287774 A3 19900307**; JP S63308853 A 19881216; US 4899078 A 19900206

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**EP 88102556 A 19880222**; JP 9696888 A 19880421; US 18085088 A 19880412