

Title (en)

Oxide cathode for electron gun with a differentially doped metallic substrate

Title (de)

Oxidkathode für eine Elektronenkanone mit einem unterschiedlich dotierten metallischen Substrat

Title (fr)

Cathode à oxyde pour canon à électrons avec un substrat métallique présentant un dopage différentiel

Publication

EP 1385190 A1 20040128 (EN)

Application

EP 02291859 A 20020724

Priority

EP 02291859 A 20020724

Abstract (en)

The metallic substrate of this cathode has a thickness $\leq 100 \mu\text{m}$ and contains a plurality of reducing agents as Si or Al and : on the top face 111, $0.005\% < \text{Mg} \leq 0.02\%$, Si or Al $\leq 0.025\%$, and $W \leq 0.008\%$, on the bottom face 122, Mg weight concentration is inferior to the Mg weight concentration on the top face, and Si or Al weight concentration is superior to Si or Al weight concentration on the top face and superior to 0.02% .
<??>Lifetime is maximized and turn-on-time is minimized. <IMAGE>

IPC 1-7

H01J 1/142; **H01J 1/26**

IPC 8 full level

H01J 1/14 (2006.01); **H01J 1/20** (2006.01); **H01J 1/26** (2006.01); **H01J 29/48** (2006.01)

CPC (source: EP)

H01J 1/26 (2013.01)

Citation (search report)

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- [A] US 3535757 A 19701027 - NESTLEROTH PAUL L, et al
- [A] EP 1152447 A1 20011107 - THOMSON LICENSING SA [FR]
- [A] US 4215180 A 19800729 - MISUMI AKIRA [JP], et al

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AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

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