

Title (en)
Electron tube device

Title (de)
Elektronenröhrenvorrichtung

Title (fr)
Dispositif de tube à électrons

Publication
EP 3007199 A1 20160413 (EN)

Application
EP 14003487 A 20141010

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Abstract (en)
An electron tube device (100) comprises an electron emitter (10), which is adapted for a release of electrons, an electron collector (20), which is adapted for a collection of the electrons, wherein the electron collector (20) and the electron emitter (10) are spaced from each other by a gap (1), and a gate electrode (30), which is arranged between the electron emitter (10) and the electron collector (20), wherein the gate electrode (30) is adapted for subjecting the electrons in the gap (1) to an electrical potential, wherein the gate electrode (30) comprises at least one membrane-shaped, electrically conductive or semiconductive electrode layer (31), which is at least partially transparent for the electrons, and the at least one electrode layer (31) has at least one of a plurality of through-holes and at least one electron absorption reducing dopant. Furthermore, methods of using the electron tube device (100) are disclosed.

IPC 8 full level
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CPC (source: EP)
H01J 3/027 (2013.01); **H01J 29/46** (2013.01); **H01J 29/485** (2013.01); **H01J 2203/0232** (2013.01)

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