

Title (en)

CHANNEL PLATE ELECTRON MULTIPLIER AND IMAGING TUBE COMPRISING SUCH AN ELECTRON MULTIPLIER

Publication

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Application

**EP 83200464 A 19830331**

Priority

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Abstract (en)

[origin: EP0091170A1] In channel plate electron multipliers 13 having continuous channel dynodes 20 extending between input, 12, and output, 14, faces of the plate, a conducting electrode 22 is required on these faces to make reliable connection to the secondary emitting layer inside each channel. By evaporating the metallic electrode onto the faces at an angle to the channel, the electrode metal penetrates a small distance into each channel, ensuring a good connection. On the input face, incoming electrons can then land on metal of poor electron emissivity, degrading the multiplier signal-to-noise ratio at the input stage of the multiplication process. In accordance with the invention, the penetration depth is a minimum on channel wall parts facing a predetermined direction 26 in the input face so that incoming electrons arriving at an angle to the channel axes at that face from that direction land on unobscured secondary emitting surface.

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