

Title (en)
MANUFACTURING PROCESS FOR LAYERED METALLIC MULTICHANNEL PLATES FOR AN IMAGE INTENSIFIER, AND USE OF PLATES SO MANUFACTURED

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Application
EP 85101037 A 19850201

Priority
DE 3408849 A 19840310

Abstract (en)
[origin: US4563251A] A method for producing a multichannel plate containing metal dynodes and having a plurality of generally parallel channels for use in structures for amplifying or converting optical images or other two-dimensional signal patterns by secondary electron multiplication, which method includes: producing a negative mold of the plate by: (i) providing a body having at least the thickness of the plate to be produced and made of an electrically insulating material whose ability to be removed from the body is altered by exposure to a selected radiation; (ii) irradiating the body with the selected radiation in a pattern corresponding to the plate to be produced and in a manner to render portions of the body having the form of a grid surrounding the channels more easily removable than the remaining portions of the body; and (iii) removing the more easily removable portions of the body to leave columnar structures corresponding to the channels in the plate; depositing metal layers and intermediate layers alternately in the openings in the negative mold or in a secondary negative mold produced therefrom, the metal layers being deposited electrolytically and forming dynodes which are spaced apart in the direction of the channels; and removing the negative mold from the deposited layers.

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