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[54] TWIN-CONVEX ELECTRON GUN

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313/449

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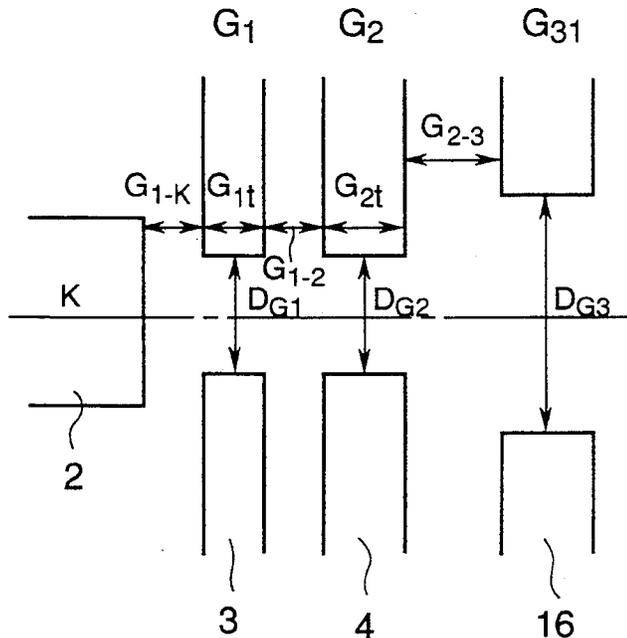
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[57] ABSTRACT

An electron gun for a cathode-ray tube has, in addition to its main lens, a triode with first and second grids as control electrodes. The thickness of the second grid, and the separation between the first and second grids, is at most one-half the diameter of the beam aperture in the second grid. These dimensions lead to formation of a prefocus lens with no concave lens component, hence with no beam diverging effect. The resulting triode aberration corrects spherical aberration in the main lens, so that the size of the beam spot focused on the screen has little tendency to increase with increasing beam current.

6 Claims, 9 Drawing Sheets



$D_{G1} = D_{G2}$
t : THICKNESS
D : DIAMETER