

Title (en)

COLOR CATHODE-RAY TUBE HAVING A THREE-LENS ELECTRON GUN

Publication

EP 0275191 A3 19890607 (EN)

Application

EP 88300247 A 19880113

Priority

- GB 8700792 A 19870114
- GB 8700793 A 19870114
- US 12895187 A 19871204

Abstract (en)

[origin: EP0275191A2] An improved color cathode-ray tube includes an electron gun for generating and directing three inline beams, a center beam and two side beams, along initially coplanar paths toward a screen of the tube. The gun includes, in order from its cathode end (K), a plurality of spaced electrodes (G1-G6) which provide a first (L1), a second (L2) and a third (L3) lens for focusing the electron beams. The first lens has a beam forming region for providing substantially symmetrical beams to the second lens. The improvement is in the combination of the second and third lens. The second lens includes at least one electrode (G4) to provide asymmetrically-shaped beams. The potentials applied to the second lens refract electron beams emerging off-axes from the first lens toward the axes. The third lens is a low aberration main focusing lens which provides asymmetrically-shaped beams of substantially constant current density to the screen.

IPC 1-7

H01J 29/50

IPC 8 full level

H01J 29/48 (2006.01); **H01J 29/50** (2006.01)

CPC (source: EP)

H01J 29/503 (2013.01); **H01J 2229/4872** (2013.01); **H01J 2229/4896** (2013.01)

Citation (search report)

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- [A] US 2884559 A 19590428 - COOPER JR HOWARD G, et al
- [AD] PATENT ABSTRACTS OF JAPAN, vol. 8, no. 88, 21st April 1984, page 74 E 240; & JP-A-59 008 246 (TOKYO SHIBAURA DENKI K.K.) 17-01-1984
- [A] PATENT ABSTRACTS OF JAPAN, vol. 3, no. 141 (E-153), 21st November 1979, page 151 E 153; & JP-A-54 120 581 (TOKYO SHIBAURA DENKI K.K.) 19-09-1979

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