Title (en)

SPACE-SAVING CATHODE RAY TUBE

Title (de)

RAUMSPARENDE KATHODENSTRAHLRÖHRE

Title (fr)

TUBE CATHODIQUE A ENCOMBREMENT REDUIT

Publication

EP 1222678 A1 20020717 (EN)

Application

EP 00975292 A 20001019

Priority

- US 0028928 W 20001019
- US 16065499 P 19991021
- US 16077299 P 19991021
- US 55980900 A 20000426

Abstract (en)

[origin: WO0129871A1] A cathode ray tube (10, 110, 210, 310, 410, 510) includes an electron gun (12, 112, 212, 312, 412, 512) directing electrons towards a faceplate (20, 120, 220, 320, 420, 520) having an electrode (22, 122, 222, 322, 422, 522) biased at screen potential. The electron beam is magnetically deflected to scan across the faceplate (20, 120, 220, 320, 420, 520) to impinge upon phosphors (23, 123, 223, 323, 423, 523) thereon to produce light depicting an image or information. A neck electrode (44, 144, 244, 344, 444, 544) near the tube neck is biased at or below screen potential and a second electrode (46, 146, 246, 346, 446, 546) between the neck electrode (44, 144, 244, 344, 444, 544) and the faceplate (20, 120, 220, 320, 420, 520) is biased at or above screen potential. As a result, the electrons are deflected over a greater total angle than is obtained from the magnetic deflection. A third electrode (48, 148, 248, 348, 448, 548) proximate the faceplate (20, 120, 220, 320, 420, 520) is biased at or below screen potential to direct electrons towards the faceplate (20, 120, 220, 320, 420, 520), thereby to increase the landing angle of the electrons thereon. A metal and ceramic support (360, 362, 364) includes a resistive voltage divider (366, 368) to which ones of the electrodes (344, 346, 348) connect.

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IPC 1-7

H01J 31/12; H01J 31/20; H01J 29/70

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

See references of WO 0129871A1

Citation (examination)

- US 5204585 A 19930420 - CHEN HSING-YAO [US]
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