Title (en)

APPARATUS HAVING A TELEVISION CAMERA TUBE AND A TELEVISION CAMERA TUBE FOR USE IN SUCH AN APPARATUS

Publication

EP 0255742 A3 19890426 (EN)

Application

EP 87201388 A 19870721

Priority

GB 8618854 A 19860801

Abstract (en)

[origin: EP0255742A2] A television camera tube which has an anti-comet-tail electron gun. In such tube a target plate (11) is line scanned by a focused electron beam which is at a cathode voltage of typically zero volts to stabilise the scanned area of the target plate (11) at that voltage and in so doing producing an output signal. During line flyback, the cathode voltage is increased to 5 V and the beam current is increased so that the target plate (11) is stabilised at that voltage. By this means the effects of moving high intensity lights can be mitigated. However if the electron beam is focused during flyback then intense damage can be done to the photo-conductive layer of the target plate. A television camera tube is described in which the electron gun (14) is a multi-spot triode electron gun comprising a cathode (15), a multi-apertured control grid (16) and a multi-apertured accelerating anode (17). During line scanning a single low current electron beam is produced from the centre of the cathode (15) and during line flyback a plurality of low current electron beams are produced to form a large spot which does not damage by ion bombardment the photo-conductive layer of the target plate (11).

IPC 1-7

H01J 31/38; H01J 29/48

IPC 8 full level

H01J 29/48 (2006.01); **H01J 31/38** (2006.01); **H04N 5/228** (2006.01)

CPC (source: EP)

H01J 31/38 (2013.01)

Citation (search report)

- [A] US 3426235 A 19690204 - SCHADE OTTO H SR
- [AD] US 3548250 A 19701215 - ROOSMALEN JOHANNES HENDRIKUS T, et al
- [A] FR 1059415 A 19540324 - CFCMUG
- [A] FR 1309662 A 19621116 - THOMSON HOUSTON COMP FRANCAISE
- [A] ELECTRONIC APPLICATIONS, vol. 30, no. 1, March 1971, pages 18-32, Centrex Publishing Co., Eindhoven, NL; "Advances in plumbicon camera tube design"

Cited by

WO03054907A1

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0255742 A2 19880210; **EP 0255742 A3 19890426**; GB 8618854 D0 19860910; JP S6343244 A 19880224

DOCDB simple family (application)

EP 87201388 A 19870721; GB 8618854 A 19860801; JP 18786087 A 19870729