

Title (en)
Image intensifier tube.

Title (de)
Bildverstärkerröhre.

Title (fr)
Tube intensificateur d'images.

Publication
EP 0241726 A1 19871021 (DE)

Application
EP 87103724 A 19870314

Priority
DE 3612368 A 19860412

Abstract (en)
1. An image intensifier tube with an axially symmetrical structure comprising a cathode assembly equipped with an input surface with a photocathode and at least one exhaust tube, an anode cone with a small-diameter aperture through which the electrons pass and which tightly girdles the electron flow at this point, a display screen electrode attached to a phosphor screen mounted in an output window with several annular isolating elements that are joined with the electrodes or their mounts vacuum-tight in such a way that, together with these, they form a vacuum envelope while at the same time keeping the electrodes isolated and at the proper distances from one another, characterized in that a multi-channel plate array for electron amplification (8) is situated just before the phosphor screen (7), that a housing section consisting of two annular metallic parts (11a, 11b) is inserted between the multi-channel plate array (8) and the anode cone (6), both parts of which (11a, 11b) bear outward-pointing flanges (12), and that the vacuum-tight joint between these two annular parts (11a, 11b) is implemented in such a way at the circumference (13) of the flanges (12) that it can be re-separated by machining away metal at the circumference (13) of the flanges (12).

Abstract (de)
Bei einer Bildverstärkerröhre mit Photokathode (5), Leuchtschirm (7), einer Multikanal-Verstärkerplatte (8) und einer dazwischenliegenden Anode (6) mit kleiner Elektronendurchtrittsöffnung (16) wird vorgeschlagen, im Bereich zwischen dieser Anode und der Multikanal-Verstärkerplatte ein aus zwei Metallteilen (11a, 11b) bestehendes Gehäuseteil vorzusehen, das eine lösbare vakuumdichte Verbindung aufweist.

IPC 1-7
H01J 29/86; **H01J 9/26**

IPC 8 full level
H01J 5/28 (2006.01); **H01J 9/26** (2006.01); **H01J 29/86** (2006.01)

CPC (source: EP)
H01J 5/28 (2013.01); **H01J 9/263** (2013.01); **H01J 29/86** (2013.01)

Citation (search report)
• [Y] DE 1764315 A1 19710701 - SIEMENS AG
• [Y] US 3868536 A 19750225 - ENCK JR RICHARD S
• [A] US 4039877 A 19770802 - WIMMER JACK D

Cited by
EP0367652A1; FR2638281A1; US5017827A

Designated contracting state (EPC)
DE NL

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EP 0241726 A1 19871021; **EP 0241726 B1 19891123**; DE 3612368 A1 19871015; DE 3761032 D1 19891228

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