

Title (en)

Coupling device between the first dynode of a photomultiplier and a sheet multiplier.

Title (de)

Kupplungsvorrichtung zwischen einer ersten Dynode eines Photovervielfachers und einem Mehrblattvervielfacher.

Title (fr)

Dispositif de couplage d'une première dynode d'un photomultiplicateur à un multiplicateur à feuilles.

Publication

EP 0345888 A1 19891213 (FR)

Application

EP 89201420 A 19890605

Priority

FR 8807778 A 19880610

Abstract (en)

[origin: JPH0233847A] PURPOSE: To narrow necessary void space of a multiplier tube and make the assembling easy by eliminating the intermediate dynode of an electronic multiplier tube into which an electronic multiplier device is incorporated and approaching the multiplier device to a first dynode. CONSTITUTION: A photocathode 20 and a bus-bar 31 are arranged at a right angle to the tube axial line 11 of a photomultiplier tube and photo-electron 21 discharged from the cathode 20 is received by a cylindrical first dynode 30. A multiplier device 40 is joined to this dynode 30 by a junction device 50. The axis 41 of this device 40 is arranged in parallel to the tube axial line 11, the coupling device 50 is made parallel to the axis 41 of the device 40, and the dynode 30 and the entrance 42 of the device 40 are surrounded by a cylindrical side part plate 52. A first electrode 51 which is supported in opposite to the cathode 20 on this plate 52 and is constituted of an upper side plate 53 is which an opening 54 passing photo-electron 21 to the dynode 30 is opened and a second electrode 55 which is parallel to the bus-bar 31 of the dynode and is between the exist 32 of the dynode 30 and the entrance 42 of the device 40 are arranged.

Abstract (fr)

Tube photomultiplicateur (10) comportant une photocathode (20), une première dynode (30) cylindrique, un dispositif multiplicateur (40) d'électrons du type "à feuilles", et un dispositif (50) de couplage de la première dynode (30) au dispositif multiplicateur (40). Selon l'invention, ledit dispositif (50) de couplage est constitué, d'une part, d'une première électrode (51) composée d'une armature latérale (52) cylindrique d'axe parallèle à celui du dispositif multiplicateur et d'une armature supérieure (53) percée d'une ouverture (54) de passage des photoélectrons (21) vers la première dynode (30), et, d'autre part, d'une deuxième électrode (55) plane située entre la sortie (32) de la première dynode (30) et l'entrée (42) du dispositif multiplicateur (40).

IPC 1-7

H01J 43/06; H01J 43/22

IPC 8 full level

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CPC (source: EP US)

H01J 43/06 (2013.01 - EP US); **H01J 43/22** (2013.01 - EP US)

Citation (search report)

- [A] EP 0131339 A1 19850116 - HYPERELEC [FR], et al
- [A] PATENT ABSTRACTS OF JAPAN, vol. 9, no 19 (E-292)[1742], 25 janvier 1985, page 139 E 292; & JP-A-57 167 946 (HAMAMATSU HOTONIKUSU K.K.) 21-09-1984

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