Title (en)

ELECTRON DETECTION SYSTEM FOR A SCANNING ELECTRON MICROSCOPE

Title (de)

ELEKTRONENDETEKTIONSSYSTEM FÜR EIN RASTERELEKTRONENMIKROSKOP

Title (fr)

SYSTEME DE DETECTION D'ELECTRONS POUR MICROSCOPE ELECTRONIQUE A BALAYAGE

Publication

EP 1678734 A1 20060712 (EN)

Application

EP 04775185 A 20041006

Priority

- PL 2004000079 W 20041006
- PL 36313103 A 20031027

Abstract (en)

[origin: WO2005041243A1] The electron detection system for a scanning electron microscope is mounted in the head body (1), made of teflon. In the lower part of the head body (1), the lower throttling aperture (2) of the form of the metal plate with a small hole at the axis of the electron beam WE is placed. Above the lower throttling aperture (2), the micro-porous plate (3) is located. The micro-porous plate (3) has a hole at the axis of the electron beam WE, in which the screen pipe (4) is fastened by means of the teflon sealing. Over the micro-porous plate (3), scintillators (5) are disposed symmetrically around the electron beam WE axis. Scintillators (5) are connected with the light pipes (6) that lead to photomultipliers.

IPC 1-7

H01J 37/244

IPC 8 full level

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CPC (source: EP)

H01J 37/244 (2013.01); H01J 2237/2443 (2013.01); H01J 2237/24435 (2013.01)

Citation (search report)

See references of WO 2005041243A1

Citation (examination)

SLOWKO W ED - KOK CHI-WAH ET AL: "Directional detection of secondary electrons for electron beam profilography", VACUUM, PERGAMON PRESS, GB, vol. 52, no. 4, 1 January 1999 (1999-01-01), pages 441 - 449, XP002316008, ISSN: 0042-207X, DOI: 10.1016/S0042-207X(98)00329-7

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