Title (en)

PHOTO CATHODE AND METHOD OF MANUFACTURING SUCH A CATHODE

Publication

EP 0127735 B1 19871119 (DE)

Application

EP 84102976 A 19840317

Priority

DE 3316027 A 19830503

Abstract (en)

[origin: US4591717A] An infrared detector includes a vacuum tube containing a photo sensitive layer comprised of densely packed needles arranged vertically on a substrate and having been grown as metal whiskers in a porous portion of the substrate. The substrate includes a metallic layer either in contact with or insulated from the needles depending upon the mode of the detecting system. The needles may face the incoming radiation, or may face away therefrom, in which case at least part of the substrate has to be transparent to infrared radiation. The radiation is either acquired directly or through an infrared optic or through a raster or line-scanning system. Photo emission from the needles can be used either directly for the production of an image or indirectly through a scanning process. The diameter and distance of the needles is significantly smaller than the radiation band to be detected.

IPC 1-7

H01J 40/06; H01J 1/34; H01J 43/08; H01J 17/49; H01J 31/49

IPC 8 full level

H01J 1/34 (2006.01); **H01J 9/12** (2006.01); **H01J 9/233** (2006.01); **H01J 17/49** (2006.01); **H01J 31/49** (2006.01); **H01J 40/06** (2006.01); **H01J 43/08** (2006.01)

CPC (source: EP US)

H01J 1/34 (2013.01 - EP US); **H01J 9/12** (2013.01 - EP US); H01J 2201/3425 (2013.01 - EP US)

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