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(54) Title: A DETECTING DEVICE FOR DETERMINING A POSITION OF REACTION OF GAMMA QUANTA AND A METHOD FOR DETERMINING A POSITION OF REACTION OF A GAMMA QUANTA IN POSITRON EMISSION TOMOGRAPHY

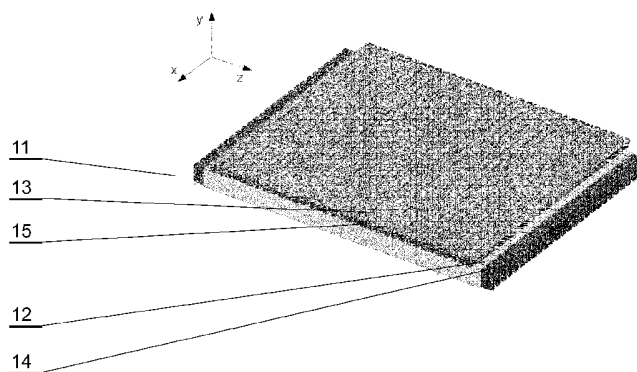


Fig. 1

(57) Abstract: A detector device for determining a position of reaction of gamma quanta, the device comprising: a detection layer comprising: at least one polymeric or inorganic scintillator (12, 22) for absorbing gamma quanta and for emitting and propagating scintillation photons; and photoelectric converters (14,24) for converting light signals of the scintillation photons into electric signals; and at least one additional layer comprising: strips of material (13, 23) for absorbing the scintillation photons and for emitting and propagating secondary photons; and photoelectric converters (15, 25) for converting the light signals for the scintillation photons into electric signals.

