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(54) Title: PLASTIC SCINTILLATOR WITH EFFECTIVE PULSE SHAPE DISCRIMINATION FOR NEUTRON AND GAMMA DETECTION

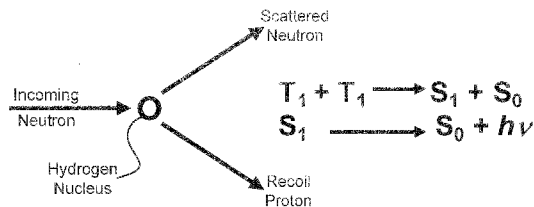
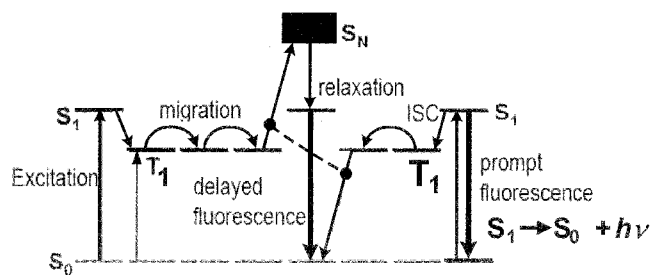


FIG. 1
(prior art)

(57) Abstract: In one embodiment, a scintillator material includes a polymer matrix; and a primary dye in the polymer matrix, the primary dye being a fluorescent dye, the primary dye being present in an amount of 5 wt% or more; wherein the scintillator material exhibits an optical response signature for neutrons that is different than an optical response signature for gamma rays. In another embodiment, a scintillator material includes a polymer matrix; and a primary dye in the polymer matrix, the primary dye being a fluorescent dye, the primary dye being present in an amount greater than 10 wt%.

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