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(54) Title: CONVERSION OF HIGH-ENERGY PHOTONS INTO ELECTRICITY

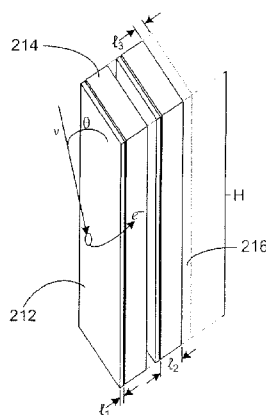


FIGURE 4B

(57) Abstract: Systems and methods for the conversion of energy of high-energy photons into electricity which utilize a series of materials with differing atomic charges to take advantage of the emission of a large multiplicity of electrons by a single high-energy photon via a cascade of Auger electron emissions. In one embodiment, a high-energy photon converter preferably includes a linearly layered nanometric-scaled wafer made up of layers of a first material sandwiched between layers of a second material having an atomic charge number differing from the atomic charge number of the first material. In other embodiments, the nanometric-scaled layers are configured in a tubular or shell-like configuration and/or include layers of a third insulator material.



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