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(71) Applicant and

(72) Inventor: **DUNKLEY, John** [CA/CA]; 70-415 West Esplanade Avenue, North Vancouver, British Columbia V7M 1A6 (CA).

(74) Agent: **INGALLS, Doran**; c/o Fasken Martineau DuMoulin LLP, 2900 - 550 Burrard Street, Vancouver, British Columbia V6C 0A3 (CA).

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(54) Title: METHOD OF MANUFACTURING A PHOTOVOLTAIC COMPOUND SEMICONDUCTOR PRINTING SOLUTION TO PRODUCE SOLAR CELLS

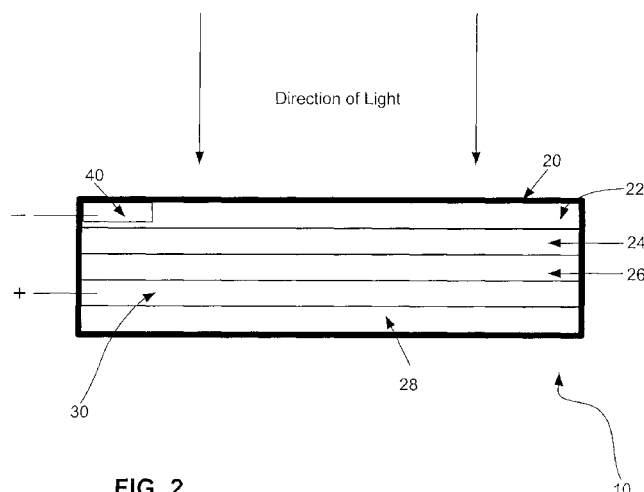


FIG. 2

(57) Abstract: A photovoltaic semiconductor solution comprising at least an equimolar mixture of cadmium, tellurium, gallium and indium; propylene glycol flux; carbon; resin in an organic solvent; strontium titanate; and high molecular weight polymer. The photovoltaic semiconductor solution provides charged free electrons on application of light to the photovoltaic semiconductor solution. Another embodiment relates to a solar cell comprising first and second electrode layers; a photovoltaic semiconductor layer disposed between the first and second electrodes; a first membrane disposed between the first electrode and the semiconductor layer and a second membrane disposed between the second electrode and the semiconductor layer. The first membrane is an electron acceptor layer and the second membrane is an insulator. The PV semiconductor layer includes the PV semiconductor solution. Each of the layers of the solar cell are formed on a substrate. Photoelectric power is generated due to light that is incident from the first electrode layer.

