

ABSTRACT

THIN FILM PHOTOVOLTAIC DEVICE

5 The present invention provides a thin film photovoltaic device and a method
of forming a thin film photovoltaic device. The thin film photovoltaic device has a
substrate, a thin film layer formed on the substrate and first and second electrodes
formed on one side of the thin film layer. By applying an electric field over the first
and second electrodes, the thin film layer is polarized in a direction parallel to the
10 surface plane of the film. Upon exposure to light, the thin film layer converts light
energy into electricity. According to the method, a thin film layer is formed on a
substrate. A first electrode and a second electrode are formed on one side of the
thin film layer. By applying an electric field over the first and second electrodes,
the thin film layer is polarized in a direction parallel to the surface plane of the film.

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(Fig. 2A)