PHOTOVOLTAIC CELL AND LAMINATE METALLIZATION

ABSTRACT OF THE DISCLOSURE

A photovoltaic laminate is disclosed. Embodiments include placing a first encapsulant on a substantially transparent layer that includes a front side of a photovoltaic laminate. Embodiments also include placing a first solar cell on the first encapsulant. Embodiments include placing a metal foil on the first solar cell, where the metal foil uniformly contacts a back side of the first solar cell. Embodiments include forming a metal bond that couples the metal foil to the first solar cell. In some embodiments, forming the metal bond includes forming a metal contact region using a laser source, wherein the formed metal contact region electrically couples the metal foil to the first solar cell. Embodiments can also include placing a backing material on the metal foil. Embodiments can further include forming a back layer on the backing material layer and curing the substantially transparent layer, first encapsulant, first solar cell, metal foil, backing material and back layer to form a photovoltaic laminate.

Fig. 1