

ABSTRACT

The present disclosure relates to a UV-resistant photovoltaic module. The photovoltaic module includes a cell layer, a back sheet layer, a UV barrier layer, and a connection layer. The back sheet layer is arranged on a backlight side of the cell layer. The UV barrier layer is arranged on a light-facing side of the cell layer, and the UV barrier layer is made of a flexible material. The connection layer is located between the cell layer and the back sheet layer and between the cell layer and the UV barrier layer. The UV barrier layer includes a UV absorbent, and the UV absorbent is one or more of 2-(2'-hydroxy-3',5'-di-tert-phenyl)-5-chloro benzotriazole, 2-(2'-hydroxy-5'-methylphenyl)benzotriazole, 2-hydroxy-4-n-octoxyl benzophenone, and 2-hydroxy-4-methoxy benzophenone.

Fig. 1