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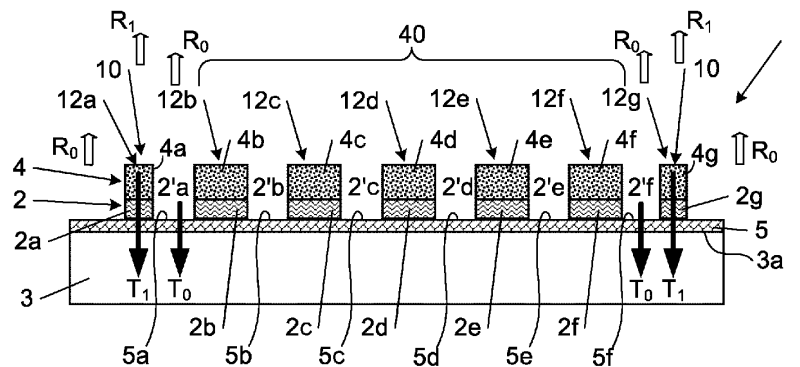
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(54) Title: PHOTOVOLTAIC DEVICE AND METHOD FOR MANUFACTURING THE SAME

**Fig. 1**

(57) **Abstract:** The invention relates to interdigitated back contact (IBC) photovoltaic devices and modules that are based on a silicon structured device (1) which comprises: a silicon-based substrate (3), an intrinsic amorphous silicon layer a-Si:H(i) (5) situated on substrate (3) a first patterned silicon layer (2), and a second patterned nano-crystalline silicon layer (4) on the first patterned silicon layer (2). The second patterned layer (4) is of the same type of doping than said first patterned silicon layer (2). The first patterned layer (2) and the second patterned layer (4) form photovoltaic structures (12a, 12g), of which at least one constitutes a fiducial mark (10) having, in a predetermined wavelength range, a different optical reflectivity (R1), than the reflectivity (R0) of the intrinsic amorphous silicon (a-Si:H(i)) layer portions interstices (5a-5f) between said photovoltaic structures (12a, 12g). The invention relates also to a photovoltaic device (1), to photovoltaic modules and to a method of fabrication of said photovoltaic device.

