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MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA,
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(54) Title: PROTECTIVE BARRIER LAYERS FOR PHOTOVOLTAIC MODULES

(57) Abstract: A photovoltaic module includes a plurality of sub-cells that are connected by interconnects formed by a plurality of scribes or to direct current to flow from one sub-cell to an adjacent sub-cell and a scribe, a P4-scribe to electrically isolate one series of sub-cells from an adjacent series of sub-cells. One or more of the scribes may include a scribe barrier layer that prevents degradation of the scribe, reduce oxygen and water exposure of the scribe sides and prevent corrosion due to chemical reactions. A P2-scribe is susceptible to degradation due to chemical reactions between different layers of the module that are in contact as a result of the geometry of the P2-scribe. The P3 and P4-scribes is susceptible to ingress and egress of water vapor or oxygen and egress of the A or X-site species of the perovskite.

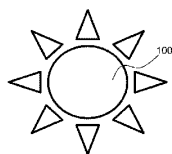
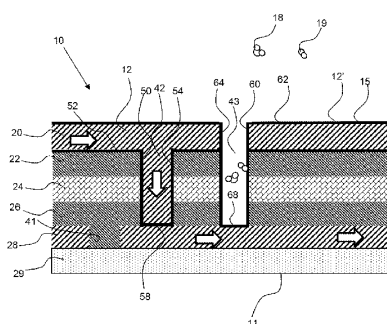


FIG. 2

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