

TECHNICAL ASSISTANCE REQUEST

Provide a two-page description of the unique challenges and needs a national lab, private facility, and/or member of the American-Made Network could potentially help you resolve. The Prize Administrator will make this request broadly available so members of the American-Made Network can understand your needs and assist you through the voucher program or otherwise.

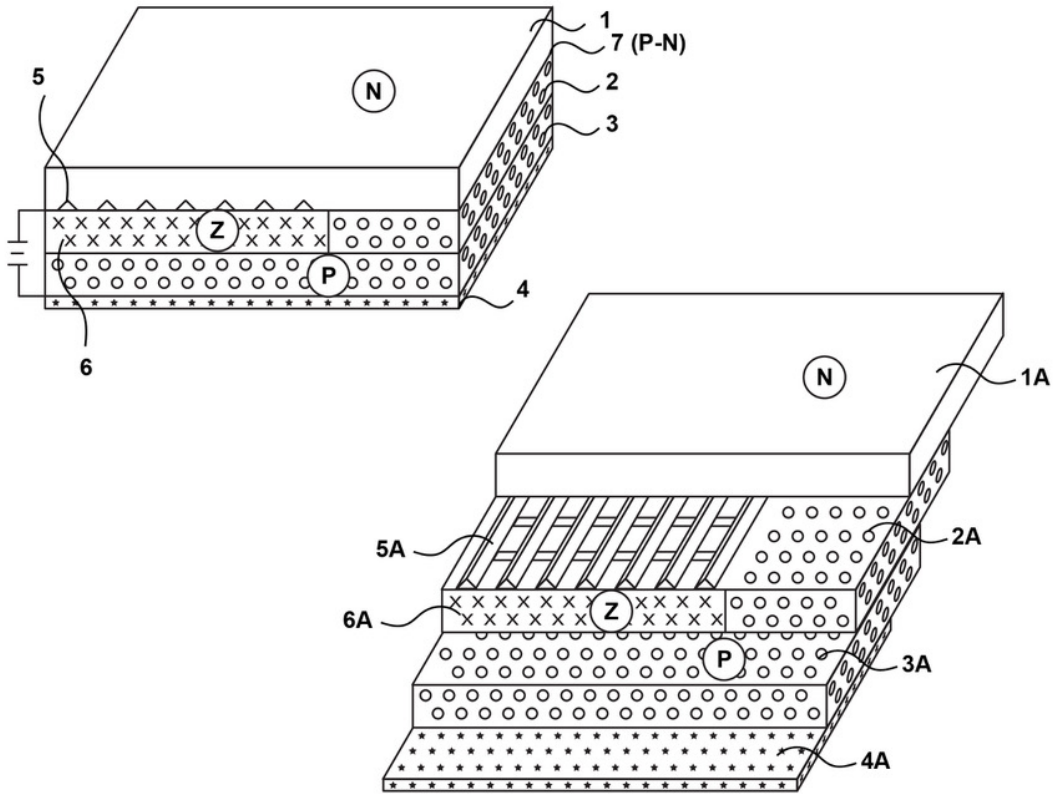
SUMMARY

Trisilicon™ is a three layered solar wafer having P-O-N silicon parts, whereby two of the silicon are doped to have a negative charge and a positive charge respectively, while one wafer has no charge. The property can be likened to the structure of an atom, which has an electron, proton and neutron. The invention is arranged in such a way to allow for the top of the solar cell to be void of a “top contact.” As such, the top surface of the solar cell will be void of any obstacle, allowing for sunlight to enter the cell for maximum efficiency. The “top contact” is moved towards the middle of the solar cell, between the top later and middle layer to form the anode. The bottom contact (4A) will remain in its original position.

Challenges

- (1) Upgrading a two-layer solar cell to three layers, whereby one layer (Z) is neutral.
- (2) Creating a new type of “middle contact” (5A)
- (3) Creating a P-N (7) junction from the middle of the solar cell as shown in the image (Fig 5) attached:

Fig. 5



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