

## **Post-treatment of silicon nitride film used in a solar cell**

The invention discloses a method for providing a post treatment of silicon nitride film used in a solar cell.

### **The Technology**

- The method comprises of depositing a silicon-nitride film on silicon by a Plasma Enhanced Chemical Vapor Deposition (PECVD) process. In general, PECVD is a process used to deposit thin films from a vapor phase to a solid phase on a substrate.
- The silicon nitride film act as a surface passivation layer and anti-reflective coating.
- The surface passivation layer is treated with at least one gas at a predefined flow and for a predefined process time in a PECVD chamber.
- The treatment is performed to obtain a post plasma treated silicon-silicon nitride interface with one or more post treated interface parameters.

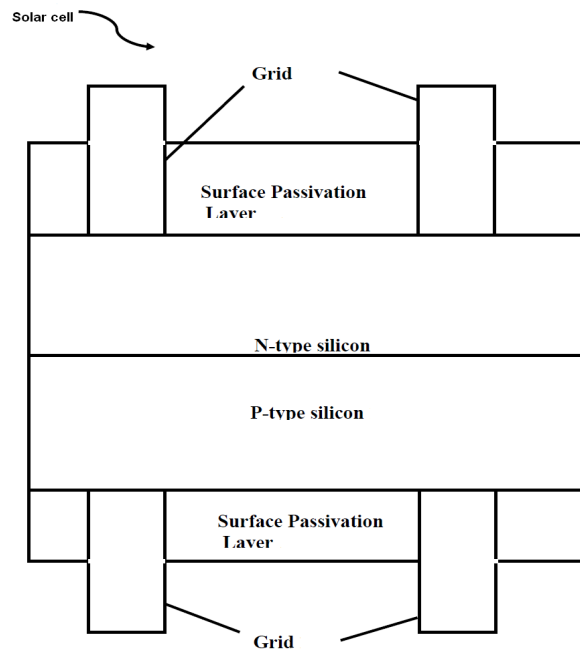


Fig – 1: Example of Solar cell with a surface passivation layer for post treatment