Antireflective Coating on Solar Cells and Method for the Production of Such an Antireflective Coating

Abstract

The invention relates to an antireflective coating on solar cells made of crystalline silicon as well as a method for producing such an antireflective coating. The aim of the invention is to create an antireflective coating on solar cells made of crystalline silicon which makes it possible to optimize the optical and passivating properties thereof while making it possible to easily and economically integrate the production thereof into the production process especially of very thin crystalline silicon solar cells. Said aim is achieved by the fact that the antireflective coating is composed of successive partial layers, i.e. a lower partial layer (S1) which covers the crystalline silicon, is embodied as an antireflective coating and as passivation with a particularly great hydrogen concentration, and is covered by an upper partial layer (S2) having an increased barrier effect against hydrogen diffusion.

Fig. 1