ABSTRACT

METHOD TO INSPECT FRONT AND REAR SIDES OF SOLAR WAFER

An inspection method for a front side and a rear side of a solar wafer as it moves on a conveyor belt, the side inspection method consisting of continuously capturing a discrete number of images of the front end and back end, directing a beam of light continously on the front side to obtain a series of first reflections, until the front side of the solar wafer passes the line of sight of the line scan imaging device, and as the rear side of the solar wafer passes the line of sight of the line scan imaging device, directing a beam of light continously on the rear side to obtain a series of second reflections, merging the series of first reflections and the series of second reflections using a beam splitting device to form a merged number of images of the front side and rear side of the solar wafer.

A system using the inspection method is also proposed.

Fig. 5