Abstract

Method and device for determining of a characteristic of a semiconductor sample

The invention relates to a method for determining a characteristic of a semiconductor sample forming a surface. The method comprises the steps: simultaneously illuminating an area on the surface of a semiconductor sample with superimposed exciting light beams with a plurality of wavelengths, modulating the light beam of the different wavelengths with the same frequency, but different phases, selecting a modulation function and its phases in such a way, that the sum of the photon fluxes of all light beams at all times lies within a tolerance range, the tolerance range being considerably smaller than the sum of all photon fluxes, simultaneously phase-dependent measuring of the components of the surface photo voltage caused by the different light beams and determining the characteristic of the semiconductor sample from the relationships between the components and the respective wavelengths. Furthermore a device for carriying out such a method is described.

(Fig.1)

Drawings:

Fig.1

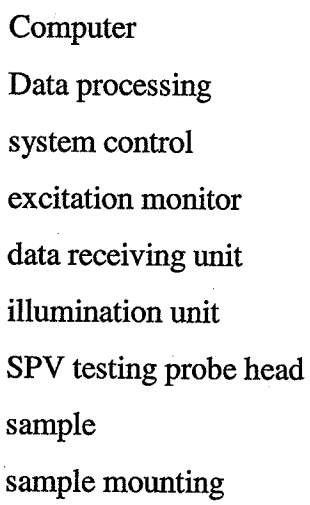


Fig.2

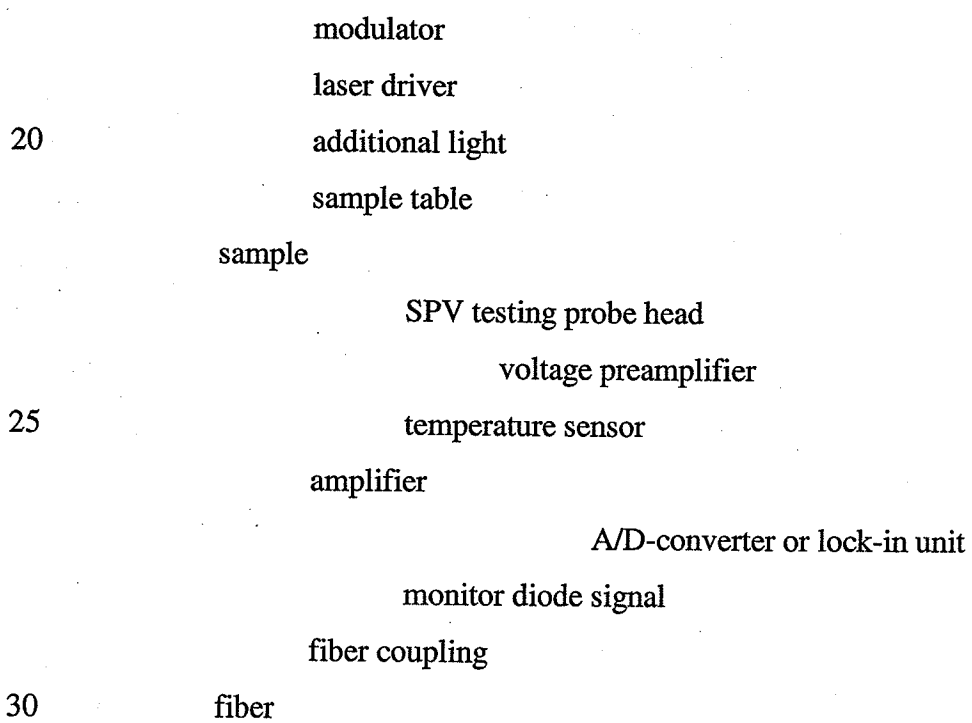
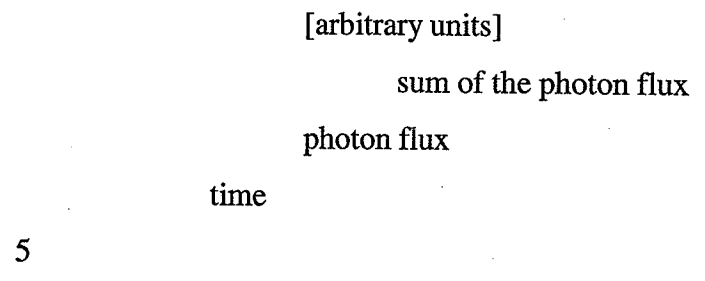


Fig.3



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