

METHOD FOR CHARACTERIZING MATERIAL BY ANALYSIS OF SPECKLES

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ABSTRACT

The invention proposes a method for characterizing material in which a surface is formed, comprising the steps of:

- 10 - projecting a coherent light beam onto the surface to generate on said surface speckles resulting from interferences of the light beams diffused by said surface,
- acquiring an image of said surface on which the speckles appear,
- processing said image to compute at least one characterization criterion of the material, and
- 15 - from criteria, determining the material constituting the surface,

in which the processing step of the image comprises:

- computation of an autocorrelation function of the light intensity on the image and computation of the value of at least one criterion set up from said function, and
- 20 - computation of the value of at least one criterion representative of a phase shift distribution of the light beams diffused by the surface.

NO FIGURE