

COMPOSITE INSPECTION

ABSTRACT

A method of detecting local material changes in a composite structure is presented. A pulsed laser beam is directed towards the composite structure comprised of a number of composite materials. Wide-band ultrasonic signals are formed in the composite structure when radiation of the pulsed laser beam is absorbed by the composite structure. The wide-band ultrasonic signals are detected to form data. The data is processed to identify a local frequency value for the composite structure. The local frequency value is used to determine if local material changes are present in the number of composite materials.

Fig. 9