INSPECTION METHOD AND APPARATUS FOR DETERMINING INCIPIENT MECHANICAL FAILURE

ABSTRACT OF THE DISCLOSURE

A method (100) for determining incipient mechanical failure of an object includes insonifying the object with ultrasonic energy at a selected fundamental frequency. Amplitude data is acquired (108) from the insonified object at the fundamental frequency and at a second harmonic of the fundamental frequency, and a non-linear acoustic image is generated (110) from the amplitude data at the fundamental frequency and the second harmonic frequency.

Fig. 1