US 20040113602A1

(19) **United States**

(12) **Patent Application Publication** (10) **Pub. No.: US 2004/0113602 A1**

Hajduk et al. (43) **Pub. Date: Jun. 17, 2004**

(54) **HIGH THROUGHPUT MECHANICAL PROPERTY TESTING OF MATERIALS LIBRARIES USING A PIEZOELECTRIC**

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(21) Appl. No.: **10/715,159**

(22) Filed: **Nov. 17, 2003**

Related U.S. Application Data

(63) Continuation of application No. 09/938,994, filed on Aug. 24, 2001, now Pat. No. 6,650,102.

Publication Classification

(51) **Int. Cl.**[7] **G01N 27/00**

(52) **U.S. Cl.** **324/71.1**; 324/76.49

(57) **ABSTRACT**

The present invention provides instruments and methods for screening combinatorial libraries that addresses many of the problems encountered when using conventional instruments. For example, the disclosed instruments can measure mechanical properties of library members in rapid serial or parallel test format, and can perform tests on small amounts of material, which are easily prepared or dispensed using art-disclosed liquid or solid handling techniques. Compared to conventional instruments, the disclosed instruments afford faster sample loading and unloading, for example, through the use of disposable libraries of material samples.