

## Bibliographic data: JP 3543088 (B2)

### EQUIPMENT AND APPARATUS FOR MEASURING PHYSICAL PROPERTIES OF MATERIAL WITH HIGH THROUGHPUT

**Publication date:** 2004-07-14

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**Classification:** - international: **B01L3/00; G01N1/28; G01N11/00; G01N19/00; G01N29/02; G01N29/22; G01N3/08; G01N3/20; G01N3/32; G01N37/00; G01N3/02; G01N5/00;** (IPC1-7): G01N1/28; G01N11/00; G01N3/08; G01N3/20; G01N3/32; G01N37/00

- european: B01L3/00C2D; G01N19/00; G01N29/02; G01N29/22F

**Application number:** JP20010156483 20010525

**Priority number(s):** US20000580024 20000526

**Also published as:**

- JP 2002022630 (A)
- EP 1158290 (A2)
- EP 1158290 (A3)
- US 2002029621 (A1)
- US 6936471 (B2)
- more

#### Abstract of JP 2002022630 (A)

**PROBLEM TO BE SOLVED:** To provide a multipurpose apparatus for screening a combination library with high throughput.

**SOLUTION:** The apparatus comprises a sample holder for holding the components of a library, a probe array for perturbing an independent library component mechanically, and a sensor array for measuring response to mechanical perturbation of each library component. During screening operation, the apparatus replaces the sample array (sample holder) and the probe array and perturbs an independent library component mechanically. A material sample is screened based on a large number of different bulk physical properties including Young's modulus (bending, uniaxial drawing, biaxial drawing, shearing), hardness (indentation), fracture (stress and strain at the time of fracture, toughness) adhesion (tackiness, loop tackiness), flow (viscosity, melt flow index, rheology), and the like.

