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- (71) **Applicant:** DREXEL UNIVERSITY [US/US]; 3141 Chestnut Street, Philadelphia, PA 19104 (US).
- (72) **Inventors:** MOON, Franklin; Mt. Laurel, NJ 08054 (US). DEVITIS, John; Philadelphia, PA 19104 (US). MAS-CERL, David; Philadelphia, PA 19104 (US). AKTAN, Ahmet, Emin; Bala Cynwyd, PA 19004 (US). BUCHTER, Barry; Hatfield, PA 19440 (US). BASILY, Basily; Piscataway, NJ 08854 (US). BRALEY, John, Burton; Philadelphia, PA 19130 (US). ROMANO, Nicholas, Paul; Philadelphia, PA 19123 (US).
- (74) **Agent:** SCHOTT, Stephen, B.; Schott, P.C., 687 West Lancaster Avenue, Wayne, PA 19087 (US).
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(54) **Title:** SELF-CONTAINED RAPID MODAL TESTING SYSTEM FOR HIGHWAY BRIDGES

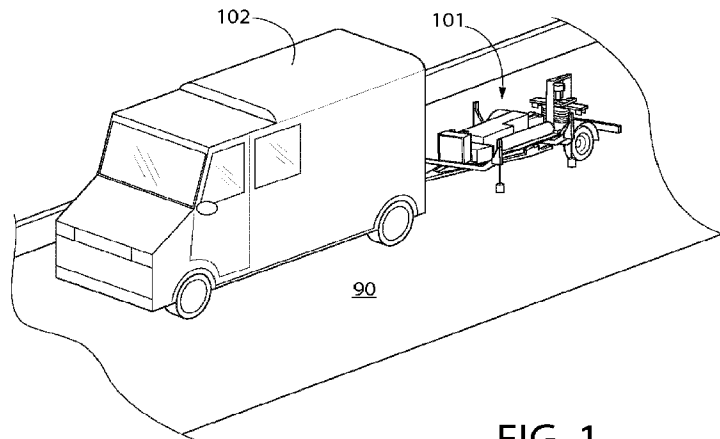


FIG. 1

(57) **Abstract:** A system for measuring structural integrity includes a self-contained rapid modal testing trailer that delivers an impact load to a structure being tested and records data resulting from the impact load, and a data processing software that extracts modal parameters of the structure, such as frequencies and mode shapes. The parameters are used to determine anomalous behavior as well as provide experimental data for finite element model calibration.

