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Smith

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(54) **SOLID STATE SEISMIC TRIGGER SWITCH**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 891 days.

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(65) **Prior Publication Data**

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Related U.S. Application Data

(63) Continuation of application No. 11/360,281, filed on Feb. 24, 2006, now abandoned.

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(51) **Int. Cl.**
G01V 1/16 (2006.01)
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(57) **ABSTRACT**

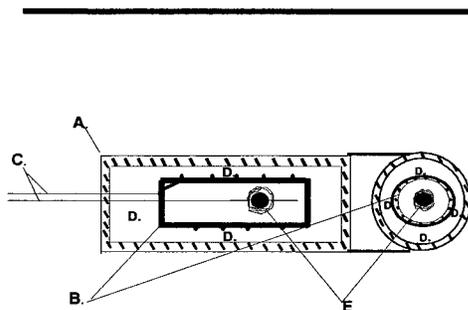
A solid state seismic trigger switch has a tube, a first wire with a first end that extends into the tube, a soldered mass attached to the first end of the first wire, and a second wire in communication with the tube. The first wire and the soldered mass are suspended within the tube. The tube, the first wire, the second wire, and the soldered mass are conductive. The first wire and the second wire are electrically connected to a seismic recorder. Contact between the soldered mass and an interior wall of the tube closes an electrical circuit between the seismic recorder and the tube.

(52) **U.S. Cl.**
CPC **G01V 1/06** (2013.01); **G01V 1/162** (2013.01); **G01V 1/16** (2013.01); **G01V 1/181** (2013.01)

(58) **Field of Classification Search**
CPC G01V 1/16; G01V 1/18; G01V 1/181
USPC 367/178–179
See application file for complete search history.

4 Claims, 3 Drawing Sheets

Side View Entire Module



Drawing References

- A.) Outer module tube or hull. Can be of aluminum, titanium, brass, ect. Can be of variable length or outer diameter.
- B.) Inner air filled copper tube.
- C.) Two inline tinned copper wires, for contact closure. One wire is wrapped around or along the inner copper tube. The other wire runs down and through the center of the tube and holds the soldered mass. This soldered mass will cause a momentary contact closure when the outer hull senses an impact or vibration.
- D.) Foam or silicon packing media.
- E.) Soldered Mass.