

[54] **BALLISTIC IMPACT SENSING AND DISPLAY SYSTEM**

[76] Inventor: **Barry R. Springer**, 9380 Saddlemount Ct., Springfield, Va. 22153

[21] Appl. No.: **113,399**

[22] Filed: **Jan. 18, 1980**

[51] Int. Cl.<sup>3</sup> ..... **G01S 5/18**

[52] U.S. Cl. .... **367/127; 273/372; 367/906**

[58] Field of Search ..... **273/372; 367/111, 117, 367/127, 906, 907, 125**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

- 2,934,346 4/1960 Mongello ..... 273/372
- 3,707,699 12/1972 Sanctuary ..... 367/127
- 3,778,059 12/1973 Rohrbaugh et al. .... 367/906

Primary Examiner—Richard A. Farley

[57] **ABSTRACT**

An improved ballistic impact sensing and display system is provided for use in conjunction with land or water ordnance ranges. A plurality of sensors placed around the target area detect the shock wave created by the impact or passage of the ballistic projectile. The sensors drive electronic timing means which record the time intervals between activation of the sensors by the propagating shock wave. Storage registers within the timing means drive a gridwork of display buses arranged along hyperbolic curves. A matrix of indicators bridging the points of intersection of the hyperbolic buses display the compartment within the target area in which the impact occurred. Additional indicators around the periphery of the matrix of indicators display the sector by which a projectile passed if it missed the target area.

10 Claims, 4 Drawing Figures

