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Moody

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[54] PROJECTILE LAUNCHER

[75] Inventor: **Paul E. Moody**, Barrington, R.I.

[73] Assignee: **The United States of America as represented by the Secretary of the Navy**, Washington, D.C.

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[52] U.S. Cl. **124/22; 124/17**

[58] Field of Search **124/17, 20.1, 20.3, 124/21, 22**

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Primary Examiner—John A. Ricci
Attorney, Agent, or Firm—Michael J. McGowan; James M. Kasischke; Prithvi C. Lall

[57] ABSTRACT

A projectile launching apparatus has a barrel for supporting a projectile prior to and during launch. The barrel is defined by a breech end, a muzzle end and a longitudinal launch axis along which the projectile is launched. A length of elastomeric material is fixed at its ends to opposing sides of the barrel aft of the muzzle end. Linear actuators are aligned parallel to and on opposite sides of the barrel. A guide or pulley is mounted on each of the linear actuators for linear movement therewith to positions forward of the ends of the elastomeric material. Third and fourth guides or pulleys are fixed by a frame such that the fourth pulley is positioned aft of the third pulley along the longitudinal launch axis. The elastomeric material is led along a path from one fixed end, about the first pulley, between the third and fourth pulleys, and about the second pulley to where the elastomeric material terminates at its other fixed end. When the frame is drawn toward the breech end of the apparatus, the third pulley and the fourth pulley are simultaneously drawn towards the breech end to stretch the elastomeric material. The stretched elastomeric material creates the potential for accelerating the projectile towards the muzzle end for a projectile placed forward of the third pulley.

13 Claims, 5 Drawing Sheets

