

A RECOIL REDUCING ELECTROMAGNET SYSTEM FOR FIREARMS

Abstract of the Disclosure

An electromagnetic system coupled to a firearm is described. The firearm has a bolt moveable between a forward position and a backward position. The electromagnetic system comprises a first electromagnet unit comprising a conducting coil and a magnet, wherein the magnet is coupled to the bolt, and wherein the conducting coil is configured to generate a magnetic field that opposes a movement of the bolt from the forward position to the backward position. The electromagnetic system further comprises a second electromagnet unit comprising a generator coil, a generator magnet, and a connector connecting the generator magnet to the bolt such that movement of the bolt causes movement of the generator magnet, wherein the movement of the generator magnet is configured to induce a current in the generator coil. The electromagnetic system further comprises a power source in electrical connection with the conducting coil and the generator coil, wherein the power source is configured to receive induced current from the generator coil, and wherein the power source is configured to provide electric current to the conducting coil in order to facilitate generation of the magnetic field.