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(54) Title: BI-STABLE ELECTROMAGNETIC RELAY WITH X-DRIVE MOTOR

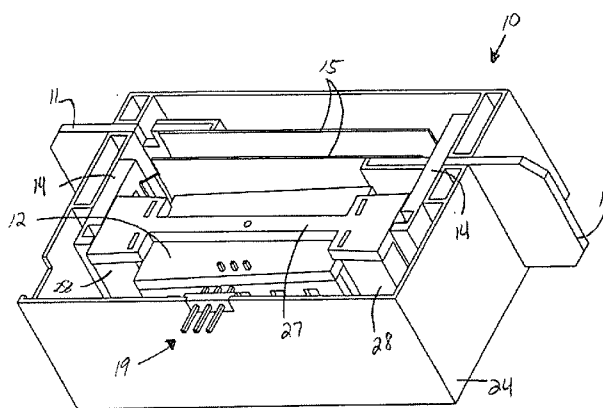


FIG. 1

(57) Abstract: An electromagnetic relay assembly comprises a rotatable electromagnetic coil assembly, first and second pairs of opposed permanent magnets, and a switch assembly. The coil assembly comprises a coil, a core, and a rotatable coil housing. The coil is wound around the core. The core comprises opposed core termini, and the coil housing has an axis of rotation orthogonal to the coil axis. The magnet pairs are fixedly positioned adjacent the core termini such that the core termini are respectively displaceable intermediate the magnet pairs. The coil operates to create a magnetic field directable through the core for imparting coil housing rotation about the axis of rotation via attraction to the positioned/anchored magnets. The core termini displace linkage arms, and the linkage arms actuate contact-spring assemblies of the switch assembly intermediate open and closed positions.

