Magnetically actuated micro-electro-mechanical capacitor switches in laminate

ABSTRACT

Magnetically actuated micro-electro-mechanical capacitor switches in laminate are disclosed. According to one embodiment, an apparatus comprises a first layer comprising a coil and magnetic element, the magnetic element made from one of nickel and iron; a second layer comprising a flexible member, wherein a permanent magnet is attached to the flexible member; a conductive plate having an insulating dielectric coating, the conductive plate attached to one of the flexible member or a magnet; and a third layer comprising a transmission line and magnetic material, wherein the transmission line comprises one or more of a signal conductor and one or more ground conductors in near proximity.