

ABSTRACT OF THE DISCLOSURE

Levitation and Propulsion Unit -2 (LPU-2) is a thrust generating device able to generate resultant force to create motion without mass flow and/or momentum exchange. This thrust generating device comprises of one or two rapid action and high driving force electromagnet moving magnet linear actuators. Each electromagnet comprises of high flux density permanent magnet dispersed outside the stator coil to minimize coil size, current to coil, heat from coil, and to maximize magnetic flux interaction at both ends of an energized stator coil with both magnets to create attraction and repulsion forces in one phase of a plunger cycle. This enable rapid action and high driving force needed in this Levitation and Propulsion Unit -2 (LPU-2) device. Through regulation and systematic control of current to each electromagnet, the device is able to generate resultant force with minimum moving parts.