

ABSTRACT

The method of assembling a pick-up actuator includes assembling a lens holder assembly to a base unit creating a magnetic gap between complementary electro-magnetic components of the lens holder assembly and the base unit,

5 disposing a quantity of a volatile magnetic fluid or a low viscosity oil-based magnetic fluid into the magnetic gap created between complementary electro-magnetic components of a lens holder assembly and a base unit, fixing resilient support members between the lens holder assembly and the base unit. The optical pick-up actuator includes a lens holder assembly, a base unit, resilient

10 support members connecting the lens holder assembly and the base unit, an electro-magnetic drive system, and a volatile magnetic fluid or a low viscosity oil-based magnetic fluid.