

A Hall low power engine has a circular discharge chamber formed with walls of hollow anode and pole tips, magnetic system with at least two sources of magneto-motive force, magnetic conduit, outer and inner magnetic poles and cathode-compensator installed downstream of outlet section of discharge chamber. Between the hollow anode and parts of magnetic system an electric screen is placed, this is made of metal net, at that outer surface of cathode at side of electric screen has artificial roughness formed by means of cutting threading with triangle profile with profile angle 60° and covered with layer of oil black, and all the inner surfaces of the anode and covered with polished nickel.