

The invention relates to internal combustion engines, namely to exhaust gas cleaning devices that can be used in mechanical engineering.

The device, according to the first embodiment, comprises a settling chamber (1), in which is placed a precipitation electrode (2), made of a metal strip in the form of spirals placed in one another, with the upper edge bent up to 1 cm inward the spiral. Above the chamber (1) is fixed a hemispherical receiving chamber (6) with exhaust gas inlet (3) and outlet (4) branch pipes. In the outlet branch pipe (4) is fixed a lead-in electric insulator (7), the free end of which is made with an oblique surface. At the entrance into the insulator (7) is fixed a corona-forming electrode (11), made in the form of a metal ring, the lower edge of which is made chamfered inside the ring at an angle of 45°. The electrodes (2, 11) are spaced apart from each other and connected to a power supply (5) with the possibility of forming an electron wind. The insulator (7) is made with the possibility of directing the flow of exhaust gases perpendicular to the electron wind. The bottom of the settling chamber (1) communicates with an exhaust gas recirculation system, and the receiving chamber (6) communicates with a cleaning liquid tank (17) through valves (15, 18).

The device, according to the second embodiment, comprises a receiving chamber in the form of a hyperboloid, closed with a cylindrical cover, and a lead-in electric insulator, made in the form of a cylinder with the possibility of directing the flow of exhaust gases along the electron wind.

Claims: 2

Fig.: 2

