## a 2005 0163

The invention relates to the field of environmental protection and may be used for air ionization, as well as of fuel gases before mixing thereof with the view of providing the complete combustion of the mixture and reduction of the quantity of toxic agent ejections in the atmosphere.

The device for gas ionization includes a hollow cylindrical electrode 1, the inner surface of which is covered with a layer 21 of electrical insulating material, and, coaxially placed therein, an inner electrode, containing a central rod electrode 9 and electrodes 8, made in the form of wires, the ends of which are uniformly fixed into two disks 7 and 10, one of which is made of current-conducting material and the other – of electrical insulting material, at the same time the central electrode 9 is earthed by means of a variable resistance 15. Novelty consists in that the device additionally contains, mounted between the hollow 1 and inner electrodes, a cylindrical electrode 17, the wall of which is made reticular.

Claims: 1 Fig.: 1

