

The invention relates to the environmental protection.

Summary of the invention consists in that it is proposed a process for reduction of nitrogen and sulphur oxides ejections from the flue gases, consisting in the ionization by collision of the flue gas flow in an electric field of the pulsating corona discharge, wherein it is concomitantly applied the alternating electric field with the effective intensity of 5...30 kV/cm, and with a frequency, determined by the following formula:

$$f = (1,10 \dots 1,25) \cdot \frac{K_{\max} \bar{E}}{l},$$

where f is the frequency of the alternating electric field, Hz ;

K_{\max} - the maximum value of ion mobility, participating in the formation of active radicals, $m^2/(V \cdot S)$;

\bar{E} - effective intensity of the alternating electric field, V/m ;

l - electrode spacing, creating the alternating electric field, m ,

with the formation of active radicals, oxidation of nitrogen and sulphur oxides with active radicals, with obtaining as a result of hydrolysis reaction of the nitric and sulphuric acids and neutralization of acids with ammonia.

Claims: 1