

Title (en)

REDUCTION OF NITROGEN- AND CARBON-BASED POLLUTANTS.

Title (de)

VERMINDERUNG DER STICKSTOFF- UND KOHLENSTOFFHALTIGEN SCHADSTOFFE.

Title (fr)

REDUCTION DE SUBSTANCES POLLUANTES A BASE D'AZOTE ET DE CARBONE.

Publication

EP 0237568 A4 19890124 (EN)

Application

EP 86906208 A 19861003

Priority

- US 78482785 A 19851004
- US 81153285 A 19851220
- US 90667186 A 19860910

Abstract (en)

[origin: WO8702023A1] A process for reducing nitrogen oxides in an effluent from the combustion of a carbonaceous fuel under oxygen-rich conditions which minimize the production of carbon-based pollutants. A dispersion of a solution comprising at least one additive compound selected from the group consisting of guanidine, guanidine carbonate, biguanide, guanylurea sulfate, melamine, dicyandiamide, calcium cyanamide, biuret, 1,1'-azobisformamide, methylol urea, methylol urea-urea condensation product, dimethylol urea, methyl urea, dimethyl urea, and hexamethylenetetramine is injected into an effluent at a temperature above 1300$^{\circ}\text{F}$, and preferably above 1500$^{\circ}\text{F}$. The concentration of the additive compound in solution, the temperature of the effluent at the point of injection, and the size of the droplets in the dispersion, are selected to provide a reduction in nitrogen oxides. When urea is employed in combination with hexamethylenetetramine, the effectiveness of the urea is enhanced, particularly at temperatures of 1800$^{\circ}\text{F}$ and below.

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IPC 8 full level

B01D 53/56 (2006.01)

CPC (source: EP)

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- No relevant documents have been disclosed.
- See references of WO 8702023A1

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