

Title (en)

POLLUTION CONTROL METHOD AND DEVICE ENABLING COMPLETE REMOVAL OF NITROGEN OXIDES FROM COMBUSTION GASES IN COMBUSTION PROCESSES

Title (de)

METHODE UND VORRICHTUNG ZUR HERABSETZUNG DER UMWELTVERSCHMUTZUNGS WELCHE DIE VOLLSTÄNDIGE ENTFERNUNG VON STICKOXYDEN AUS VERBRENNUNGSGASEN IN VERBRENNUNGSVERFAHREN ERMÖGLICHEN

Title (fr)

PROCEDE ET DISPOSITIF POUR LA DEPOLLUTION DES PROCESSUS DE COMBUSTION PAR L'ELIMINATION TOTALE DES OXYDES D'AZOTE DES GAZ DE COMBUSTION

Publication

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Application

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Abstract (en)

[origin: WO9524959A1] Pollution from combustion processes may be controlled by completely removing nitrogen oxides. Combustion processes are widely used, e.g. in internal combustion engines, turbine engines, jet engines, thermal power stations, steel plants, fusion piercing, gas generators, cement and lime production, district heating stations, common heating stoves, etc. The invention comprises replacing the air needed to burn fuels with a synthetic mixture of discharged combustion gases and pure oxygen in proportions suitable for high efficiency combustion. The mixture is prepared more readily than in other known methods by separating a continuous stream of air using a centrifugal device under suitable conditions. The device consists of a sectional stator frame (1, 2, 3 and 4), an air intake turbine (5) and a centrifugal separator rotor consisting of an air distributor (6), frusto-conical surfaces (7 and 8) and members with circular slots (9, 10) for separating oxygen from nitrogen, by means of the difference in densities in the ultracentrifugal field, through outlets corresponding to each gas flow path.

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