

Title (en)
APPARATUS AND METHOD FOR REDUCING NO_x, CO AND HYDROCARBON EMISSIONS WHEN BURNING GASEOUS FUELS

Title (de)
VORRICHTUNG UND VERFAHREN ZUR REDUZIERUNG NO_x, CO UND KOHLENWASSERSTOFFEMISSIONEN BEI DER VERWENDUNG VON GASFÖRMIGEN BRENNSTOFFEN

Title (fr)
APPAREIL ET PROCEDE DESTINES A REDUIRE LES REJETS DE NO_x, DE CO ET D'HYDROCARBURES LORS DE LA COMBUSTION DE COMBUSTIBLES GAZEUX

Publication
EP 0707698 A1 19960424 (EN)

Application
EP 94923414 A 19940712

Priority

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- US 9297993 A 19930716
- US 18858694 A 19940121

Abstract (en)
[origin: WO9502789A1] A forced draft burner apparatus for burning a gaseous fuel while producing low levels of NO_x, CO and hydrocarbon emissions; comprising: an outer shell (8) including a windbox and a constricted tubular section (13) in fluid communication therewith; a generally cylindrical body (16) mounted in said shell coaxially with and spaced inwardly from said tubular section; an annular flow channel being defined between said body and the inner wall of said tubular section, said channel constituting a throat (14) for oxidant gases provided thereto from said windbox, and having a downstream outlet end for said gases; means for providing a flow of said oxidant gases to said throat from said windbox; a divergent quarl (28) being adjoined to said outlet end of said throat and defining a combustion zone for said burner; a plurality of curved axial swirl vanes (20) being mounted in said annular flow channel to impart swirl to said oxidant gases flowing downstream in said throat; fuel gas injection means being provided in said annular flow channel proximate to said swirl vanes for injecting said gas into the flow of oxidant gases at a point upstream of said outlet end.

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