

FUEL DILUTION METHODS AND APPARATUS FOR NO_x REDUCTION

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Abstract of the Disclosure

Methods and apparatus for reducing the content of nitrogen oxides in the flue gases produced by the combustion of fuel gas and combustion air introduced into a burner connected to a furnace are provided. The methods basically comprise the steps of conducting the combustion air to the burner, providing a chamber outside of the burner and furnace for mixing flue gases from the furnace with the fuel gas, 10 discharging the fuel gas in the form of a fuel jet into the mixing chamber so that flue gases from the furnace are drawn into the chamber and mixed with and dilute the fuel gas therein and conducting the resulting mixture of flue gases and fuel gas to the burner wherein the mixture is combined with the combustion air and burned in the 15 furnace.

Figure 2