Title (en)

Low NOx burner

Title (de)

Brenner mit niedriger NOx-Produktion

Title (fr)

Brûleur à faible production de NOx

Publication

EP 0486169 B1 19980121 (EN)

Application

EP 91309796 A 19911023

Priority

US 61458190 A 19901116

Abstract (en)

[origin: EP0486169A2] A method of operating a burner to reduce the NOx emissions produced thereby is disclosed. Air and gas are premixed in a manner such that excess air exists in the resulting mixture and the velocity of the mixture is increased as it passes through the burner. By increasing the velocity of the air/gas mixture, the "residence time" associated with the formation of the flame is decreased, i.e., the combustion gases are in the reaction zone of the flame for a significantly shorter period of time, reducing the production of NOx. In order to prevent the flame from "lifting-off" the burner because of the high velocity of the air/gas mixture, flame stabilizing devices or techniques are utilized resulting in a high heat flux and low NOx production. <IMAGE>

IPC 1-7

F23D 14/74

IPC 8 full level

F23D 14/26 (2006.01); **F23D 14/74** (2006.01)

CPC (source: EP)

F23D 14/26 (2013.01); **F23D 14/74** (2013.01)

Cited by

NL9301980A; CN117490064A; US6893251B2; WO9509326A1; WO9313360A1; US6846175B2; US6986658B2; US6890172B2; US6866502B2; US7476099B2; US6893252B2; US6877980B2; US7322818B2; US6884062B2; US9388983B2; US6902390B2; US6890171B2; US7025587B2; US6881053B2; US6869277B2; US6887068B2

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DOCDB simple family (application)

EP 91309796 A 19911023; CA 2054014 A 19911023; DE 69128768 T 19911023; JP 32510291 A 19911114