

Title (en)

Method and apparatus for reduced NOx emissions from coal furnaces.

Title (de)

Verfahren und Vorrichtung zur Verminderung des NOx-Gehaltes in Kohlenofenabgasen.

Title (fr)

Procédé et appareil pour réduire la teneur en NOx dans les gaz d'échappement des fours à charbon.

Publication

EP 0225157 A2 19870610 (EN)

Application

EP 86309192 A 19861125

Priority

- AU 6573286 A 19861126
- AU PH358085 A 19851126

Abstract (en)

The present invention discloses a method of, and apparatus for, reducing NOx emissions from black coal fired updraught furnaces (20). The pulverised coal is entrapped in the "primary air" and separated into two streams, one fuel rich (13) and one fuel lean (15). These streams are introduced into the furnace (20) via a corresponding burner(s) (14,16) with the burner(s) (16) for the fuel lean stream (15) being located at an elevation above the burner(s) (14) for the fuel rich stream (13). The apparatus comprises a concentrator (3) positioned between the substantially conventional mill (1) and furnace (20) and arranged to split the primary air and entrapped fuel into the two abovementioned streams. The concentrator preferably includes a classifier (8) and takes the form of a swirl generator (5) and radially positioned outlets which make use of the action of centrifugal force on the "primary air" and entrapped coal particles to bring about the desired separation.

IPC 1-7

F23K 3/02; F23C 6/02

IPC 8 full level

F23C 6/04 (2006.01); **F23K 3/02** (2006.01)

CPC (source: EP)

F23C 6/047 (2013.01); **F23K 3/02** (2013.01); **F23C 2201/101** (2013.01); **F23C 2201/301** (2013.01); **F23K 2201/10** (2013.01)

Cited by

FR2679980A1; FR2658589A1; EP0747629A4; EP0385499A3; EP0428932A3; US5429060A; EP2993400A1; CN105387455A; US10012382B2

Designated contracting state (EPC)

AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)

EP 0225157 A2 19870610; EP 0225157 A3 19870930

DOCDB simple family (application)

EP 86309192 A 19861125