

Title (en)

AN ADVANCED OVERFIRE AIR SYSTEM FOR NO_x CONTROL

Title (de)

OBERLUFTZUFUHRSYSTEM FÜR DIE ÜBERWACHUNG DER NO_x-EMISSIONEN

Title (fr)

SYSTEME PERFECTIONNE A AIR DE SURCOMBUSTION PERMETTANT DE CONTROLER LES EMISSIONS DE NO_x

Publication

EP 0554254 B1 19960821 (EN)

Application

EP 91912984 A 19910624

Priority

- US 9104440 W 19910624
- US 60717790 A 19901031

Abstract (en)

[origin: WO9208078A1] An advanced overfire air system for NO_x control designed for use in a firing system of the type that is particularly suited for use in fossil fuel-fired furnaces and a method of operating such a furnace which embodies an advanced overfire air system. The advanced overfire air system for NO_x control includes multi-elevations of overfire air compartments consisting of a plurality of close coupled overfire air compartments (84, 86) and a plurality of separated overfire air compartments (94, 96, 98). The close coupled overfire air (84, 86) compartments are supported at a first elevation in the furnace (10) and the separated overfire air compartments (94, 96, 98) are supported at a second elevation in the furnace (10) so as to be spaced from but aligned with the close coupled overfire air compartments (84, 86). Overfire air is supplied (106, 92) to both the close coupled overfire air compartments (84, 86) and the separated overfire air compartments (94, 96, 98) such that there is a predetermined most favorable distribution of overfire air therebetween, such that the overfire (106) air exiting from the separated overfire air compartments (94, 96, 98) establishes a horizontal "spray" or "fan" distribution (124, 126, 128) of overfire air over the plan area of the furnace, and such that the overfire air (106) exits from the separated overfire air compartments (94, 96, 98) at velocities significantly higher than the velocities employed heretofore.

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WO 9208078 A1 19920514; AU 646677 B2 19940303; AU 8108691 A 19920526; BR 9107060 A 19930914; CA 2091341 A1 19920501; CA 2091341 C 19951205; CS 327791 A3 19920513; DE 69121579 D1 19960926; EP 0554254 A1 19930811; EP 0554254 B1 19960821; ES 2092573 T3 19961201; FI 931941 A0 19930429; FI 931941 A 19930429; HU 9300808 D0 19930628; HU T65491 A 19940628; JP 2731794 B2 19980325; JP H05507345 A 19931021; KR 930702645 A 19930909; KR 970009483 B1 19970613; MX 9100537 A 19920605; YU 141991 A 19951003; ZA 915500 B 19920429

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