

Title (en)

Process and modular system to heat an industrial furnace with regenerator burners

Title (de)

Verfahren zum Beheizen eines Industrieofens und Regenerator-Brenner-Modulsystem hierfür

Title (fr)

Procédé et système modulaire de chauffage d'un four industriel avec des brûleurs à régénérateur

Publication

EP 0797063 A3 19990421 (DE)

Application

EP 97104043 A 19970311

Priority

- DE 19610710 A 19960319
- DE 19708550 A 19970304

Abstract (en)

[origin: EP0797063A2] The system is for a fuel-heated industrial furnace, particularly one melting metal. It uses regenerators (3r) and burners (4) through which hot exhaust gas (7r) and cold combustion air (7) flow alternately. Two or more regenerator-burner modules (3) are changed over independently to control the operation between burning and regeneration, the exhaust gas being exhausted in the latter setting. The ratio between the numbers of the firing burners and the exhausted ones can be variable dependent on the temperature of the furnace atmosphere and the temperatures measured in different furnace sectors, and the timing of the operations can be fixed or variable.

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F27D 17/00; F27B 3/20

IPC 8 full level

F27B 3/26 (2006.01)

CPC (source: EP US)

F27B 3/263 (2013.01 - EP US)

Citation (search report)

- [A] US 4923391 A 19900508 - GITMAN GREGORY M [US]
- [A] WO 9606954 A1 19960307 - AMERICAN COMBUSTION INC [US]
- [A] GB 2056040 A 19810311 - TOLEDO ENG CO
- [A] DATABASE WPI Week 9526, Derwent World Patents Index; AN 95-196952, XP002093977

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Designated contracting state (EPC)

AT CH DE ES FR GB IT LI NL SE

DOCDB simple family (publication)

EP 0797063 A2 19970924; EP 0797063 A3 19990421; NO 971255 D0 19970318; NO 971255 L 19970922; US 5876197 A 19990302; US 6250917 B1 20010626

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EP 97104043 A 19970311; NO 971255 A 19970318; US 19367498 A 19981117; US 82016897 A 19970319