Title (en)

OXYGEN-FUEL BURNER WITH LANCING CAPABILITY AND METHOD OF PRODUCING STEEL.

Title (de)

BRENNSTOFF-OXY-BRENNER ZUM LANZENFRISCHEN UND VERFAHREN ZUR HERSTELLUNG VON STAHL.

Title (fr)

BRULEUR A OXYGENE-COMBUSTIBLE A CAPACITE D'OXYCOUPAGE ET PROCEDE DE PRODUCTION D'ACIER.

Publication

EP 0112393 A4 19841120 (EN)

Application

EP 83902476 A 19830621

Priority

- US 39160182 A 19820624
- US 49324783 A 19830510

Abstract (en)

[origin: WO8400176A1] An oxygen-fuel burner of the rocket burner type includes a graphite burner block (11) for direct exposure to the interior of a furnace, and a cylindrical combustion chamber (115) formed through the hot face of the burner block and extending into the burner block. An oxygen supply conduit (15) delivers oxygen to the combustion chamber along the center line of the combustion chamber and fuel supply ducts (109 and 110) deliver fuel to the combustion chamber at the concave surface of the combustion chamber, whereby fuel surrounds the stream of oxygen. Excess oxygen can be supplied by the nozzle (82) to provide more oxygen than consumed by the flame, whereby the excess oxygen is preheated as it passes through the flame and can be used in a lancing process in the refining of steel.

IPC 1-7

C21B 5/02; F23D 11/36

IPC 8 full level

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CPC (source: EP)

C21C 5/5217 (2013.01); **F23D 14/32** (2013.01); **F23M 5/025** (2013.01); **F27B 3/20** (2013.01); Y02P 10/20 (2015.11)

Citation (search report)

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Designated contracting state (EPC)

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DOCDB simple family (publication)

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US 8300949 W 19830621; CA 430554 A 19830616; DK 91784 A 19840223; EP 83902476 A 19830621; ES 523585 A 19830623; ES 530206 A 19840301; IT 2176783 A 19830623; IT 2220083 U 19830623; NO 840694 A 19840223