

Title (en)

ARCHIMEDEAN SCREW FOR METALLURGICAL FURNACES, IN PARTICULAR FOR HEARTH FURNACES

Publication

EP 0259510 B1 19910123 (DE)

Application

EP 86112533 A 19860910

Priority

US 71931085 A 19850403

Abstract (en)

[origin: US4636127A] A countercurrent fluid cooled conveying screw is disclosed. Suitable for furnace applications, the screw includes an outer shaft spatially circumscribing an inner tube. A plurality of hollow, fluid cooled flights are affixed to the outer shaft and are in fluid flow communication with coolant coursing through the screw. The coolant is first directed through the flights and then back through the outer shaft before exiting through the inner tube.

IPC 1-7

C21B 13/10; **F27B 9/38**; **F27D 3/08**; **F28F 5/06**

IPC 8 full level

C21B 13/10 (2006.01); **F27B 9/16** (2006.01); **F27B 9/38** (2006.01); **F27D 3/08** (2006.01)

CPC (source: EP US)

C21B 13/105 (2013.01 - EP US); **F27B 9/16** (2013.01 - EP US); **F27B 9/38** (2013.01 - EP US); **F27D 3/08** (2013.01 - EP US)

Cited by

DE19543074C2; DE19529925A1; CN105300108A; CN105333737A; CN105300107A; CN107572199A

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

DE 3610490 A1 19861016; **DE 3610490 C2 19880331**; BR 8601447 A 19861209; EP 0259510 A1 19880316; EP 0259510 B1 19910123; IN 165587 B 19891125; US 4636127 A 19870113

DOCDB simple family (application)

DE 3610490 A 19860327; BR 8601447 A 19860401; EP 86112533 A 19860910; IN 702CA1986 A 19860923; US 71931085 A 19850403