

Title (en)
MEANS FOR INTRODUCING METAL IN A CONTINUOUS VERTICAL CASTING PLANT FOR CASTING METAL TUBES, IN PARTICULAR FROM CAST IRON

Publication
EP 0151723 B1 19880309 (FR)

Application
EP 84114695 A 19841203

Priority
FR 8400382 A 19840110

Abstract (en)
[origin: US4628987A] In the continuous ascending vertical casting of an iron tube T without the use of a core to form the hollow tube interior, the molten iron is contained in a crucible made up of a cooled tubular die 6, 7 and the base 1 of a syphon unit. The crucible comprises a coaxial central form 5 at least as high as the die, which creates with the latter an annular space for molten iron F. Such arrangement reduces the volume of molten iron in the crucible and thus results in considerable energy savings.

IPC 1-7
B22D 11/00; **B22D 11/14**

IPC 8 full level
B22D 18/04 (2006.01); **B22D 11/00** (2006.01); **B22D 11/04** (2006.01); **B22D 11/10** (2006.01); **B22D 11/14** (2006.01); **B22D 18/06** (2006.01)

CPC (source: EP KR US)
B22D 11/006 (2013.01 - EP US); **B22D 11/04** (2013.01 - KR); **B22D 11/145** (2013.01 - EP US)

Cited by
CN109513890A; DE3736956A1

Designated contracting state (EPC)
AT BE CH DE FR IT LI LU NL SE

DOCDB simple family (publication)
US 4628987 A 19861216; AT E32843 T1 19880315; AU 3756285 A 19850718; AU 580279 B2 19890112; BR 8500089 A 19850813; CA 1251614 A 19890328; CS 20185 A3 19960814; CZ 281600 B6 19961113; DD 229054 A5 19851030; DE 3469687 D1 19880414; EG 16950 A 19921130; EP 0151723 A1 19850821; EP 0151723 B1 19880309; ES 539430 A0 19861016; ES 8700100 A1 19861016; FI 77587 B 19881230; FI 77587 C 19890410; FI 850067 A0 19850107; FI 850067 L 19850711; FR 2557820 A1 19850712; FR 2557820 B1 19870507; GB 2160132 A 19851218; GB 2160132 B 19870930; GB 8431703 D0 19850130; IN 163782 B 19881112; JP H02169169 A 19900629; JP H0420698 B2 19920406; JP H0545345 B2 19930708; JP S60148656 A 19850805; KR 850005300 A 19850824; KR 900000785 B1 19900216; MX 162663 A 19910613; MY 100401 A 19900917; PL 143057 B1 19880130; PL 251490 A1 19850924; RO 90980 A 19870227; RO 90980 B 19870228; SK 20185 A3 19961106; SK 278335 B6 19961106; SU 1356954 A3 19871130; UA 5949 A1 19941229; YU 213584 A 19880831; YU 44481 B 19900831; ZA 8546 B 19850828

DOCDB simple family (application)
US 68723384 A 19841228; AT 84114695 T 19841203; AU 3756285 A 19850109; BR 8500089 A 19850109; CA 469628 A 19841207; CS 20185 A 19850110; DD 27245885 A 19850108; DE 3469687 T 19841203; EG 1285 A 19850109; EP 84114695 A 19841203; ES 539430 A 19850109; FI 850067 A 19850107; FR 8400382 A 19840110; GB 8431703 A 19841214; IN 1055MA1984 A 19841229; JP 26433184 A 19841214; JP 4290989 A 19890222; KR 840008199 A 19841221; MX 20383184 A 19841219; MY PI19880059 A 19880125; PL 25149085 A 19850109; RO 11725785 A 19850109; SK 20185 A 19850110; SU 3833357 A 19850109; UA 3833357 A 19850109; YU 213584 A 19841217; ZA 8546 A 19850103