

Title (en)
TAPPING TUBE

Title (de)
ABSTICHRÖHR

Title (fr)
TUBE DE COULEE

Publication
EP 1678333 B1 20070620 (DE)

Application
EP 05730742 A 20050416

Priority
• EP 2005004051 W 20050416
• DE 102004027440 A 20040604

Abstract (en)
[origin: US2007164491A1] The present invention relates to a tapping pipe for a metallurgical melting vessel, such as a converter or an arc furnace.

IPC 8 full level
C21C 5/46 (2006.01); **B22D 41/50** (2006.01); **F27B 1/21** (2006.01); **F27B 3/18** (2006.01); **F27D 3/15** (2006.01)

IPC 8 main group level
C21C (2006.01)

CPC (source: EP KR US)
B22D 41/50 (2013.01 - EP US); **C21C 5/46** (2013.01 - KR); **C21C 5/4653** (2013.01 - EP US); **F27B 1/21** (2013.01 - EP US);
F27B 3/18 (2013.01 - EP US); **F27D 3/1518** (2013.01 - EP US)

Cited by
EP2380681A4

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2007164491 A1 20070719; US 7556765 B2 20090707; AR 049903 A1 20060913; AT E365231 T1 20070715; AU 2005250081 A1 20051215;
AU 2005250081 B2 20080124; BR PI0511738 A 20080108; BR PI0511738 B1 20130924; CA 2562334 A1 20051215; CA 2562334 C 20100126;
CN 100429323 C 20081029; CN 1950523 A 20070418; DE 102004027440 B3 20050616; DE 502005000895 D1 20070802;
DK 1678333 T3 20070924; EA 008914 B1 20070831; EA 200602009 A1 20070629; EG 24432 A 20090621; EP 1678333 A2 20060712;
EP 1678333 B1 20070620; ES 2287912 T3 20071216; JP 2008501854 A 20080124; JP 4787244 B2 20111005; KR 100861849 B1 20081007;
KR 20070020275 A 20070220; MX PA06013067 A 20070214; NO 20064992 L 20061031; PE 20060119 A1 20060402; PL 1678333 T3 20071031;
PT 1678333 E 20070814; SI 1678333 T1 20071231; TW 200609357 A 20060316; TW I294464 B 20080311; WO 2005118889 A2 20051215;
WO 2005118889 A3 20060406; ZA 200609209 B 20080625

DOCDB simple family (application)
US 56816005 A 20050416; AR P050102280 A 20050603; AT 05730742 T 20050416; AU 2005250081 A 20050416; BR PI0511738 A 20050416;
CA 2562334 A 20050416; CN 200580014845 A 20050416; DE 102004027440 A 20040604; DE 502005000895 T 20050416;
DK 05730742 T 20050416; EA 200602009 A 20050416; EG NA2006001134 A 20061129; EP 05730742 A 20050416;
EP 2005004051 W 20050416; ES 05730742 T 20050416; JP 2007513714 A 20050416; KR 20067025506 A 20061204;
MX PA06013067 A 20050416; NO 20064992 A 20061031; PE 2005000629 A 20050603; PL 05730742 T 20050416; PT 05730742 T 20050416;
SI 200530061 T 20050416; TW 94117709 A 20050530; ZA 200609209 A 20061106