Title (en)

Continuous casting steel strip method

Title (de)

Bandgiessverfahren

Title (fr)

Möthode de coulée continue de bande méallique

Publication

EP 1029617 B2 20170104 (EN)

Application

EP 00300852 A 20000203

Priority

AU PP852599 A 19990205

Abstract (en)

[origin: EP1029617A2] In twin roll casting of steel strip, molten steel is introduced into the nip 16B between parallel casting rolls (16) to create casting pool (30) supported on casting surfaces (16A) of the rolls and the rolls are rotated to deliver solidified strip (20) downwardly from the nip. Casting surfaces (16A) are textured by a random pattern of discrete projections having pointed peaks and the strip is moved away from the casting pool at a speed of more than 60 meters per minute. In order to suppress chatter defects, the molten steel has a manganese content of less than 0.6% by weight and a silicon content in the range of 0.1 to 0.35% by weight. The random texture may be produced by grit blasting the casting surfaces on a substrate covered by a protective coating. Alternatively the texture may be produced by chemical deposition or electrodeposition of a coating onto a substrate to form the casting surfaces. <IMAGE>

IPC 8 full level

B22D 11/06 (2006.01); **B22D 11/00** (2006.01); **B22D 11/16** (2006.01)

CPC (source: EP KR)

B22D 11/00 (2013.01 - KR); **B22D 11/0651** (2013.01 - EP)

Citation (opposition)

Opponent :

- US 5807444 A 19980915 - PARADIS PHILIPPE [FR], et al
- EP 0796685 A1 19970924 - USINOR SACILOR [FR], et al
- EP 0572681 A1 19931208 - NIPPON STEEL CORP [JP]
- EP 0706845 A1 19960417 - NIPPON STEEL CORP [JP]
- EP 0471608 B1 19960807 - USINOR SACILOR [FR], et al
- JP H091209 A 19970107 - NIPPON STEEL CORP
- JP H08165523 A 19960625 - NIPPON STEEL CORP
- WO 0007753 A1 20000217 - ISHIKAWAJIMA HARIMA HEAVY IND [JP], et al

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Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Designated extension state (EPC)

AL LT LV MK RO SI

DOCDB simple family (publication)

EP 1029617 A2 20000823; **EP 1029617 A3 20010110**; **EP 1029617 B1 20040107**; **EP 1029617 B2 20170104**; AT E257415 T1 20040115; AU 1491300 A 20000810; AU 761348 B2 20030605; AU PP852599 A0 19990304; BR 0000263 A 20000905; CA 2302476 A1 20000805; CA 2302476 C 20090120; CN 1263804 A 20000823; CN 1273243 C 20060906; DE 60007570 D1 20040212; DE 60007570 T2 20041104; DE 60007570 T3 20170524; ID 26785 A 20010208; JP 2000225447 A 20000815; JP 4734496 B2 20110727; KR 100649389 B1 20061124; KR 20000057923 A 20000925; MY 122670 A 20060429; NZ 502396 A 20010330; TW 464565 B 20011121; ZA 200000294 B 20001227

DOCDB simple family (application)

EP 00300852 A 20000203; AT 00300852 T 20000203; AU 1491300 A 20000204; AU PP852599 A 19990205; BR 0000263 A 20000204; CA 2302476 A 20000131; CN 00101896 A 20000204; DE 60007570 T 20000203; ID 20000092 D 20000204; JP 2000027835 A 20000204; KR 20000005443 A 20000203; MY PI20000168 A 20000119; NZ 50239600 A 20000118; TW 89100898 A 20000120; ZA 200000294 A 20000124