

Title (en)

ELECTRO-MAGNETIC PLUGGING MEANS FOR HOT DIP COATING POT

Title (de)

ELEKTROMAGNETISCHER VERSCHLUSS FÜR HEISSTAUCHBESCHICHTUNGSTOPF

Title (fr)

BOUCHON ELECTROMAGNETIQUE POUR CUVE D'ENDUCTION A CHAUD PAR TREMPAGE

Publication

EP 0776382 B1 20010530 (EN)

Application

EP 95925672 A 19950726

Priority

- AU 9500458 W 19950726
- AU PM713394 A 19940728
- AU PN256995 A 19950424

Abstract (en)

[origin: WO9603533A1] A hot dip coating pot (2) having a strip inlet passage (3) and electro-magnetic plugging means to prevent leakage of bath liquid from the pot through that passage, wherein: the plugging means comprises two magnetic field generators (7) disposed one on each side of the passage; each generator projects an oscillating magnetic field into the passage from at least two poles of opposite polarity that are adjacent the passage and spaced apart in the through direction of the passage; the said at least two poles of each generator are respectively in substantial alignment with the corresponding poles of the other in the transverse direction of the passage; the magnetic fields projected by the generators have flux patterns which are substantially mirror images with reference to a plane of reflection coinciding with a centre plane of the passage; and both generators operate at a frequency of more than seven kiloHertz. When no strip is present the fields combine and extend transversely of the passage. When a strip is present the fields not only plug the passage but also provide restraining forces to prevent deviation of the strip from its intended pass line.

IPC 1-7

C23C 2/00; **C23C 2/36**; **C23C 2/40**; **C23C 2/24**

IPC 8 full level

C23C 2/00 (2006.01); **C23C 2/24** (2006.01)

CPC (source: EP KR)

B05C 1/003 (2013.01 - KR); **B05C 11/101** (2013.01 - KR); **C23C 2/003** (2013.01 - KR); **C23C 2/24** (2013.01 - EP KR); **C23C 2/40** (2013.01 - KR)

Cited by

CN108113474A

Designated contracting state (EPC)

AT DE ES GB LU NL SE

DOCDB simple family (publication)

WO 9603533 A1 19960208; AT E201718 T1 20010615; BR 9408603 A 19971118; BR 9510681 A 19991026; CA 2196056 A1 19960208; CA 2196056 C 20060131; CN 1147616 C 20040428; CN 1154721 A 19970716; DE 69521135 D1 20010705; DE 69521135 T2 20020307; EP 0776382 A1 19970604; EP 0776382 A4 19990210; EP 0776382 B1 20010530; ES 2160170 T3 20011101; FI 119326 B 20081015; FI 970334 A0 19970127; FI 970334 A 19970127; IN 191638 B 20031206; JP 3811817 B2 20060823; JP H10502972 A 19980317; KR 100337725 B1 20020926; KR 970704902 A 19970906; NZ 289790 A 19980527

DOCDB simple family (application)

AU 9500458 W 19950726; AT 95925672 T 19950726; BR 9408603 A 19940726; BR 9510681 A 19950726; CA 2196056 A 19950726; CN 95194400 A 19950726; DE 69521135 T 19950726; EP 95925672 A 19950726; ES 95925672 T 19950726; FI 970334 A 19970127; IN 1383DE1995 A 19950724; JP 50531996 A 19950726; KR 19970700518 A 19970127; NZ 28979095 A 19950726