

Title (en)
METAL STRIP STABILIZER, METHOD FOR MANUFACTURING HOT DIPPED METAL STRIP, AND METAL STRIP

Title (de)
BLECHSTREIFENSTABILISATOR, VERFAHREN ZUR HERSTELLUNG EINES FEUERVERZINKTEN BLECHSTREIFENS UND BLECHSTREIFEN

Title (fr)
STABILISATEUR DE BANDE DE MÉTAL, PROCÉDÉ DE FABRICATION D'UNE BANDE DE MÉTAL PAR IMMERSION À CHAUD ET BANDE DE MÉTAL

Publication
EP 2743368 A4 20150408 (EN)

Application
EP 12821917 A 20120807

Priority
• JP 2011174204 A 20110809
• JP 2012168154 A 20120730
• JP 2012070115 W 20120807

Abstract (en)
[origin: EP2743368A1] Provided is a metal strip stabilizer with which loss in vibration suppression performance caused by an induced current between a vibration suppression coil and a position correction coil may be prevented. The metal strip stabilizer according to the present invention includes: a non-contact displacement sensor that measures displacement of a metal strip 2 during online running; a control unit 5 that outputs a vibration suppression signal and a position correction signal after a signal is input from the non-contact displacement sensor; a vibration suppression coil 7a that generates a magnetic force in accordance with the vibration suppression signal output from the control unit 5; a position correction coil 7b that generates a magnetic force in accordance with the position correction signal output from the control unit 5, a winding number thereof being larger than a winding number of the vibration suppression coil 7a; a core 6 around which the vibration suppression coil 7a and the position correction coil 7b are wound concentrically and that induces the magnetic force generated by the vibration suppression coil 7a and the position correction coil 7b to the metal strip 2; and a counter induced current coil 13a that is disposed in series to an electric circuit supplying electricity to the position correction coil 7b.

IPC 8 full level
C23C 2/40 (2006.01); **B65H 23/00** (2006.01); **C23C 2/00** (2006.01); **F16F 15/02** (2006.01)

CPC (source: EP US)
B65H 23/00 (2013.01 - EP); **C23C 2/00344** (2022.08 - EP US); **C23C 2/0038** (2022.08 - EP US); **C23C 2/40** (2013.01 - EP); **C23C 2/51** (2022.08 - EP US); **C23C 2/5245** (2022.08 - EP US); **B65H 2557/2644** (2013.01 - EP); **B65H 2557/50** (2013.01 - EP); **B65H 2601/524** (2013.01 - EP); **B65H 2701/173** (2013.01 - EP)

Citation (search report)
• [XA] JP 2009275280 A 20091126 - JFE STEEL CORP
• [A] WO 2006021437 A1 20060302 - EWANDTE FORSCHUNG GMBH BETR SF [DE], et al
• [AD] JP H0262355 A 19900302 - KAWASAKI STEEL CO
• See references of WO 2013022004A1

Cited by
AU2016374757B2; US10876194B2

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2743368 A1 20140618; EP 2743368 A4 20150408; EP 2743368 B1 20160601; CN 103717778 A 20140409; CN 103717778 B 20150429; JP 2013053367 A 20130321; JP 5263433 B2 20130814; KR 101470906 B1 20141209; KR 20140035516 A 20140321; WO 2013022004 A1 20130214

DOCDB simple family (application)
EP 12821917 A 20120807; CN 201280038441 A 20120807; JP 2012070115 W 20120807; JP 2012168154 A 20120730; KR 20147003123 A 20120807