

Title (en)

METHOD AND MEANS FOR NON-CONTACT MEASURING THICKNESS OF NON-METAL COATING ON SURFACE OF METAL MATRIX

Title (de)

VERFAHREN UND VORRICHTUNG ZUR KONTAKTFREIEN MESSUNG DER DICKE EINER METALLFREIEN BESCHICHTUNG AUF EINER METALLMATRIXOBERFLÄCHE

Title (fr)

PROCÉDÉS ET MOYENS DE MESURER SANS CONTACT L'ÉPAISSEUR D'UN REVÊTEMENT NON MÉTALLIQUE SUR UNE SURFACE DE MATRICE MÉTALLIQUE

Publication

EP 2406579 A4 20170215 (EN)

Application

EP 10751099 A 20100312

Priority

- SE 2010050278 W 20100312
- SE 0950148 A 20090312

Abstract (en)

[origin: WO2010104466A1] The present invention relates to a material thickness of a web (1) of non-magnetic material applied to a magnetic material (2) measuring means. A sensor assembly (4) comprises an optical sensor (6), for interaction with a first side (10) of said web (1) and a reluctance transducer (8), which is arranged close to said first side of the web (1) for interaction with said magnetic material (2) as a magnetic reference element on the opposite side (12) of the web (1). Said optical sensor, preferably a confocal sensor (6), is provided for interaction with said first side (10) of the web (1) as an optical reference element and said sensor assembly (4) is configured with said confocal sensor (6) and said reluctance transducer (8) in combination and related to a reference point (r p). The confocal sensor (6) emits optical signals (30) as input to an optical controller (20), which optical signals are representative of a first distance (d1) from said reference point (r p) to the web (1). The reluctance transducer (8) emits electric signals (32) as input to an electric control unit (22), which electric signals are representative of a second distance (d2) from said reference point (r p) to said magnetic material (2). Said optical controller (20) and said electric control unit (22) are individually connected to a processor (24), in which a third distance (d3), which represents the material thickness of the web (1), is calculated.

IPC 8 full level

G01B 7/06 (2006.01); **G01B 11/06** (2006.01); **G01B 21/08** (2006.01)

CPC (source: EP)

G01B 7/105 (2013.01); **G01B 11/0616** (2013.01); **G01B 21/08** (2013.01); **G01B 2210/42** (2013.01); **G01B 2210/50** (2013.01)

Citation (search report)

- [Y] US 2005157314 A1 20050721 - TYPPOE PEKKA [US], et al
- [Y] US 2009059232 A1 20090305 - HELLSTROM AKE [US], et al
- [A] US 4977853 A 19901218 - FALCOFF ALLAN F [US], et al
- See references of WO 2010104466A1

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

WO 2010104466 A1 20100916; EP 2406579 A1 20120118; EP 2406579 A4 20170215

DOCDB simple family (application)

SE 2010050278 W 20100312; EP 10751099 A 20100312