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

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Application
EP 10751099 A 20100312

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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 senor (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.

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