

Title (en)

DIGITALLY OPERATING DEVICE FOR DETECTING METALLICALLY CONDUCTIVE PARTS

Title (de)

DIGITAL ARBEITENDE EINRICHTUNG ZUR FESTSTELLUNG METALLISCH LEITENDER TEILE

Title (fr)

DISPOSITIF À FONCTIONNEMENT NUMÉRIQUE POUR DÉTECTER DES ÉLÉMENTS CONDUCTEURS MÉTALLIQUES

Publication

**EP 2269096 A1 20110105 (DE)**

Application

**EP 09735434 A 20090422**

Priority

- EP 2009002934 W 20090422
- DE 102008020360 A 20080423

Abstract (en)

[origin: WO2009130018A1] The invention relates to a device for generating a recognition signal in the event of the appearance of metallically conductive parts in an at least largely non-conductive transport flow. An electromagnetic alternating field is established by an alternating current generator (5) in a section of the transport flow to be monitored, by means of a transmitter coil system (S1), the signal variations of the alternating field, triggered by a part passing by in the flow, being detected by a receiver coil system (S2, S3) and used to derive a recognition signal by means of a downstream digitally operating evaluation circuit (4) which triggers information about the part and/or eliminates the part. An analog/digital converter (1) is associated with the receiver coil system (S2, S3) and the receiver signal transmission to the evaluation circuit (4) is carried out digitally. An analog/digital conversion (3) is also provided for the signal of the alternating current generator (5). The receiver signal in digital form and the signal of the alternating current generator (5), in digital form, are supplied to the evaluation circuit (4) in order to derive the recognition signal.

IPC 8 full level

**G01V 3/10** (2006.01)

CPC (source: EP US)

**G01V 3/104** (2013.01 - EP US)

Citation (search report)

See references of WO 2009130018A1

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 TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

**WO 2009130018 A1 20091029**; CN 102016645 A 20110413; DE 102009018387 A1 20100602; EP 2269096 A1 20110105;  
US 2011109307 A1 20110512

DOCDB simple family (application)

**EP 2009002934 W 20090422**; CN 200980114409 A 20090422; DE 102009018387 A 20090422; EP 09735434 A 20090422;  
US 98937009 A 20090422