

Title (en)

DEVICE FOR TRANSMITTING AND/OR RECEIVING ELECTROMAGNETIC HF SIGNALS, AND MEASURING MACHINE AND MACHINE TOOL MONITORING DEVICE HAVING SUCH A DEVICE

Title (de)

VORRICHTUNG ZUM SENDEN UND/ODER EMPFANGEN ELEKTROMAGNETISCHER HF-SIGNALE, SOWIE MESSGERÄT UND WERKZEUGMASCHINENÜBERWACHUNGSVORRICHTUNG MIT EINER SOLCHEN VORRICHTUNG

Title (fr)

DISPOSITIF POUR L'ÉMISSION ET/OU LA RÉCEPTION DE SIGNAUX HF ÉLECTROMAGNÉTIQUES, ET APPAREIL DE MESURE ET SYSTÈME DE SURVEILLANCE D'UNE MACHINE-OUTILS ÉQUIPÉS D'UN TEL DISPOSITIF

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Application

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Abstract (en)

[origin: WO2010089164A1] The invention relates to a device (50) for transmitting and/or receiving electromagnetic HF signals, in particular a UWB antenna, having a planar, ultra-wideband (UWB) antenna structure (10) made of a plurality of dipole elements (12). According to the invention, each dipole element (12) comprises two poles (14, 16) having substantially elliptical base shapes. The invention further relates to a measuring machine, in particular a locating and/or material identifying device (42) for identifying objects (46) encased in a medium (44) and/or for identifying material parameters, in particular the moisture of a material, having at least one UWB sensor (58) comprising at least one device (50) according to the invention for transmitting electromagnetic HF signals. The invention further relates to a machine tool monitoring device having a detecting device (52) for detecting the presence of a material type (54), in particular of tissue, in a machine tool working area (56), and having a working means (60) wherein the detecting device (52) comprises a sensor unit having at least one device (50) according to the invention for transmitting electromagnetic HF signals.

IPC 8 full level

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Citation (search report)

See references of WO 2010089164A1

Citation (examination)

US 2006262026 A1 20061123 - GAINES KENNETH M [US], et al

Cited by

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