Title (en)

ANTENNA STRUCTURE FOR THE WIDE-BAND TRANSMISSION OF ELECTRICAL SIGNALS

Title (de)

ANTENNENSTRUKTUR ZUR BREITBANDIGEN ÜBERTRAGUNG ELEKTRISCHER SIGNALE

Title (fr)

STRUCTURE D'ANTENNE POUR LA TRANSMISSION À LARGE BANDE DE SIGNAUX ÉLECTRIQUES

Publication

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Application

EP 13805281 A 20131113

Priority

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Abstract (en)

[origin: WO2014079744A1] The invention relates to an antenna structure for the wide-band transmission of electrical signals, which has a stripline and a probe that can be capacitively or inductively coupled to the stripline, wherein the stripline and the probe are arranged so as to be movable in relation to each other within a specified distance range between the probe and the stripline in the longitudinal direction of the stripline such that electrical signals can be transmitted between the stripline and the probe without contact, wherein the stripline comprises at least one strip electrode facing the probe, a reference electrode, and a dielectric carrier material located between the strip electrode and the reference electrode. In order to provide a wide-band and economical device for signal transmission that has a conductor structure that achieves high symmetry of the signal and low attenuation values even at high frequencies, the dielectric carrier material comprises, according to the invention, a homogeneous plastic layer containing macromolecules, said plastic layer being characterized by an orientation of the macromolecules along a preferred direction.

IPC 8 full level

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Citation (opposition)

Opponent : Schleifring und Apparatebau GmbH

- WO 03069797 A2 20030821 - SCHLEIFRING UND APPBAU GMBH [DE], et al
- EP 1470560 B1 20060628 - BAYER MATERIALSCIENCE AG [DE]
- WO 2007147271 A1 20071227 - HUBER+SUHNER AG [CH], et al
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- US 5507903 A 19960416 - YAMAMORI YOSHIYUKI [JP], et al
- "Recken (Materialtechnik)", WIKIPEDIA, 29 May 2012 (2012-05-29), XP055408373
- MARTIN BONNET: "Kunststoffe in der Ingenieuranwendung", 2009, ISBN: 9783834803498

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