

Title (en)

Active vehicle receiving antenna, its antenna conductor being provided on or in a non-conductive surface inserted in a metallic vehicle body.

Title (de)

Aktive Fahrzeug-Empfangsantenne, deren Antennenleiter auf oder in einer in eine metallische Fahrzeugkarosserie eingesetzten nichtleitfähigen Fläche angebracht sind.

Title (fr)

Active antenne réceptrice d'un vehicule, dont le conducteur d'antenne étant placé sur ou dans une surface non-conductrice installé dans une carrosserie métallique.

Publication

EP 0386678 B1 19941207 (DE)

Application

EP 90104209 A 19900305

Priority

DE 3907493 A 19890308

Abstract (en)

[origin: EP0386678A1] The arrangement relates to an active receiving antenna for frequencies up to the UHF waveband in a non-conductive surface (1, 12), which is inserted into a metallic vehicle body (2), having an antenna conductor (3a), fitted onto or into the non-conductive surface, having an antenna conductor connection (11) and an antenna connecting point, one terminal of which is connected in a low- impedance manner (in terms of radio frequencies) to an earth point (10) on the conductive bodywork. <??>An active four-pole network (5) is present which has a first and a second input connection (6a and 6b) and a first and second output connection (7a and 7b). In addition, there is an output line (8) which consists of a first (14) and a second (15) section, the output line (8) being connected to the output connections (7a and 7b) of the active four-pole network and the antenna conductor connection (4a) of the antenna conductor (3a) being connected in as short a manner as possible to the first input connection (6a) of the active four-pole network (5), and the other input connection (6b) of the active four- pole network being connected in as short a manner as possible to the output connection (7b) of the active four-pole network. <??>In the first section (14), the output line (8) is led to the antenna connection point (11) with the earth point (10), which is located on the conductive bodywork (2). The conductor of the output line (8), which is connected to the second output connection (7b) of the active four-pole network (5), is in this case connected to the earth point (10) in a radio-frequency conductive manner. The necessary length (20) of the output line (8) in the first section (14) for bridging over the distance between the output of the active four-pole network and the antenna connection point with the earth point (10) cannot be ignored from the radio-frequency point of view. The second section (15), which directly adjoins the first section (14), of the output line (8) leads to the receiver (39). <IMAGE>

IPC 1-7

H01Q 1/12; H01Q 23/00

IPC 8 full level

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Cited by

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