

Title (en)

Planar antenna device and a method for providing conductive elements on a substrate

Title (de)

Planarantennenanordnung und Verfahren zur Herstellung von Leiterbahnen auf einem Substrat

Title (fr)

Antenne plane et procédé de fabrication de conducteurs sur un substrat

Publication

EP 0903805 A3 19990609 (EN)

Application

EP 98116584 A 19980902

Priority

- AU PO929897 A 19970919
- US 9877198 A 19980617

Abstract (en)

[origin: EP0903805A2] A antenna arrangement is disclosed for use in vehicles and other application where the antenna can be affixed to a surface, e.g. a window. The antenna 10 is formed from 2 square elements 12,13, defined within a rectangle. Additional square elements 17, 18 may be defined within the other square elements. The dimensions may be chosen so as to maximise gain for selected radio frequencies. Also disclosed is a method for providing conductive elements on a substrate, including printing a conductor pattern onto a substrate using conductive ink, and using the deposited pattern as a electrode for an electroplating process. <IMAGE>

IPC 1-7

H01Q 1/38; H01Q 1/12

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CPC (source: EP)

H01Q 1/1271 (2013.01); **H01Q 1/38** (2013.01); **H01Q 5/371** (2015.01); **H01Q 7/00** (2013.01)

Citation (search report)

- [XY] EP 0786824 A1 19970730 - IMAMURA AKITOSHI [JP]
- [X] US 4470883 A 19840911 - EICHELBERGER CHARLES W [US], et al
- [X] WO 8302538 A1 19830721 - GEN ELECTRIC [US]
- [X] CH 684540 A5 19941014 - SHIH CHANG HSU [TW]
- [X] EP 0195612 A2 19860924 - MARCONI ELECTRONIC DEVICES [GB]
- [X] WO 9109511 A2 19910627 - TECHNOLOGY APPLIC COMPANY LIM [GB]
- [DAY] US 5363114 A 19941108 - SHOEMAKER KEVIN O [US]
- [A] EP 0762539 A1 19970312 - MURATA MANUFACTURING CO [JP]
- [A] US 4737797 A 19880412 - SIWIAK KAZIMIERZ [US], et al
- [A] EP 0516303 A1 19921202 - SONY CORP [JP]
- [A] US 4860019 A 19890822 - JIANG KE-ZHENG [CN], et al
- [A] EP 0443097 A1 19910828 - BAASEL CARL LASERTECH [DE]

Cited by

EP1901392A1; DE102015201379B4; EP1266426A4; EP1388186A4; EP1555715A1; GB2355116A; GB2355116B; US7377447B2; US7526163B2; US7298331B2; WO2007037999A1; WO2015110658A1; WO2008066811A3; US7639184B2; US6933892B2; US7674649B2; US7388542B2; US7456506B2; US7268740B2; US7456752B2; US7515116B2; US7358906B2; US6784844B1; WO2020259981A1; DE202020005572U1

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