

Title (en)
ROOF FOR MOTOR VEHICLES

Title (de)
ANTENNENANORDNUNG

Title (fr)
ANTENNE DE TOIT POUR VEHICULES AUTOMOBILES

Publication
EP 1504491 A1 20050209 (DE)

Application
EP 03732333 A 20030508

Priority
• DE 10221877 A 20020516
• EP 0304843 W 20030508

Abstract (en)
[origin: WO03098735A1] The invention relates to an antenna arrangement for motor vehicles, especially for mounting onto a surface of a car chassis (1). Said antenna arrangement comprises the following features: at least one radiator arrangement (9) comprising a conductive surface which is arranged on a dielectric material, is aligned vertically. A vertically aligned conductor board (15) is arranged in a parallel manner in relation to the radiator arrangement (9). The conductor board (15) comprises a section (15) which is provided with electric modules and components, especially an adapter circuit. The antenna arrangement is mechanically maintained by a mounting holder (7) and covered by means of a protective cover.

IPC 1-7
H01Q 1/38; **H01Q 1/32**; **H01Q 1/12**; **H01Q 23/00**; **H01Q 5/00**

IPC 8 full level
H01Q 1/12 (2006.01); **H01Q 1/32** (2006.01); **H01Q 1/36** (2006.01); **H01Q 1/38** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/321** (2015.01); **H01Q 23/00** (2006.01)

CPC (source: EP US)
H01Q 1/1214 (2013.01 - EP US); **H01Q 1/1271** (2013.01 - EP US); **H01Q 1/3275** (2013.01 - EP US); **H01Q 1/38** (2013.01 - EP US); **H01Q 5/321** (2015.01 - EP US); **H01Q 23/00** (2013.01 - EP US)

Citation (search report)
See references of WO 03098735A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 03098735 A1 20031127; AT E319198 T1 20060315; AU 2003239853 A1 20031202; DE 10221877 A1 20031218; DE 20221959 U1 20091119; DE 50302532 D1 20060427; EP 1504491 A1 20050209; EP 1504491 B1 20060301; EP 1504491 B2 20170308; ES 2256746 T3 20060716; JP 2005531171 A 20051013; JP 4199189 B2 20081217; US 2005062658 A1 20050324; US 7193572 B2 20070320

DOCDB simple family (application)
EP 0304843 W 20030508; AT 03732333 T 20030508; AU 2003239853 A 20030508; DE 10221877 A 20020516; DE 20221959 U 20020516; DE 50302532 T 20030508; EP 03732333 A 20030508; ES 03732333 T 20030508; JP 2004506120 A 20030508; US 49936304 A 20041119