

Title (en)

COMBINATION ANTENNA FOR MOBILE RADIO SERVICES FOR VEHICLES

Title (de)

KOMBINATIONSENTENNE FÜR MOBILFUNKDIENSTE FÜR FAHRZEUGE

Title (fr)

ANTENNE COMBINÉE POUR SERVICES DE COMMUNICATION MOBILES POUR VÉHICULES

Publication

EP 3734755 A1 20201104 (DE)

Application

EP 20171891 A 20200428

Priority

DE 102019003079 A 20190429

Abstract (en)

[origin: US2021135341A1] A combination antenna for mobile radio or for mobile radio and broadcasting services comprises at least one plastic film arranged above a base plate and coated with conductive antenna structures; and at least one antenna connection point coupled to antenna structures on the electrically conductive base plate as an electrical counterweight of the combination antenna.

Abstract (de)

Eine Kombinationsantenne für Mobilfunk/oder Mobilfunk und Rundfunk-Dienste umfasst wenigstens eine über einer Grundplatte angeordnete, mit leitenden Antennenstrukturen beschichtete Kunststoffolie und mindestens eine mit Antennenstrukturen verkoppelte Antennenanschlussstelle auf der elektrisch leitenden Grundplatte als elektrisches Gegengewicht der Kombinationsantenne.

IPC 8 full level

H01Q 1/32 (2006.01); **H01Q 1/38** (2006.01); **H01Q 1/52** (2006.01); **H01Q 9/36** (2006.01); **H01Q 9/40** (2006.01); **H01Q 9/42** (2006.01); **H01Q 21/28** (2006.01)

CPC (source: EP US)

H01Q 1/246 (2013.01 - US); **H01Q 1/32** (2013.01 - US); **H01Q 1/3275** (2013.01 - EP US); **H01Q 1/38** (2013.01 - EP US); **H01Q 1/405** (2013.01 - US); **H01Q 1/521** (2013.01 - EP); **H01Q 9/36** (2013.01 - EP); **H01Q 9/40** (2013.01 - EP); **H01Q 9/42** (2013.01 - EP); **H01Q 11/14** (2013.01 - US); **H01Q 21/28** (2013.01 - EP)

Citation (search report)

- [Y] DE 102016123369 A1 20170608 - HIRSCHMANN CAR COMM GMBH [DE]
- [Y] DE 102014013926 A1 20160324 - LINDENMEIER HEINZ [DE]
- [A] DE 102005054286 A1 20070516 - FUBA AUTOMOTIVE GMBH [DE]
- [A] US 2016104932 A1 20160414 - AMINZADEH MEHRAN [DE], et al

Cited by

DE102022000604A1; DE102021203543B3; WO2022214147A1; EP4092914A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3734755 A1 20201104; **EP 3734755 B1 20230517**; DE 102020001427 A1 20201029; US 11095020 B2 20210817; US 2021135341 A1 20210506

DOCDB simple family (application)

EP 20171891 A 20200428; DE 102020001427 A 20200305; US 202016861298 A 20200429