

Title (en)
Glass antenna and window glass for vehicle

Title (de)
Glasantenne und Fensterglas für Fahrzeuge

Title (fr)
Antenne pour vitre et vitre de fenêtre pour véhicule

Publication
EP 2159872 B1 20120815 (EN)

Application
EP 09011095 A 20090828

Priority
• JP 2008222787 A 20080829
• JP 2008282546 A 20081031

Abstract (en)
[origin: EP2159872A1] A dual band glass antenna for a vehicle, includes: a feeding part; and an antenna conductor adapted to be disposed in or on a window glass for the vehicle, including: a loop element formed into a loop; a L-shaped element, including: a first antenna element, extending in a first direction from a first point of the loop element; and a second antenna element, extending in a second direction roughly perpendicular to the first direction from an end point of the first antenna element; and a connection element, connecting the feeding part with the second point of the loop element.

IPC 8 full level
H01Q 1/12 (2006.01); **H01Q 1/32** (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/10** (2015.01); **H01Q 5/342** (2015.01); **H01Q 7/00** (2006.01); **H01Q 9/36** (2006.01); **H01Q 9/42** (2006.01)

CPC (source: EP)
H01Q 1/1271 (2013.01); **H01Q 5/364** (2015.01); **H01Q 5/40** (2015.01); **H01Q 7/00** (2013.01); **H01Q 9/42** (2013.01)

Citation (examination)
• WO 2004010529 A1 20040129 - HARADA IND EUROP LTD [GB], et al
• US 2008158075 A1 20080703 - VILLARROEL WLADIMIRO [US], et al

Cited by
DE102010003646A1; AU2014201816B2; EP3499639A1; US9300031B2; EP3076480B1

Designated contracting state (EPC)
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 SE SI SK SM TR

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EP 09011095 A 20090828; JP 2008282546 A 20081031