

Title (en)
GLASS ANTENNA AND WINDOW GLASS

Title (de)
GLASANTENNE UND FENSTERGLAS

Title (fr)
ANTENNE DE VITRE ET VITRE DE FENETRE

Publication
EP 3185350 A1 20170628 (EN)

Application
EP 16203865 A 20161213

Priority
JP 2015253527 A 20151225

Abstract (en)
It is provided a glass antenna to be arranged on a window glass of a vehicle, comprising a first antenna (3) configured to receive a radio wave in a first frequency band, and a second antenna (4) configured to receive a radio wave in a second frequency band having a frequency that is approximately half of a frequency of the first frequency band. The first antenna (3) including a core-side feeding unit (36) and an earth-side feeding unit (31) to be coupled to a receiver, a core-side element (37) extended from the core-side feeding unit, and an earth-side element (32) extended from the earth-side feeding unit. The core-side element (37) having a length approximately equal to a length obtained by multiplying a wavelength at a center frequency of the first frequency band by a wavelength shortening rate of glass.

IPC 8 full level
H01Q 1/12 (2006.01); **H01Q 9/42** (2006.01); **H01Q 21/28** (2006.01)

CPC (source: EP)
H01Q 1/1271 (2013.01); **H01Q 9/42** (2013.01); **H01Q 21/28** (2013.01)

Citation (applicant)
• JP 2012023707 A 20120202 - CENTRAL GLASS CO LTD
• JP 2014123851 A 20140703 - CENTRAL GLASS CO LTD
• JP 2014216805 A 20141117 - CENTRAL GLASS CO LTD

Citation (search report)
• [YA] EP 2421090 A1 20120222 - ASAHI GLASS CO LTD [JP]
• [Y] EP 2797164 A1 20141029 - CENTRAL GLASS CO LTD [JP]

Cited by
CN112166527A

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 3185350 A1 20170628; EP 3185350 B1 20180620; JP 2017118400 A 20170629

DOCDB simple family (application)
EP 16203865 A 20161213; JP 2015253527 A 20151225