

Title (en)

WINDOW ASSEMBLY WITH TRANSPARENT LAYER AND AN ANTENNA ELEMENT

Title (de)

FENSTERANORDNUNG MIT DURCHSICHTIGER SCHICHT UND EINER ANTENNENEINHEIT

Title (fr)

ENSEMBLE VITRE COMPORTANT UNE COUCHE TRANSPARENTE ET UN ÉLÉMENT ANTENNE

Publication

**EP 3097603 B1 20181205 (EN)**

Application

**EP 14703708 A 20140122**

Priority

US 2014012526 W 20140122

Abstract (en)

[origin: WO2015112135A1] A window assembly includes an electrically conductive transparent layer and an antenna element disposed on a substrate. The antenna element includes a first antenna segment and a second antenna segment. The first antenna segment is elongated and disposed in an outer region devoid of the transparent layer. The second antenna segment extends from the first antenna segment toward the transparent layer such that the second antenna segment crosses a periphery of the transparent layer. The second antenna segment abuts and is in direct electrical contact with the transparent layer. A feeding element is coupled to the antenna element and energizes the first and second antenna segments and the transparent layer such that the first and second antenna segments and the transparent layer collectively transmit and/or receive radio frequency signals.

IPC 8 full level

**H01Q 1/12** (2006.01)

CPC (source: EP)

**H01Q 1/1271** (2013.01); **H01Q 1/1278** (2013.01)

Cited by

WO2024115047A1

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

DOCDB simple family (publication)

**WO 2015112135 A1 20150730**; EP 3097603 A1 20161130; EP 3097603 B1 20181205; JP 2017505576 A 20170216; JP 6123033 B2 20170426

DOCDB simple family (application)

**US 2014012526 W 20140122**; EP 14703708 A 20140122; JP 2016547574 A 20140122