

Title (en)  
Frequency tunable antenna

Title (de)  
Frequenzabstimbare Antenne

Title (fr)  
Antenne accordable en fréquence

Publication  
**EP 2816665 A1 20141224 (EN)**

Application  
**EP 13173018 A 20130620**

Priority  
EP 13173018 A 20130620

Abstract (en)  
A frequency tunable antenna is provided. Specifically, a device is provided that includes: a ground; an antenna feed; a first radiating arm connected to the antenna feed; a second radiating arm capacitively coupled to the first radiating arm; a switch connected to the second radiating arm, the switch having an open position and a closed position; an inductor connected to the switch on one side and the ground on an opposite side, and, a processor in communication with the switch, the processor configured to open and close the switch to tune a resonance frequency of at least the second radiating arm thereby changing a resonant length of the second radiating arm depending on whether the inductor is connected thereto.

IPC 8 full level  
**H01Q 5/00** (2006.01); **H01Q 9/42** (2006.01)

CPC (source: EP)  
**H01Q 5/378** (2015.01); **H01Q 9/42** (2013.01)

Citation (search report)

- [X1] US 2013122828 A1 20130516 - CHOI CHANG RYUL [KR]
- [X1] WO 2008059106 A1 20080522 - PULSE FINLAND OY [FI], et al
- [X1] US 2012013511 A1 20120119 - SUMI SHINGO [JP], et al
- [X1] EP 1962375 A1 20080827 - LAIRD TECHNOLOGIES AB [SE]

Cited by  
CN105098317A; CN106058432A; US10601146B2; EP3896789B1

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 2816665 A1 20141224; EP 2816665 B1 20210602**

DOCDB simple family (application)  
**EP 13173018 A 20130620**