

Title (en)
Antenna with a combined bandpass/bandstop filter network

Title (de)
Antenne mit kombiniertem Bandpass-/Bandsperrfilternetzwerk

Title (fr)
Antenne avec réseau de filtre coupe-bande/passe-bande combiné

Publication
EP 2819242 A1 20141231 (EN)

Application
EP 13174418 A 20130628

Priority
EP 13174418 A 20130628

Abstract (en)
An antenna with a combined bandpass/bandstop filter network is provided. The antenna includes: a first radiating arm connectable to an antenna feed, the first radiating arm configured to resonate at a first frequency; a second radiating arm, the second radiating arm and the first radiating arm, when electrically connected, configured to resonate at a second frequency lower than the first frequency; and, a filter network comprising a bandstop filter and a bandpass filter, the filter network filtering an electrical connection between the first radiating arm and the second radiating arm, the filter network configured to: electrically isolate the first radiating arm from the second radiating arm at the first frequency, and electrically connect the first radiating arm and the second radiating arm at the second frequency.

IPC 8 full level
H01Q 5/00 (2006.01); **H01Q 1/24** (2006.01); **H01Q 9/40** (2006.01); **H01Q 9/42** (2006.01)

CPC (source: EP)
H01Q 1/243 (2013.01); **H01Q 5/321** (2015.01); **H01Q 5/328** (2015.01); **H01Q 5/371** (2015.01); **H01Q 9/40** (2013.01)

Citation (search report)
• [X1] US 2007285326 A1 20071213 - MCKINZIE WILLIAM E [US]
• [X1] WO 2010025095 A1 20100304 - AGILE RF INC [US], et al
• [XYI] US 2006097918 A1 20060511 - OSHIYAMA TADASHI [JP], et al
• [XYI] DE 102012204184 A1 20120927 - DENSO CORP [JP]
• [X1] US 7436365 B1 20081014 - TAN YU CHEE [SG], et al
• [X1] WO 0211236 A1 20020207 - SAGEM [FR], et al
• [X1] EP 2182583 A1 20100505 - MURATA MANUFACTURING CO [JP]

Cited by
CN110190378A; CN111106452A; CN114899599A; CN110741510A; EP3646410A4; WO2024148480A1; US11211711B2; US12034235B2; WO2019005252A1; US11145982B2; US11996636B1

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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

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