

Title (en)  
Compact, lightweight frequency duplexer

Title (de)  
Frequenzieller Duplexer mit geringer Masse und geringem Platzbedarf

Title (fr)  
Duplexeur fréquentiel à faible masse et faible encombrement

Publication  
**EP 2515373 B1 20130417 (FR)**

Application  
**EP 12164889 A 20120420**

Priority  
FR 1153403 A 20110420

Abstract (en)  
[origin: EP2515373A1] The duplexer (10) has a transmission filter (52) and a receiving filter (54) fabricated from respective technologies. Rejection of the receiving filter at frequency is chosen such that ratio between maximum real impedance and characteristics resistance is greater than difference obtained between maximum input handling powers expressed in decibel meter, of the respective filters when the receiving filter is adapted by adjustment of impedance of an adaptation element (62), for obtaining real and maximum impedance at the frequency in an effective junction area (63). The technology for fabricating the transmission filter is ceramic cavity filter technology, air or vacuum cavity filter technology or technology of cavity filter cooled by an energy-saving cooling device. The technology for fabricating the receiving filter is surface acoustic wave (SAW) filter technology, bulk acoustic wave (BAW) filter technology, low temperature co-fired ceramic (LTCC) type filter technology and quartz filter technology. The difference obtained between maximum handling powers is greater than or equal to 20 decibel. Independent claims are also included for the following: (1) a radio communication equipment (2) a method for fabricating a duplexer.

IPC 8 full level  
**H01P 1/213** (2006.01)

CPC (source: EP)  
**H01P 1/213** (2013.01)

Cited by  
CN115640770A

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**EP 12164889 A 20120420**; ES 12164889 T 20120420; FR 1153403 A 20110420