

Title (en)
A combined duplex filter and antenna

Title (de)
Kombiniertes Duplexfilter und Antenne

Title (fr)
Filtre duplex combiné et antenne

Publication
EP 0772254 A1 19970507 (EN)

Application
EP 96307644 A 19961022

Priority
FI 955302 A 19951106

Abstract (en)
The invention relates to a combined structure of an antenna (1) and a duplex filter (2b), in which said antenna (1) at its input point is connected directly to the duplex filter (2b) at an antenna connection point. Then it is not possible that an exceptional situation would occur, in which no radiating element would be connected to the duplex filter, for instance due to a damaged antenna, to the replacement action of a replaceable antenna, or due to an retractable antenna being in a position between the extreme positions. This prevents the transmit signal from reflecting at a high power level to the receive branch (RX), so that the receive branch (RX) can be dimensioned for a much lower power level than earlier, and it can utilize for instance current surface acoustic filters (7). Further the transmission line losses between the duplex filter and the antenna are minimized, and a filter designer is provided with the possibility to design the impedance of the duplex filter at its antenna connection point (3) so that it is directly matched to the input impedance of the antenna. <IMAGE>

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H01Q 1/24; **H01Q 21/30**

IPC 8 full level
H01Q 1/24 (2006.01); **H01Q 21/30** (2006.01)

CPC (source: EP)
H01Q 1/244 (2013.01); **H01Q 21/30** (2013.01)

Citation (search report)

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