

Title (en)  
Duplexer and communication apparatus

Title (de)  
Duplexer und Kommunikationsvorrichtung

Title (fr)  
Duplexeur et dispositif de communication

Publication  
**EP 0993063 A3 20010502 (EN)**

Application  
**EP 99120152 A 19991008**

Priority  
JP 28661998 A 19981008

Abstract (en)  
[origin: EP0993063A2] The invention provides a duplexer (15) comprising: a frequency variable filter (13) switching between a first band and a second band by a voltage-controllable reactor D1; and a transmission/reception select switch (14) connected to an input/output terminal of an end of the frequency variable filter (13). The above duplexer is small and capable of efficiently eliminating harmonics of transmission signals generated by a transmission/reception select switch. <IMAGE>

IPC 1-7  
**H01P 1/15**; **H01P 1/205**

IPC 8 full level  
**H01P 1/10** (2006.01); **H01P 1/15** (2006.01); **H01P 1/201** (2006.01); **H01P 1/205** (2006.01); **H01P 1/213** (2006.01); **H04B 1/44** (2006.01)

CPC (source: EP KR)  
**H01P 1/10** (2013.01 - KR); **H01P 1/15** (2013.01 - EP); **H01P 1/201** (2013.01 - KR); **H01P 1/2056** (2013.01 - EP); **H01P 1/213** (2013.01 - KR)

Citation (search report)

- [X] EP 0736978 A2 19961009 - LK PRODUCTS OY [FI]
- [X] US 5486797 A 19960123 - SUZUKI TOMOHIRO [JP]
- [A] EP 0865095 A2 19980916 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [A] EP 0520641 A1 19921230 - LK PRODUCTS OY [FI]
- [A] US 5023935 A 19910611 - VANCRAEYNEST JAN [US]
- [A] EP 0570184 A1 19931118 - LK PRODUCTS OY [FI]

Cited by  
EP1119069A3; EP1505683A1; EP1237290A3; EP1508974A3; EP1119069A2; US6885261B2; US11936355B2; US7206551B2; US7038557B2

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0993063 A2 20000412**; **EP 0993063 A3 20010502**; JP 2000114804 A 20000421; KR 20000028933 A 20000525

DOCDB simple family (application)  
**EP 99120152 A 19991008**; JP 28661998 A 19981008; KR 19990043425 A 19991008