

Title (en)

T-DMB and DAB low intermediate frequency receiver

Title (de)

Niedrige- Zwischenfrequenz Empfänger für T-DMB und DAB

Title (fr)

Récepteur à fréquence intermédiaire basse pour T-DMB et DAB

Publication

EP 1753233 A1 20070214 (EN)

Application

EP 06118843 A 20060811

Priority

- KR 20050074552 A 20050813
- KR 20050075309 A 20050817

Abstract (en)

Provided is a terrestrial-digital multimedia broadcasting (T-DMB) and digital audio broadcasting (DAB) low intermediate frequency (IF) receiver. A T-DMB and DAB low IF receiver comprises a low noise amplifier (LNA) 202b, an image rejection down-conversion mixer 203b, a low pass filter 204b, an amplifier 205b, a local oscillator 208b, a phase-locked loop 209b, and at least one high pass filter 211b. Particularly, the LNA, the image rejection down-conversion mixer, the low pass filter, the amplifier, the local oscillator, the phase-locked loop, and the high pass filter are integrated in a monolithic semiconductor integrated circuit substrate. The T-DMB and DAB low IF receiver allows a removal of a conventional SAW filter without degrading the performance of the receiver. Thus, the T-DMB and DAB low IF receiver can be easily integrated into a single and manufactured at low costs.

IPC 8 full level

H04B 1/06 (2006.01); **H04B 1/26** (2006.01); **H04B 1/30** (2006.01)

CPC (source: EP)

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Citation (search report)

- [Y] US 2004147238 A1 20040729 - WANG SHOU-TSUNG [TW], et al
- [Y] US 2004176055 A1 20040909 - VEPSALAINEN JUSSI [FI], et al
- [A] WO 02093732 A2 20021121 - KONINKL PHILIPS ELECTRONICS NV [NL], et al
- [Y] LUFF G F ET AL: "A compact triple-band eureka-147 RF tuner with an FM receiver", SOLID-STATE CIRCUITS CONFERENCE, 2005. DIGEST OF TECHNICAL PAPERS. ISSCC. 2005 IEEE INTERNATIONAL SAN FRANCISCO, CA, USA FEB. 6-10, 2005, PISCATAWAY, NJ, USA,IEEE, 6 February 2005 (2005-02-06), pages 434, 435,608, XP010830892, ISBN: 0-7803-8904-2
- [A] JOSE EPIFANIO DA FRANCA ET AL: "WIRELESS RECEIVERS: ARCHITECTURES AND IMAGE REJECTION", CIRCUIT DESIGN FOR WIRELESS COMMUNICATIONS, SPRINGER, DE, 2003, pages 9 - 32, XP009061090
- [A] PHILIPS: "TDA827x Silicon Tuner Family", INTERNET CITATION, June 2003 (2003-06-01), XP002365815, Retrieved from the Internet <URL:http://www.semiconductors.philips.com/acrobat_download/literature/939_7/75011533.pdf> [retrieved on 20060202]

Designated contracting state (EPC)

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Designated extension state (EPC)

AL BA HR MK YU

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