

Title (en)

BROADBAND RECEIVER FOR MULTI-BAND MILLIMETER-WAVE WIRELESS COMMUNICATION

Title (de)

BREITBANDEMPFÄNGER FÜR DRAHTLOSE MEHRBANDMILLIMETERWELLENKOMMUNIKATION

Title (fr)

RÉCEPTEUR À LARGE BANDE POUR COMMUNICATION SANS FIL À ONDES MILLIMÉTRIQUES MULTIBANDES

Publication

EP 3956981 A4 20230118 (EN)

Application

EP 20791902 A 20200415

Priority

- US 201962836295 P 20190419
- US 201916414480 A 20190516
- US 2020028361 W 20200415

Abstract (en)

[origin: WO2020214733A1] An RF receiver includes a low-noise amplifier (LNA) to receive and amplify RF signals, a transformer-based IQ generator circuit, one or more load resistors, one or more mixer circuit, and a downconverter. The transformer-based IQ generator is to generate a differential in-phase local oscillator (LOI) signal and a differential quadrature (LOQ) signal based on a local oscillator (LO) signal received from an LO. The load resistors are coupled to an output of the transformer-based IQ generator. Each of the load resistors is to couple one of the differential LOI and LOQ signals to a predetermined bias voltage. The mixers are coupled to the LNA and the transformer-based IQ generator to receive and mix the RF signals amplified by the LNA with the differential LOI and LOQ signals to generate an in-phase RF (RFI) signal and a quadrature RF (RFQ) signal. The downconverter is to down convert the RFI signal and the RFQ signal into IF signals.

IPC 8 full level

H03D 7/16 (2006.01); **H03B 27/00** (2006.01); **H03D 7/14** (2006.01); **H03D 7/18** (2006.01); **H03F 1/22** (2006.01); **H03F 3/193** (2006.01); **H03F 3/195** (2006.01)

CPC (source: EP KR)

H03B 27/00 (2013.01 - EP); **H03D 7/1441** (2013.01 - EP KR); **H03D 7/1458** (2013.01 - EP KR); **H03D 7/1483** (2013.01 - EP KR); **H03D 7/165** (2013.01 - EP KR); **H03D 7/18** (2013.01 - EP KR); **H03F 1/223** (2013.01 - EP KR); **H03F 3/193** (2013.01 - KR); **H03F 3/195** (2013.01 - EP); **H03D 2200/0019** (2013.01 - EP); **H03D 2200/0043** (2013.01 - EP); **H03F 2200/294** (2013.01 - EP KR); **H03F 2200/451** (2013.01 - EP KR); **H03F 2200/541** (2013.01 - EP KR)

Citation (search report)

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- See also references of WO 2020214733A1

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DOCDB simple family (application)

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