

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 A1 20220223 (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.

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CPC (source: EP KR)
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WO 2020214733 A1 20201022; CA 3137133 A1 20201022; CN 113491066 A 20211008; CN 113491066 B 20240820; EP 3956981 A1 20220223; EP 3956981 A4 20230118; JP 2022529195 A 20220617; JP 7441240 B2 20240229; KR 102708133 B1 20240919; KR 20210148351 A 20211207

DOCDB simple family (application)
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