

Title (en)

METHOD AND APPARATUS FOR ENVELOPE SHAPING IN ENVELOPE TRACKING POWER AMPLIFICATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR HÜLLKURVENFORMGEBUNG IN DER HÜLLKURVENVERFOLGUNGSLEISTUNGSVERSTÄRKUNG

Title (fr)

PROCÉDÉ ET APPAREIL POUR LA FORMATION D'ENVELOPPE DANS L'AMPLIFICATION DE PUISSANCE À SUIVI D'ENVELOPPE

Publication

**EP 3155721 A4 20180207 (EN)**

Application

**EP 14894315 A 20140613**

Priority

CN 2014079807 W 20140613

Abstract (en)

[origin: WO2015188363A1] A method, corresponding apparatuses, and a non-transitory computer readable medium for envelope shaping in envelope tracking power amplification are provided. The method comprises detecting, based on a shaping threshold, one or more troughs in an envelope signal representing an envelope of a signal to be amplified by an envelope tracking power amplifier connected with an envelope tracking supply modulator. The method also comprises clipping the one or more detected troughs in the envelope signal. The method further comprises shaping the envelope signal for the envelope tracking supply modulator by processing a delayed version of the envelope signal with the one or more clipped troughs. With the claimed inventions, the efficiency and linearity of an envelope tracking power amplifier could be improved.

IPC 8 full level

**H03F 1/02** (2006.01); **H03F 1/30** (2006.01); **H03F 3/195** (2006.01); **H03F 3/24** (2006.01)

CPC (source: EP)

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Citation (search report)

- [Y] US 2012269240 A1 20121025 - BALTEANU FLORINEL G [CA], et al
- [XAY] DONGSU KIM ET AL: "Optimization for Envelope Shaped Operation of Envelope Tracking Power Amplifier", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, PLENUM, USA, vol. 59, no. 7, 13 July 2011 (2011-07-13), pages 1787 - 1795, XP011369961, ISSN: 0018-9480, DOI: 10.1109/TMTT.2011.2140124
- See references of WO 2015188363A1

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