

Title (en)

LOW-POWER HIGH-ACCURACY CLOCK HARVESTING IN INDUCTIVE COUPLING SYSTEMS

Title (de)

HOCHGENAUE TAKTGEWINNUNG MIT NIEDRIGER LEISTUNGS-AUFNAHME IN INDUKTIVEN KOPPLUNGSSYSTEMEN

Title (fr)

COLLECTE D'HORLOGE DE HAUTE PRÉCISION À FAIBLE PUISSANCE DANS DES SYSTÈMES DE COUPLAGE INDUCTIF

Publication

EP 3794737 A4 20220302 (EN)

Application

EP 19803392 A 20190410

Priority

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- IB 2019052940 W 20190410

Abstract (en)

[origin: WO2019220232A1] An apparatus (20) includes a front-end circuit (30) and a digital processing circuit (28). The front-end circuit includes an antenna (32) and a modulation switch (40). The digital processing circuit is configured to transmit data to a remote unit (50) using inductive coupling of an Alternating Current (AC) magnetic field generated by the remote unit, by modulating a load impedance of the antenna using the modulation switch. The front-end circuit is configured to supply to the digital processing circuit a voltage signal, which has a frequency of the AC magnetic field and which has a non-zero envelope both during intervals in which the modulation switch is closed and during intervals in which the modulation switch is open, and wherein the digital processing circuit is configured to derive a clock signal from the voltage signal.

IPC 8 full level

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CPC (source: EP)

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See references of WO 2019220232A1

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