

Title (en)

COMPENSATING FOR OSCILLATOR DRIFT IN WIRELESS MESH NETWORKS

Title (de)

KOMPENSATION DER OSZILLATORABWEICHUNG IN DRAHTLOSEN MESH-NETZWERKEN

Title (fr)

COMPENSATION DE LA DÉRIVE D'UN OSCILLATEUR DANS DES RÉSEAUX MAILLÉS SANS FIL

Publication

**EP 3656071 A4 20210421 (EN)**

Application

**EP 18835789 A 20180712**

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- US 201715655781 A 20170720
- US 2018041735 W 20180712

Abstract (en)

[origin: WO2019018190A1] A battery powered node within a wireless mesh network maintains a mapping between temperature and oscillator drift and compensates for oscillator drift based on this mapping. When the mapping includes insufficient data points to map the current temperature to an oscillator drift value, the battery powered node requests calibration packets from an adjacent upstream node in the network. The adjacent node transmits two calibration packets with a transmit time delta and also indicates this time delta in the first calibration packet. The battery powered node receives the two calibration packets and measures the receive time delta. The battery powered node compares the transmit time delta to the receive time delta to determine oscillator drift compared to an oscillator in the adjacent node. The battery powered node then updates the mapping based on the current temperature and determined oscillator drift.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

- [A] EP 2544387 A1 20130109 - MITSUBISHI ELEC R&D CT EUROPE [NL], et al
- [A] EP 2369880 A1 20110928 - MITSUBISHI ELECTRIC CORP [JP], et al
- [A] WO 2008027294 A2 20080306 - BBN TECHNOLOGIES CORP [US], et al
- See references of WO 2019018190A1

Designated contracting state (EPC)

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