

Title (en)

METHOD FOR DETERMINING THE DISTANCE OF A MOBILE COMMUNICATIONS TERMINAL TO BASE TRANSCEIVER STATIONS AND MOBILE COMMUNICATIONS TERMINAL

Title (de)

VERFAHREN ZUR ABSTANDSBESTIMMUNG EINES MOBILEN KOMMUNIKATIONSSENDGERÄTES ZU MOBILFUNKBASISSTATIONEN UND MOBILES KOMMUNIKATIONSSENDGERÄT

Title (fr)

PROCÉDÉ DE DÉTERMINATION DE DISTANCE D'UN TERMINAL DE COMMUNICATION MOBILE PAR RAPPORT À DES STATIONS RADIO DE BASE ET TERMINAL DE COMMUNICATION MOBILE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2007107128A1] The invention relates to a method for determining the distance of a mobile communications terminal (MK) from a first base transceiver station (MB2, MB3) in a mobile radio network, according to which the determination of the distance of the mobile communications terminal (MK) from the first base transceiver station (MB1) and optionally from additional base transceiver stations (MB2, MB3) is precisely calculated. In comparison with prior art, in which the distance value (A11) is exclusively calculated from the timing advance value (TA1), the first base transceiver station (MB1) or the mobile communications terminal (MK) calculates in addition a second, distance value (A12) that is more precise, but more ambiguous in relation to the aforementioned distance value (A11) from the following parameters: a first carrier frequency signal (TFS11) and a second carrier frequency signal (TFS12) with a fixed frequency interval, an initial phase relationship (AP1) between the first carrier frequency signal (TFS11) and the second carrier frequency signal (TFS12) at the transmission site of said first signal and a measuring phase relationship (MP1) between the first carrier frequency signal (TFS11) and the second carrier frequency signal (TFS12) at the receiving site of said first signal.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

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