

Title (en)

METHOD AND APPARATUS FOR IMPROVING RADIO LINK BUDGET FOR A CELLULAR BASE STATION

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERBESSERUNG VON FUNKVERBINDUNGSBILANZ FÜR EINE ZELLULARE BASISSTATION

Title (fr)

PROCEDE ET DISPOSITIF PERMETTANT L'AMELIORATION DU BILAN DE RADIOCOMMUNICATION DANS UNE STATION DE BASE CELLULAIRE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO0064072A1] A method and apparatus for improving the radio link budget for cellular base stations is disclosed. A transmitter module generates N in-phase downlink signals, wherein each of the in-phase downlink signals are at the same frequency and have a predetermined power level, and a combiner, coupled to the transmitter module, receives and combines the N in-phase downlink signals to produce an output signal at an output power level greater than the power level of any of the N in-phase downlink signals. The transmitter module includes N channel units and each of the N channel units includes a modulator, an upconverter and an amplifier. The system further includes a baseband unit for generating a baseband signal for each of the N channel units for processing. The system further includes a phase shifter for receiving each of the baseband signals and a power detector disposed at the output of the combiner for measuring the output power level of the output signal and maximizing the output power level of the output signal by adjusting the phase shifter.

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