

Title (en)

A METHOD AND AN APPARATUS FOR IMPROVING STABILITY AND CAPACITY IN CDMA MEDIUM DATA RATE SYSTEMS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERBESSERUNG DER STABILITÄT UND KAPAZITÄT IN CDMA SYSTEMEN MIT MITTLEREN DATENRATE

Title (fr)

PROCEDE ET APPAREIL PERMETTANT D'AMELIORER LA STABILITE ET LA CAPACITE DE SYSTEMES CDMA A CADENCE DE TRANSMISSION MOYENNE

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Application

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Abstract (en)

[origin: WO0189099A2] A novel method and apparatus for achieving optimum capacity and stability in IS-95-B based medium data rate systems. Each user served by a base station is allocated a constant portion of available transmission power. A data are transmitted to each user at this allocated transmission power and a data rate is varied in accordance with the user's channel condition. This strategy removes the variation in transmission power when a user switches between a maximum and minimum rate, thus increasing stability and capacity of the system. The capacity is further increased by allocating a constant portion of a total available transmission power of a base station is allocated to a power for data transmission power for data transmission on a fundamental forward channel and a power for transmission on supplemental forward channels. Each user is allocated one fundamental channel. Rate of transmission of data to a user is varied by allocating supplemental forward channels based on the RF conditions of a communication link and the required data rate of each of the user. The allocation is controlled by a scheduling method. In another aspect of the invention the base station, transmitting on a fixed power is allowed to gradually adjust this fixed power to allow changes in a long term data throughput.

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