

Title (en)

WIRELESS MULTIPLE ACCESS SYSTEM FOR SUPPRESSING INTER-CELL INTERFERENCE

Title (de)

DRAHTLOSES MEHRFACHZUGANGSSYSTEM ZUR UNTERDRÜCKUNG VON ZWISCHENZELLENINTERFERENZ

Title (fr)

SYSTEME A ACCES MULTIPLE SANS FIL POUR SUPPRIMER LES INTERFERENCES ENTRE CELLULES

Publication

EP 1849245 A2 20071031 (EN)

Application

EP 06715997 A 20060217

Priority

- KR 2006000546 W 20060217
- KR 20050013796 A 20050218
- KR 20050036813 A 20050502

Abstract (en)

[origin: WO2006088326A2] An OFDM based multiple access system provides strong persistence against selective frequency fading and further provides suppression of inter-cell interference by using cell differentiating scrambling codes. Thus, the OFDM system maximizes frequency reuse rate. The present invention includes an OFDM modulator frequency-division-multiplexing data to be transmitted, a code division unit multiplexing the frequency-division-multiplexed data with a prescribed code, and an RF end converting the data multiplexed by the code division unit to a radio frequency signal to transmit. Accordingly, the present invention raises the degree of freedom (frequency division, time division, code division) of system implementation in the multiple access system. The OFDM system includes the scrambling of the downlink data by different scrambling codes by a cell unit for base stations within at least two neighboring cells to identify the respective cells and transmitting the spread downlink data.

IPC 8 full level

H04B 7/216 (2006.01); **H04J 11/00** (2006.01); **H04J 13/00** (2011.01); **H04L 12/52** (2006.01); **H04L 27/26** (2006.01); **H04L 27/32** (2006.01)

CPC (source: EP)

H04B 7/2615 (2013.01); **H04L 5/0073** (2013.01); **H04L 5/0017** (2013.01); **H04L 25/03866** (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2006088326 A2 20060824; WO 2006088326 A3 20061109; EP 1849245 A2 20071031; EP 1849245 A4 20110803

DOCDB simple family (application)

KR 2006000546 W 20060217; EP 06715997 A 20060217