FREQUENCY OVERLAY COMMUNICATION SYSTEM AND TRANSMISSION/RECEPTION METHOD THEREOF

Inventors: Chang-Ho Suh, Seongnam-si (KR); Dong-Seok Park, Yongin-si (KR); Sung-Kwon Hong, Seoul (KR); Young-Kwon Cho, Suwon-si (KR); Jin-Kyu Koo, Suwon-si (KR); Jung-Soo Woo, Suwon-si (KR)

Assignee: Samsung Electronics Co., Ltd (KR)

Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1051 days.

Appl. No.: 11/443,421
Filed: May 30, 2006

Prior Publication Data
US 2006/0268677 A1 Nov. 30, 2006

Foreign Application Priority Data
May 27, 2005 (KR) 10-2005-0045266

Int. Cl.
H04L 27/28 (2006.01)

U.S. Cl. 375/260; 375/259; 375/140; 455/59; 370/210

Field of Classification Search 375/260, 375/259; 370/210; 455/59

See application file for complete search history.

References Cited
U.S. PATENT DOCUMENTS
5,907,583 A 5/1999 Sakoda et al.

ABSTRACT
Provided is a method and apparatus for transmitting/receiving data in a frequency overlay communication system. A transmitter generates a data stream for data transmission, and performs Inverse Fast Fourier Transform (IFFT) on the generated data stream according to a predetermined first frequency band before transmission. Upon receiving a particular signal, a receiver performs Fast Fourier Transform (FFT) on the received signal according to a predetermined second frequency band, and restores the received signal.

3 Claims, 12 Drawing Sheets