

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2004/0037215 A1 Hwang et al.

Feb. 26, 2004 (43) Pub. Date:

- (54) ORTHOGONAL FREQUENCY DIVISION MULTIPLEXING COMMUNICATION METHOD AND APPARATUS ADAPTED TO CHANNEL CHARACTERISTICS
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- Appl. No.: 10/606,430 (21)
- (22)Filed: Jun. 25, 2003
- (30)Foreign Application Priority Data

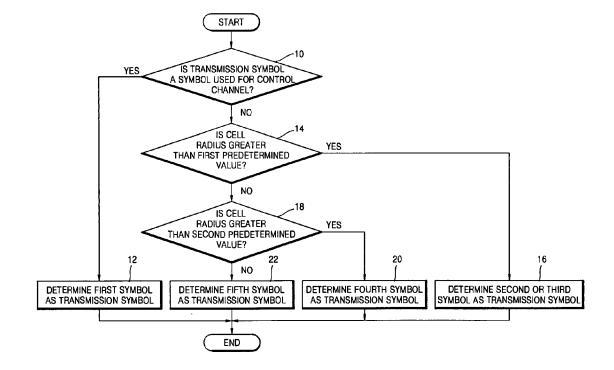
Jul. 29, 2002 (KR) 2002-0044630

Publication Classification

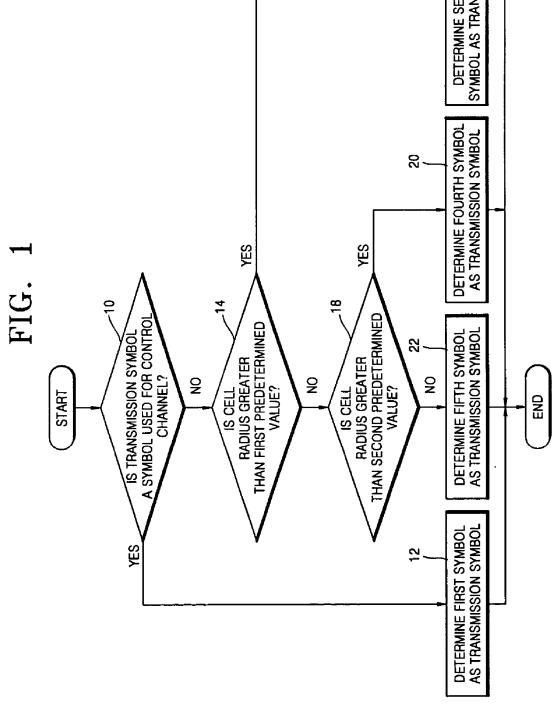
(51)	Int. Cl. ⁷	Н04Ј 1	1/00
(52)	U.S. Cl.		203

(57)**ABSTRACT**

An orthogonal frequency division multiplexing (OFDM) communication method and apparatus adapted to channel characteristics are provided. The OFDM communication method includes changing at least one of a length of a transmission symbol, a format of a frame, and a format of the transmission symbol depending on a type of the transmission symbol and a radius of a cell, in which communication is performed. The OFDM communication apparatus includes a symbol inspector, for inspecting a type of a transmission symbol and outputting the result of the inspection as a first control signal, and a symbol and format converter, for changing at least one of a length of a transmission symbol, a format of a frame, and a format of the transmission symbol in response to the first control signal and a radius of a cell, in which communication is performed.







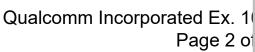
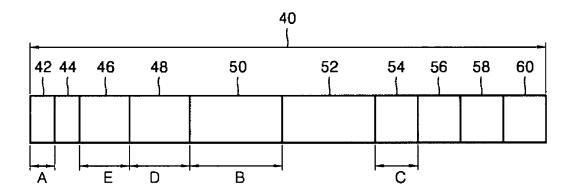




FIG. 2



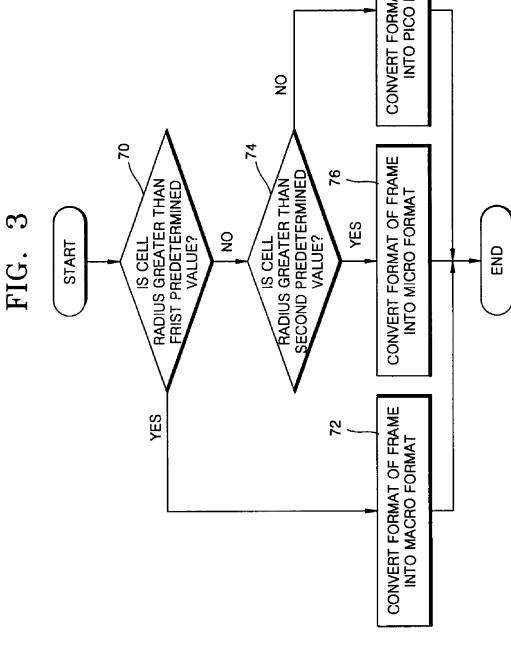


FIG. 4

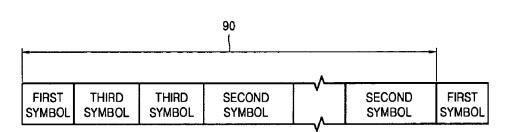


FIG. 5

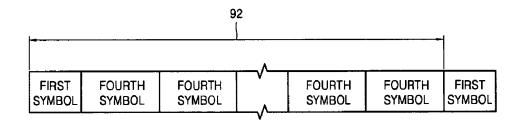
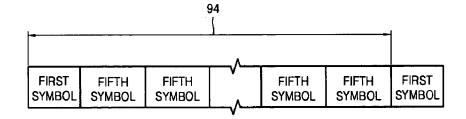


FIG. 6



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