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Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

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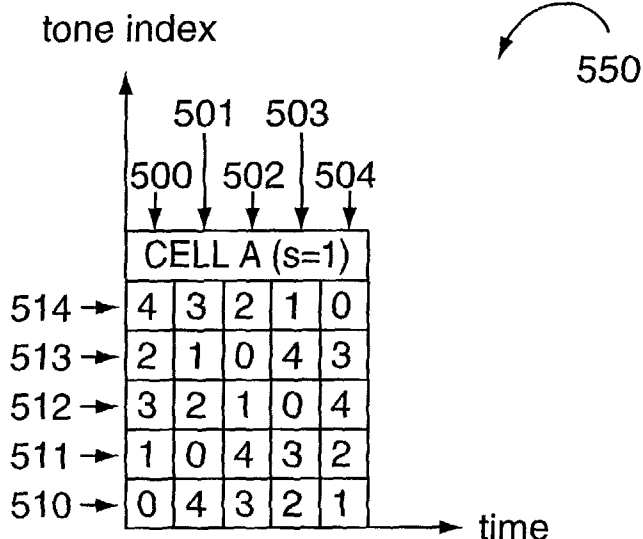
- with international search report

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29 November 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD OF TONE ALLOCATION FOR TONE HOPPING SEQUENCES



(57) Abstract: Methods and apparatus for allocating tones for communications purposes in adjoining cells of an OFDM system are described. Tones (550) used in each cell are allocated to tone hopping sequences (510, 511, 512, and 513) according to a tone-to-tone hopping sequence allocation function. Different cells use different tone to tone hopping sequence allocation functions to minimize the number of collisions between hopping sequences of neighboring cells. Tone hopping sequences to communications channel allocation functions are used to allocate tone hopping sequences to communications channels. Communications channels are used by wireless terminals, e.g., mobile nodes, to transmit data. Over time, a wireless terminal uses the tones included in the tone hopping sequences corresponding to communications channels it is authorized to use. Accordingly, tones are assigned to communications devices by multi-function, e.g., two level, mapping operation.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/19273

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : H04B 1/69

US CL : 375/133

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 375/132, 133, 134; 370/203, 337

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A,P	US 6,298,081 B1 (ALMGREN et al.) 02 October 2001, all	1-21
A	US 5,867,478 A (BAUM et al.) 02 February 1999, all	1-21



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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INTERNATIONAL SEARCH REPORT

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Continuation of B. FIELDS SEARCHED Item 3:

East

search terms: hopping, allocation, function, OFDM