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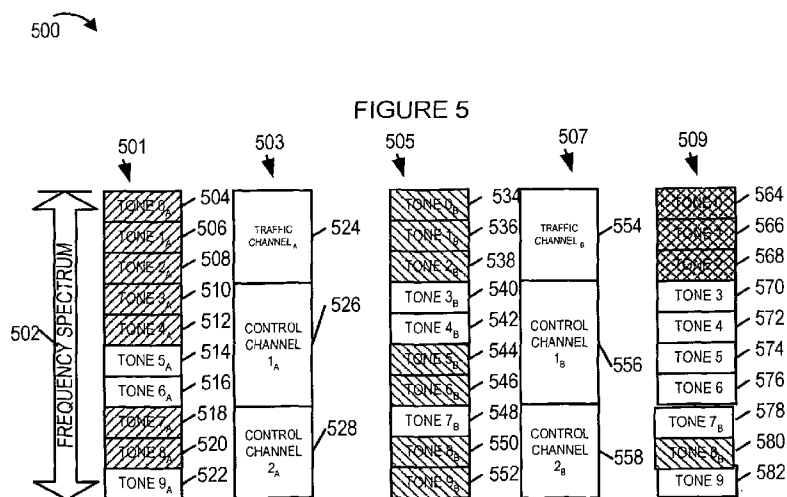
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- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

[Continued on next page]

(54) Title: METHOD OF DOWNLINK RESOURCE ALLOCATION IN A SECTORIZED ENVIRONMENT



(57) Abstract: Methods and apparatus for communicating different size coded blocks of information in a wireless sectorized communications cell are described. Information may be categorized and formed into large, medium, and small coded blocks which may include error correction code bits based on the number of bits representing the information, time criticality of the information, and tolerable level of interference. Channels with full tone overlap between adjacent sectors, channels with no tone overlap between adjacent sectors, and channels with partial tone overlap between adjacent sectors are used for different size blocks. Some tones corresponding to a channel with less than full tone overlap are left unused in an adjacent sector thereby achieving less than full transmission tone overlap. Large transmission blocks are transmitted using full tone overlap channels; medium transmission blocks are transmitted using partial tone overlap channels; small transmission blocks are transmitted without using transmission tone overlap in adjacent sectors.



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