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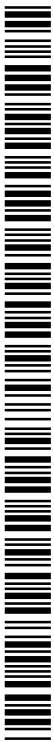
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(54) Title: ASYMMETRIC BANDS ALLOCATION IN DOWNLINK AND UPLINK USING THE SAME FFT SIZE

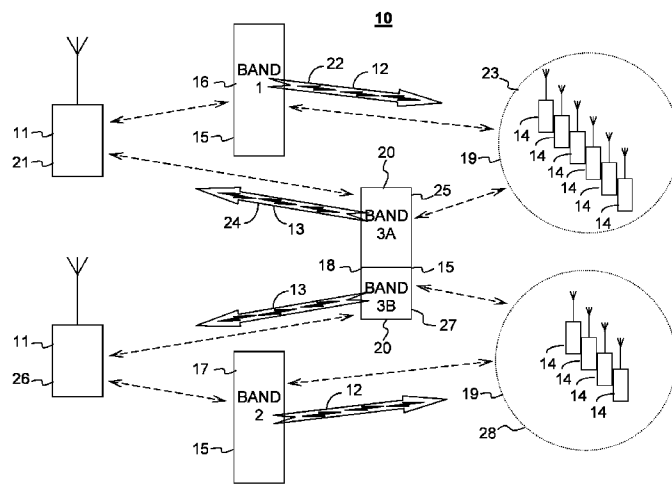


Fig. 1

(57) Abstract: Creating asymmetric wireless communication by Allocating a first plurality of frequency bands to a first transmission direction and at least one frequency band to an opposite transmission direction where all the frequency bands use the same FFT size Dividing at least one of the frequency bands into sub-bands or slots Creating an asymmetrical communication channel including at least one of A whole number of the frequency bands in one direction and at least one of the sub-bands in the opposite direction A first number of the sub- bands in one direction and a different number of the sub-bands in the opposite direction At least one sub-band in one direction and at least one sub-band in the opposite direction having different size.

INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER
 IPC(8) - G06F 15/16 (2009.01)
 USPC - 709/234
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B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 USPC: 709/234

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
 USPC: 709/230; 370/310, 330

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
 USPTO WEST (PGPB, USPT, EPAB, JPAB); GOOGLE
 Search Terms Used: Fourier, FTT, frequency, band, bandwidth, allocate, synchronize, divide, subdivide, sub-band, upload, uplink, download, downlink, link, size, same, asymmetric,

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2008/0019314 A1 (GOROKHOV et al.) 24 January 2008 (24.01.2008), entire document, especially para [0009]-[0010], [0030]-[0036], [0042]-[0044], [0055]-[0063], [0088]	1-9
Y	US 6,940,827 B2 (LI et al.) 06 September 2005 (06.09.2005), entire document, especially col col 5, 8-17; col 6, 9-35 and Fig 1B, 7	1-9
A	US 7,042,857 B2 (KRISHNAN et al.) 09 May 2006 (09.05.2006), entire document	1-9
A	US 2007/0195690 A1 (BHUSHAN et al.) 23 August 2007 (23.08.2007), entire document	1-9

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