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(54) Title: PARTIAL DMM RECEPTION TO REDUCE STANDBY POWER

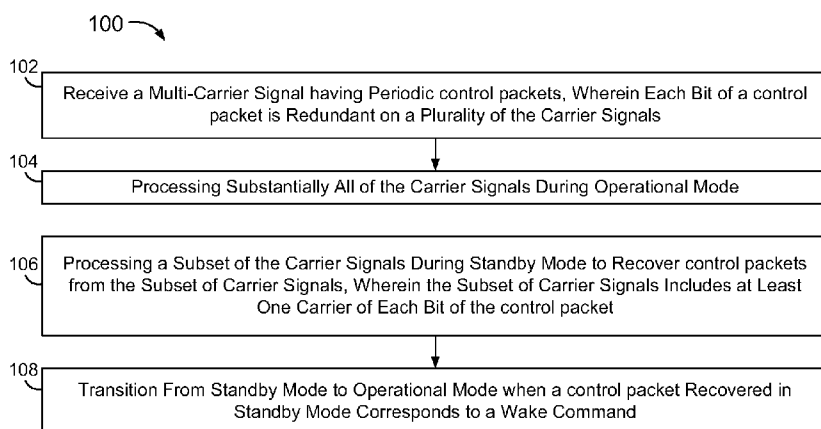


FIG. 1

(57) Abstract: Methods and systems to receive a multiple-carrier signal having periodic control packets, wherein each bit of a control packet is redundant on a plurality of the carrier signals, and to recover the control packet from a subset of the carrier signals in a standby mode. In an operational mode, a full bandwidth of the multiple-carrier signal digitized and processed. In a standby mode, the digitized signal may be digitally low pass filtered and decimated to obtain sample points corresponding to the subset of the carrier signals, and the samples may be processed with a reduced-bandwidth FFT and a reduced-bandwidth equalizer. Standby mode parameters corresponding to the subset of carrier signals may be selected based on signal to noise ratios (SNRs) of the signal sub-carriers. A minimum set of carrier signals needed to recover a control packet, and corresponding bit locations, may be determined from bit loading information and SNR.



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A. CLASSIFICATION OF SUBJECT MATTER***H04W 52/02(2009.01)i, H04B 7/26(2006.01)i***

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)

H04W 52/02; H04M 11/06; H04B 7/00; H04B 15/00; H04B 1/04; H04B 1/38

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

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

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

eKOMPASS(KIPO internal) & Keywords: standby, operat*, mode, packet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6788963 B2 (RAJIV LARROIA et al.) 07 September 2004 See figure 5 and corresponding detailed description.	1-20
A	KR 10-2000-0067240 A (SAMSUNG ELECTRONICS CO., LTD.) 15 November 2000 See abstract and claim 1.	1-20
A	US 2007-0066329 A1 (RAJIV LARROIA et al.) 22 March 2007 See abstract and claims 1-30.	1-20
A	EP 0765042 A2 (AT&T CORP.) 26 March 1997 See abstract and claims 1-8.	1-20

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

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