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Declarations under Rule 4.17:

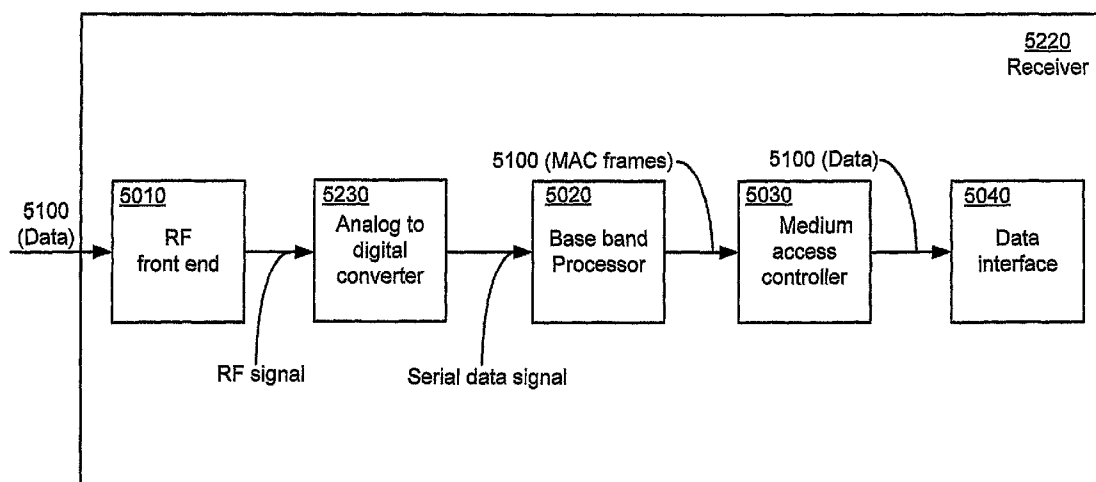
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
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(54) Title: HIGH DATA RATE TRANSMITTER AND RECEIVER



(57) Abstract: A high-speed transmitter and receiver are provided. In one embodiment, a transmitter comprises a baseband processor structured to receive data and to convert the data into a multiplicity of high and low signal values, with each high and low signal value having a first timing interval. A local oscillator generates a clock signal at a second timing interval and a digital circuit combines the high and low signal values with the clock signal to produce a transmission signal directly at a transmission frequency. A receiver is configured to receive the signal. This Abstract is provided for the sole purpose of complying with the Abstract requirement rules that allow a reader to quickly ascertain the subject matter of the disclosure contained herein. This Abstract is submitted with the explicit understanding that will not be used to interpret or to limit the scope or the meaning of the claims.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US06/02973

A. CLASSIFICATION OF SUBJECT MATTER IPC: H04B 1/02(2006.01);H04B 1/16(2006.01) USPC: Please See Continuation Sheet 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. : Please See Continuation Sheet 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) U.S. Patent, EPO, JPO, DERWENT, PG-PUB, IEEE				
C. DOCUMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
X --- Y	U.S. 5,594,341 A (MAJIDI-AHY et al.) 14 January 1997 (14.01.1997) figure 2, column 3 line 39 to column 4 line 16.	31 ----- 33-35, 46-47		
Y	U.S. 6,061,551 A (SORRELLS et al.) 04 February 2003 (04.02.2003), column 26 lines 45-68.	33-35		
A,E	U.S. 7,180,421 A (PAHLAVEN et al.) 20 February 2007 (20.02.2007) see entire reference.	1-48		
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.				
<table style="width: 100%; border: none;"> <tr> <td style="width: 50%; vertical-align: top;"> * Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed </td> <td style="width: 50%; vertical-align: top;"> "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 "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 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family </td> </tr> </table>			* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier application or patent published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"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 "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 "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family
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Date of the actual completion of the international search 13 June 2008 (13.06.2008)		Date of mailing of the international search report <div style="font-size: 1.2em; font-weight: bold;">05 AUG 2008</div>		
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Authorized officer <div style="display: flex; justify-content: space-between;"> <div> /Sonny TRINH/ Telephone No. 703-306-0377 </div> <div> DEBORAH A. THOMAS PARALEGAL SPECIALIST </div> </div>		

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Continuation of B. FIELDS SEARCHED Item 1:

455/102,118,258,91,105,113,141,147,208,209,255,504,506,63.1,114.2,278.1,296; 375/134,135,142,146; 370/319,320,321,335,344,347

Continuation of USPC:

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