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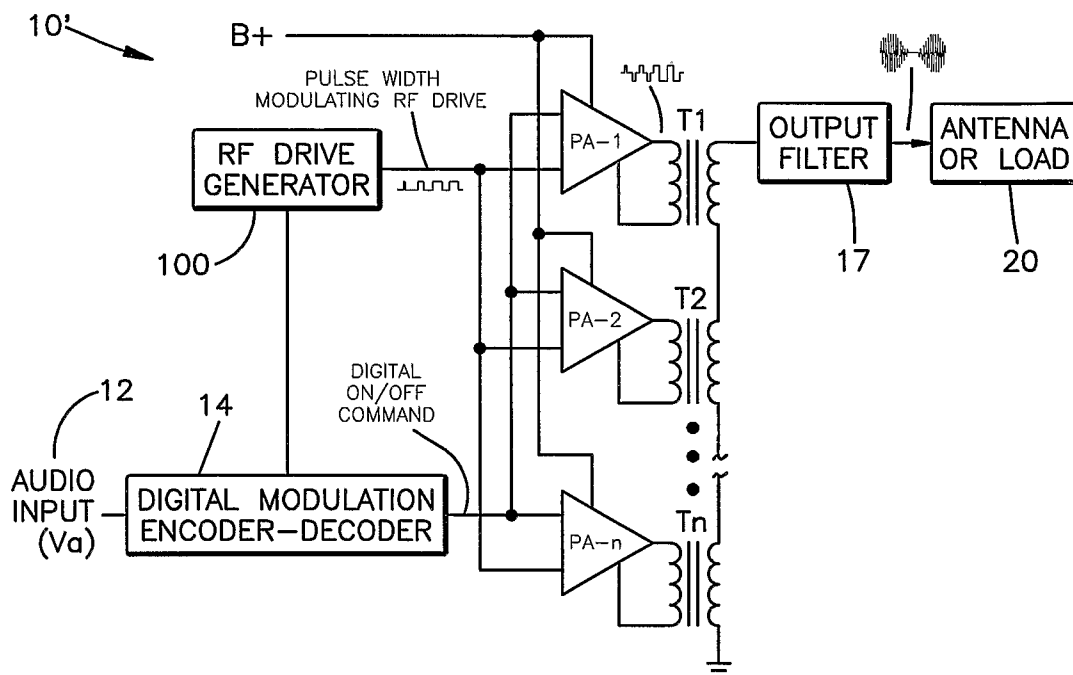
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(54) Title: A DIGITAL AMPLITUDE MODULATION TRANSMITTER WITH PULSE WIDTH MODULATING RF DRIVE



(57) Abstract: A digital amplitude modulation (AM) transmitter with pulse width modulating RF drive is presented. A plurality of RF amplifiers, each, when turned on, amplifies an applied RF drive signal by the same amount to provide a unit step RF output. An encoder supplies turn-on signals to turn on a number of the RF amplifiers wherein the number varies as a function of the value of an applied audio signal. The width of the unit step RF output is varied as a function of the number of the RF amplifiers that are turned on.

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**INTERNATIONAL SEARCH REPORT**

International application No.  
PCT/US 06/10213

<p><b>A. CLASSIFICATION OF SUBJECT MATTER</b>                  IPC(8) - H03C 01/00 (2007.01)                  USPC - 332/183                  According to International Patent Classification (IPC) or to both national classification and IPC</p>											
<p><b>B. FIELDS SEARCHED</b>                  Minimum documentation searched (classification system followed by classification symbols)                  USPC: 332/183</p>											
<p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched                  USPC: 332/149, 152, 155, 175, 178, 185; 375/240, 259, 268, 300</p>											
<p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)                  PubWEST(USPT,PGPB,EPAB,JPAB); Google Scholar                  Search Terms: pulse width modulation, digital amplitude modulation, transmitter, RF drive</p>											
<p><b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b></p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>X</td> <td>US 2002/0180547 A1 (STASZEWSKI et al.) 05 December 2002 (05.12.2002), abstract and para [0025], [0028]</td> <td>1-7</td> </tr> <tr> <td>A</td> <td>US 6,542,722 B1 (SORRELLS et al.) 01 April 2003 (01.04.2003), entire document</td> <td>1-7</td> </tr> </tbody> </table>		Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	X	US 2002/0180547 A1 (STASZEWSKI et al.) 05 December 2002 (05.12.2002), abstract and para [0025], [0028]	1-7	A	US 6,542,722 B1 (SORRELLS et al.) 01 April 2003 (01.04.2003), entire document	1-7	
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<p><input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/></p>											
<p>* Special categories of cited documents:</p> <table border="0"> <tr> <td>"A" document defining the general state of the art which is not considered to be of particular relevance</td> <td>"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</td> </tr> <tr> <td>"E" earlier application or patent but published on or after the international filing date</td> <td>"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</td> </tr> <tr> <td>"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)</td> <td>"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</td> </tr> <tr> <td>"O" document referring to an oral disclosure, use, exhibition or other means</td> <td>"&amp;" document member of the same patent family</td> </tr> <tr> <td>"P" document published prior to the international filing date but later than the priority date claimed</td> <td></td> </tr> </table>		"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 but 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	"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)	"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	"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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<p>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</p>	<p>Authorized officer:                  Lee W. Young                  PCT Helpdesk: 571-272-4300                  PCT OSP: 571-272-7774</p>										