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(54) Title: POLAR MODULATION SYSTEM

(57) Abstract: A system and a method for polar modulation achieved via generation of a multi-level pulse width modulated signal. The system in overview comprises a base-band pre-distortion element (115) producing a pre-distorted signal carrying the amplitude information of the base-band signal, two comparators (140,150) providing two inter-related pulse width modulated signals and a combination and amplification stage (160) that provides a third pulse width modulated radio frequency signal carrying the amplitude and the phase of the base-band signal. The first and second comparators compare a radio -frequenc signal carrying the phase information of the base-band signal with the pre-distorted signal and an inverted copy of the pre-distortion signal respectively.



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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER
INV. H04L27/36

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)

H03F

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 practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 271 870 A (NOKIA CORP [FI]) 2 January 2003 (2003-01-02)	1,2,5-14
Y	paragraphs [0025] - [0037]; figures 6-10,13	3,4
Y	----- US 5 115 203 A (KRETT DAVID L [US] ET AL) 19 May 1992 (1992-05-19) figures 4-6	3
Y	----- US 2005/007194 A1 (GRUNDLINGH JOHAN M [CA]) 13 January 2005 (2005-01-13) paragraphs [0005], [0006]; figures 1,2	4
A	----- WO 2004/100356 A (DANMARKS TEKNISKE UNI [DK]; POULSEN SOEREN [DK]) 18 November 2004 (2004-11-18) page 10, lines 6,7; figure 24 page 22, line 28 - page 23, line 11	1-14



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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