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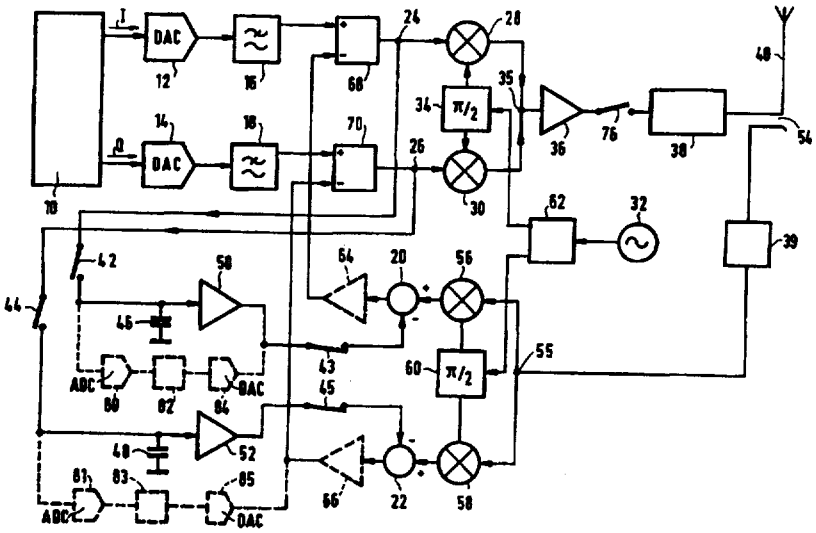
(54) Title: TRANSMITTER COMPRISING CARRIER SUPPRESSION AND DC OFFSET REDUCTION MEANS



(57) Abstract

A transmitter comprising at least first and second phase related signal paths (I, Q), having respective frequency up-converting means (28, 30, 32, 34), means (35) for combining the output of the respective frequency up-converting means and for supplying the combined signal to power amplifying means (36, 38). A feedback loop is provided which has a coupler (54) for deriving a portion of the power amplifier output signal and supplying it to first and second phase related feedback paths. Each of the feedback paths comprises frequency down-converting means (56, 58, 60). Means (42 to 52) are provided for measuring the dc offsets at the respective inputs of the frequency up-converting means (28, 30) when the feedback around the linearisation loop is reduced to zero without altering the dc offsets produced at the outputs of the frequency down-converting means (56, 58, 60). Subtracting means (20, 22, 68, 70) subtract the measured dc offsets from the feedback loop error signals.

* (Referred to in PCT Gazette No. 45/1997, Section II)

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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H03C 1/52, H04B 1/02, H04L 27/20
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)

IPC6: H03C, H04B, H04L, H03D

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

SE,DK,FI,NO classes as above

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5396196 A (BLODGETT), 7 March 1995 (07.03.95), column 5, line 9 - column 8, line 18, figures 3,4	1,5,9,10
A	--	2-4,6-8
A	US 5012208 A (MÄKINEN ET AL), 30 April 1991 (30.04.91), column 2, line 51 - column 4, line 2, figure 2	1,5,9,10
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[X] Further documents are listed in the continuation of Box C. [X] See patent family annex.

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Date of the actual completion of the international search	Date of mailing of the international search report
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Patent Abstracts of Japan, Vol 17,No 283, E-1373, abstract of JP,A,5-14429 (OKI ELECTRIC IND CO LTD), 22 January 1993 (22.01.93) --	1,2,5,6,9,10
A	US 4243955 A (DANIEL ET AL), 6 January 1981 (06.01.81), column 3, line 39 - column 4, line 58, figure 3 --	1,5

INTERNATIONAL SEARCH REPORT

Information on patent family members

06/08/97

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US 5396196 A	07/03/95	CN 1116375 A	07/02/96
		EP 0661801 A	05/07/95
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