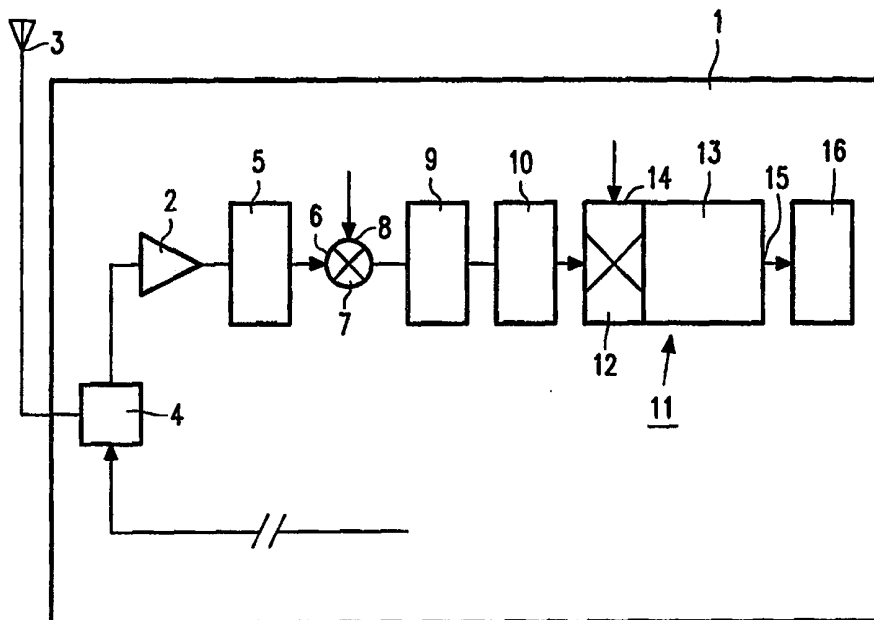




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(54) Title: A DIGITAL COMMUNICATION DEVICE AND A MIXER



(57) Abstract

Known is a digital communication device having a dual conversion architecture. A first RF-mixing stage is provided followed by a second, quadrature, mixing stage of which output signals are sampled by means of an analog-to-digital converter and supplied to a DSP for further baseband processing. Proposed is a modified sigma delta analog-to-digital converter. A mixing function is added to the A/D-conversion function by modifying the input stage of a conventional sigma delta bitstream A/D converter. Herewith, a reduced number of IC-external components and a reduced power consumption are achieved.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IB 98/01078

A. CLASSIFICATION OF SUBJECT MATTER

IPC6: H03M 3/02

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: H03M, H04B

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

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

EDOC, WPIL, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0643477 A2 (NOKIA MOBILE PHONES LTD.), 15 March 1995 (15.03.95), see whole document	1,3-5,7-9
Y	--	2,6
Y	EP 0658008 A2 (MOTOROLA, INC.), 14 June 1995 (14.06.95), figure 2, abstract	2
Y	US 5331583 A (HIROTAKA HARA ET AL), 19 July 1994 (19.07.94), column 16, line 35 - column 18, line 50	6
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INTERNATIONAL SEARCH REPORT

Information on patent family members

02/02/99

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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