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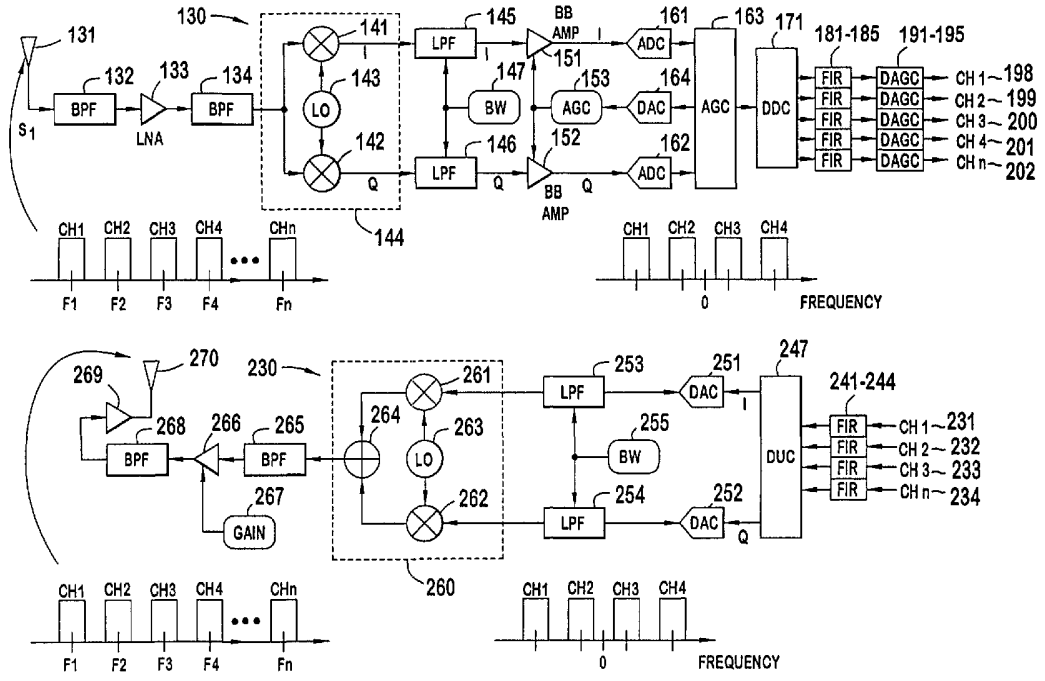
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(54) Title: SYSTEM AND METHOD FOR A DIRECT CONVERSION MULTI-CARRIER PROCESSOR




(57) Abstract: A radio communications device such as a receiver (130), transmitter (230) or transceiver provides direct conversion of quadrature signals between a radio frequency signal and a plurality of resolved channels. The device provides block processing of multiple RF carriers in a wireless communication system using a direct conversion transmitter/receiver and baseband signal processing.

WO 2003/105390 A3

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# INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/17851

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H04B 1/707; H04L 27/02
US CL : 455/47,109; 375/148,270,152,301

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. : 455/47,109; 375/148,270,152,301

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)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---|---|---|
| X | US 6,480,528 B1 (Patel et al.) 12 NOVEMBER 2002 (12.11.2002), col. 4, line 54-col. 5, line 61; col. 11, lines 1-25) | 1-4 |
| Y | US 6,631,170 B1 (Gu) 07 OCTOBER 2003 (07.10.2003), fig. 2-3; col. 4, line 39-col. 5, line 52; col. 6, lines 37-44. | 1-4 |
| X | US 6,351,500 B2 (Kumar) 26 FEBRUARY 2002 (26.02.2002), fig. 11, 12 and 17; col. 14, lines 58-59; col. 19, lines 36-37; col.21, lines 10-13; col. 21, lines 25-30. | 5-9 |
| Y | US 6,611,565 B1 (Bada et al.) 26 AUGUST 2003 (26.08.2003), fig. 8; col. 5, line 65-col. 6, line 19; col. 9, lines 45-49; col. 9, lines 54-60. | 5-9 |

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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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