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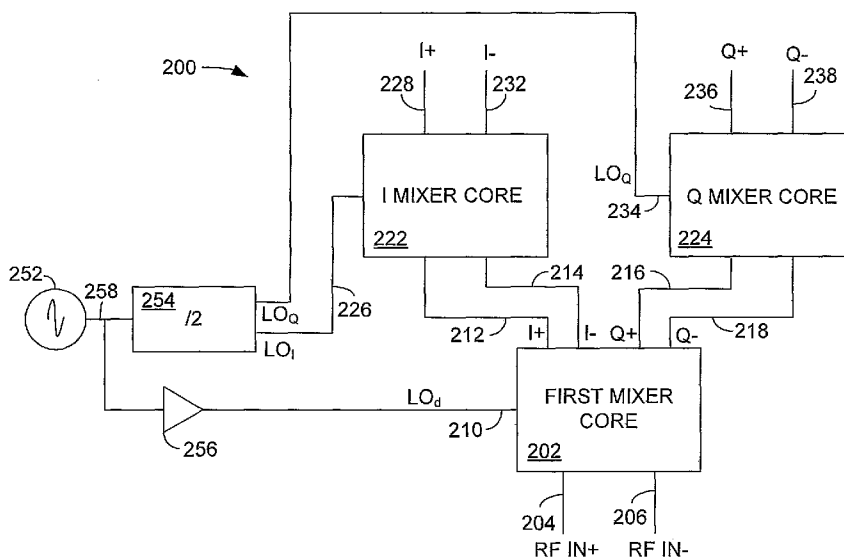
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(54) Title: LOW NOISE MIXER



(57) Abstract: A low noise mixer comprises a first mixer core configured to receive a radio frequency (RF) input signal having an RF frequency, and a first local oscillator signal, wherein the first local oscillator signal is at a frequency that is nominally twice the frequency of the RF frequency, the first mixer core configured to switch the RF input signal to at least one secondary mixer core at a frequency that coincides with the frequency of the first local oscillator signal, the at least one secondary mixer core configured to receive the switched RF input signal and a second local oscillator signal, where the second local oscillator signal is at the same nominal frequency as the RF input signal, and wherein switching the RF input signal at the frequency of the first local oscillator signal substantially eliminates flicker noise associated with the down-conversion process.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC(8) - H04L 12/26 (2007.01)
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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)
MicroPatent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
|---------------|---|------------------------|
| X --- Y | US 2003/0021237 A1 (MIN et al) 30 January 2003 (30.02.2003) paragraphs 0087-0088, 0090, 0126, 0129. | 1-11 ----- 12-20 |
| Y | WO 2004/001997 A1 (KUFFNER) 31 December 2003 (31.12.2003) Page 1, lines 7-9. | 12-20 |
| A | US 2002/0055337 A1 (PERSICO et al) 09 May 2002 (09.05.2002) Entire Document. | 1-20 |
| A | WO 03/023983 A1 (SARCA) 20 March 2003 (20.03.2003) Entire Document. | 1-20 |

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