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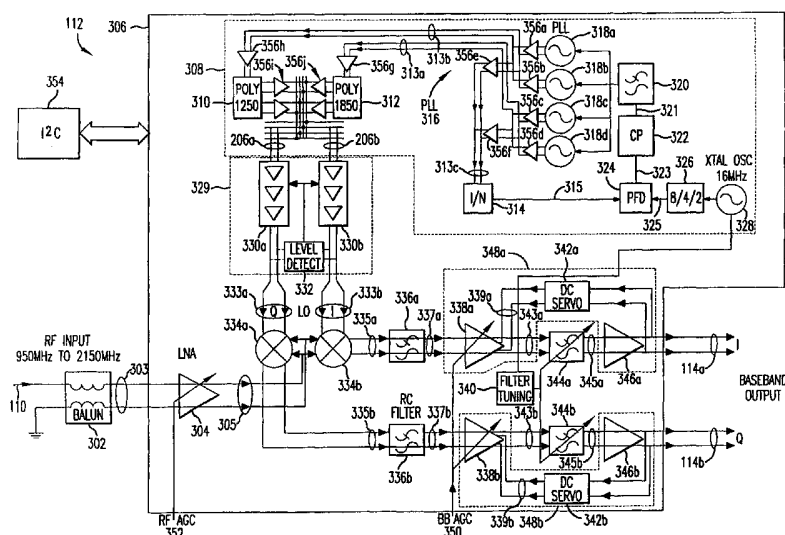
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(54) Title: INTEGRATED DIRECT CONVERSION SATELLITE TUNER



(57) Abstract: A direct conversion satellite tuner is fully integrated on a common substrate. The integrated tuner receives an RF signal having a plurality of channels and down-converts a selected channel directly to baseband for further processing. The integrated tuner includes on-chip local oscillator generation, tunable baseband filters, and DC Offset cancellation. The integrated tuner can be implemented in a completely differential I/Q configuration for improved electrical performance. The entire direct conversion satellite tuner can be fabricated on a single semiconductor substrate using standard CMOS processing, with minimal off-chip components. The tuner configuration described herein is not limited to processing TV signals, and can be utilized to down-convert other RF signals to an IF frequency or baseband.



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B. FIELDS SEARCHED

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

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EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00 13306 A (MAXIM INTEGRATED PRODUCTS) 9 March 2000 (2000-03-09)	1,10,11, 15,16, 23,24, 29,30, 33,37, 39,41
Y	claims 1,4,5; figures 1,2,4 ---	2,3
Y	DE 199 24 039 A (MATSUSHITA ELECTRIC IND CO LTD) 2 December 1999 (1999-12-02) claims 1,13; figure 1 ---	2,3
A	US 5 819 157 A (KEATE CHRISTOPHER ET AL) 6 October 1998 (1998-10-06) abstract; figure 4 --- -/--	1-4

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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