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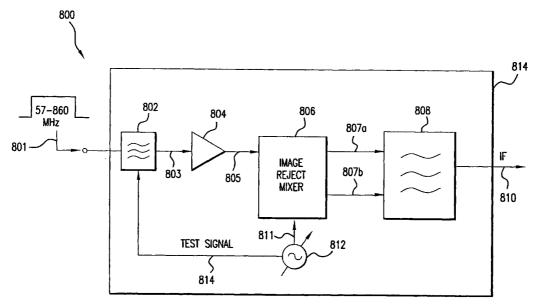
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(54) Title: DIRECT CONVERSION TUNER



(57) Abstract: A direct conversion tuner down-converts television signals, cable signals, or other signals directly from an RF frequency to an IF frequency and/or baseband, without an intermediate up-conversion step for image rejection. The direct conversion tuner includes a pre-select filter, an amplifier, an image reject mixer, and a poly-phase filter. The pre-select filter, amplifier, and the image reject mixer can be calibrated to provide sufficient image rejection to meet the NTSC requirements for TV signals. The entire direct conversion tuner can be fabricated on a single semiconductor substrate without requiring any 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

 $\begin{array}{ccc} \text{Minimum documentation searched } & \text{(classification system followed by classification symbols)} \\ IPC & 7 & H03D & H03J \\ \end{array}$

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 practical, search terms used)

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Date of the actual completion of the international search 2 April 2002	Date of mailing of the international search report $10/04/2002$
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