

CARRIER RECOVERY APPARATUS OF DIGITAL BROADCASTING RECEIVER USING TWO (2) PILOT SIGNALS

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ABSTRACT

A carrier recovery apparatus of a digital broadcasting receiver. The carrier recovery apparatus has a plurality of frequency offset estimating units for estimating a frequency offset of the carrier generate during the tuning of the digital broadcasting signal, by shifting a plurality of pilot tones contained in the I signal and the Q signal respectively to a base band; a combining unit for combining the frequency offset estimated by the plurality of frequency offset estimating units; a phase offset estimating unit for estimating a phase offset of the carrier for which the frequency offset is combined by the combining unit; and a voltage-controlled oscillating (VCO) unit for oscillating a predetermined level of voltage for compensating for the frequency offset and the phase offset and then tuning.

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FIG. 3



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