

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0223194 A1 Jin et al.

Jul. 4, 2024 (43) Pub. Date:

(54) PHASE LOCK CIRCUIT

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Appl. No.: 18/205,008

(22) Filed: Jun. 2, 2023

Related U.S. Application Data

(60) Provisional application No. 63/436,931, filed on Jan. 4, 2023.

Publication Classification

Int. Cl. (51) H03L 7/093 (2006.01)H03L 7/07 (2006.01)H03L 7/099 (2006.01)

U.S. Cl. H03L 7/093 (2013.01); H03L 7/07 CPC (2013.01); H03L 7/0991 (2013.01)

(57)**ABSTRACT**

A phase lock system includes a phase detector to detect a phase difference between a reference signal and the output of a controllable oscillator circuit. A loop filter may filter the output of the loop filter and an integrator may integrate the output of the loop filter. The integrator output may be added to the output of the loop filter and may be input to the controllable oscillator circuit and may modify at least one of the phase and frequency of the controlled oscillator output. A loop filter may enable a 40 dB-per-decade roll-off and improve attenuation of reference signal noise and local oscillator noise.

