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(54) **ADAPTIVE PHASE LOCK LOOP THAT
ADJUSTS ITS PHASE DIFFERENCE
TARGET**

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(57) **ABSTRACT**

Techniques are described herein that are capable of adjusting a center frequency of an adaptive voltage controlled oscillator (VCO) that is included in an adaptive phase lock loop (PLL) and/or a phase difference target of the adaptive PLL. An adaptive PLL is a PLL that includes an adaptive VCO. An adaptive VCO is a VCO that is capable of adjusting its center frequency and/or a phase difference target of the adaptive PLL that includes the adaptive VCO. The adaptive PLL may be configured to drive (e.g., control) a device. A drive signal that is used to drive the device and a resulting output signal that is proportional to movement of the device may be fed back to respective inputs of the adaptive PLL so that the phases of those signals may be processed to facilitate adjustment of the center frequency and/or the phase difference target.

