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(54) **DUTY-CYCLE CORRECTOR PHASE SHIFT CIRCUIT**

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(57) **ABSTRACT**

One embodiment of a duty-cycle corrector phase shift (DCCPS) circuit includes a voltage-controlled delay line circuit, a duty-cycle correct circuit, an error amplifier circuit, and DC sampler circuits. Another embodiment of a duty-cycle corrector phase shift circuit includes a digital-controlled delay line circuit, a duty-cycle correct circuit, DC sampler circuits, a comparator circuit, a counter circuit, a control circuit, and a lock detector circuit. In some instances, the DCCPS circuit provides a clock signal with a duty-cycle of approximately fifty percent (50%) and a given phase shift between an input clock signal and the output clock signal.