

VARIABLE CAPACITOR AND METHOD FOR FABRICATING THE SAME

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Abstract of the Disclosure

A voltage variable capacitor (10) fabricated on a semiconductor substrate (11) includes a gate structure (62) and a well (22) under the gate structure (62). A heavily
10 doped buried layer (15) and a heavily doped contact region (31) in the semiconductor substrate (11) form a low resistance conduction path from the well (22) to a surface (17) of the semiconductor substrate (11). A multi-finger layout is used to construct the voltage variable capacitor
15 (10). In operation, when a voltage applied across the voltage variable capacitor (10) changes, the width of depletion region in the well (22) changes, and the capacitance of the voltage variable capacitor (10) varies accordingly.

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Fig. 2 accompanies this abstract.

