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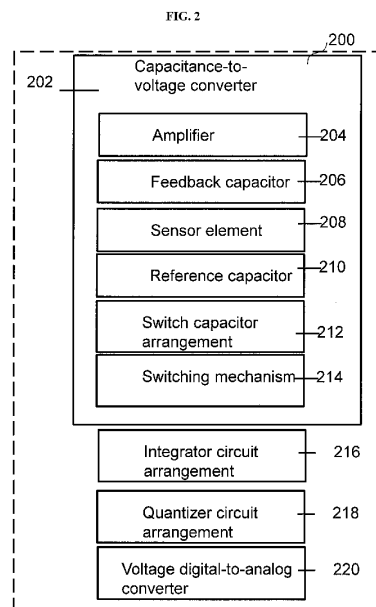
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- (54) **Title:** DELTA SIGMA MODULATOR FOR AND METHOD OF GENERATING A DIGITAL OUTPUT VOLTAGE



(57) **Abstract:** Various embodiments may provide a delta sigma modulator for generating a digital output voltage. The delta sigma modulator may include a capacitance-to-voltage converter for converting a sensed continuous-in-time applied capacitance signal to a delta analog output voltage signal. The modulator may also include an integrator circuit arrangement configured to generate an analog output voltage signal based on the delta analog output voltage signal. The modulator may additionally include a quantizer circuit arrangement configured to generate the digital output signal based on the analog output voltage signal. The modulator may further include a voltage digital-to-analog converter configured to generate the analog charging voltage based on the digital output signal, thereby generating the delta analog output voltage signal based on the digital output signal.

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