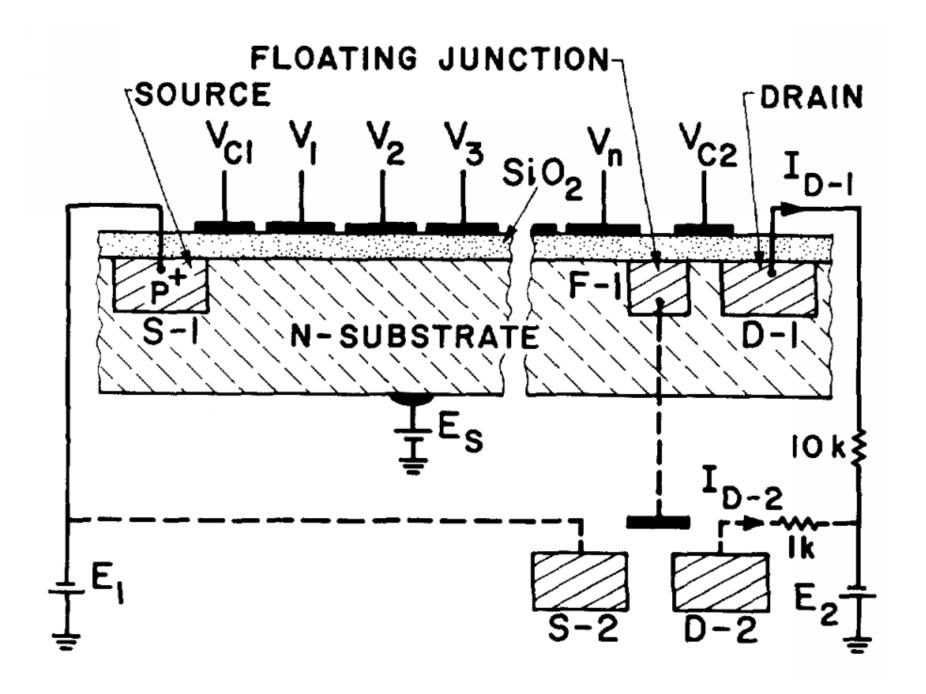
FLOATING DIFFUSION AMPLIFIER

ISSCC 1971



Charge-Coupled Digital Circuits

KOSONOCKY AND CARNES (RCA) described the working principle of a floating-diffusion charge detector in a CCD. The small charge packets which are shifted through a CCD are transported towards the floating diffusion, where they are converted into a voltage. This basic configuration of the floating diffusion amplifier is still in use in every CCD, as well as in every pixel of a CMOS image sensor.