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(54) **SAMPLING SWITCH CIRCUITS**

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ABSTRACT

A sampling switch circuit, comprising an input node, connected to receive an input voltage signal, a sampling transistor comprising a gate terminal, a source terminal and a drain terminal, the source terminal connected to the input node, a hold-control node connected to receive a hold-control voltage signal, an output node connected to the drain terminal of the sampling transistor, a buffer circuit having a buffer input connected to the input node and a buffer output connected to a track-control node, the buffer circuit configured to provide a track-control voltage signal at the track-control node dependent on the input voltage signal and switching circuitry configured to connect the gate terminal of the sampling transistor to the track-control node or to the hold-control node in dependence upon a clock signal.

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