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(54) Switched capacitor charge pump, as well as sawtooth oscillator comprising such a switched capacitor charge pump.

(57) Charge pump comprising: a capacitor (4) which includes a first capacitor terminal (2) and a second capacitor terminal (8), a discharge switch (20) for discharging the capacitor (4) by the closing and opening of the discharge switch (20) in response to a first or second value respectively, of a clock signal (CS), a first current source (6) for supplying a first current (I₁) to the first capacitor terminal (2), a comparator (12) whose first input (10) is connected to the first capacitor terminal (2) and whose second input (14) is connected to a reference voltage source (16) and which comparator generates a comparison signal (V_{comp}) of which a first or second value denotes that the voltage (V_c) on the first input (10) is smaller or larger than the voltage on the second input (14), a current switch (24) passing a second current (I₂) coming from the second current source (34) to an output terminal (28) once the clock signal (CS) has changed from the first to the second value, and prevents the second current (I₂) flowing to the output terminal (28) once the comparison signal (V_{comp}) has changed from the first to the second value.

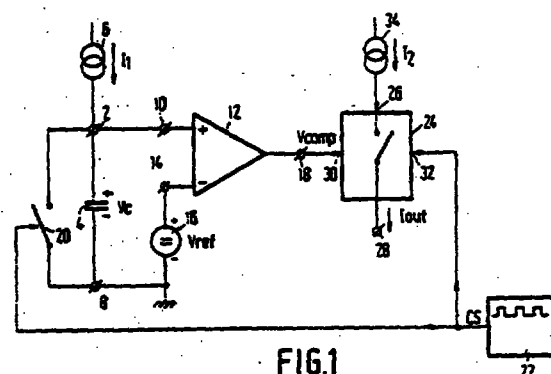


FIG.1

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