

Title (en)

Switched capacitor differentiator

Title (de)

Geschalteter Kondensatordifferenzierer

Title (fr)

Différentiateur de condensateur commuté

Publication

**EP 2835760 B1 20190116 (EN)**

Application

**EP 13179643 A 20130807**

Priority

EP 13179643 A 20130807

Abstract (en)

[origin: EP2835760A1] The switched capacitor differentiator comprises : - an operational amplifier (12) having an output (18), an inverting input (14) and a non-inverting input (16), - an input port (34) and a reference voltage (20), - a first capacitor (30) and a second capacitor (32), and - a switching structure (40) comprising switches (41, 42, 43, 44, 45, 46) to alternately couple at least one of the first and the second capacitors with the operational amplifier, the input port and with the reference voltage in at least three different switch configurations, wherein: - in a first switch configuration the first capacitor is coupled between the input port and the reference voltage, - in a second switch configuration the second capacitor is coupled between the input port and a node connected to the operational amplifier output and inverting input, and - in a third switch configuration the first and second capacitors are connected in series between the inverting input and the operational amplifier output.

IPC 8 full level

**G06G 7/186** (2006.01)

CPC (source: EP)

**G06G 7/186** (2013.01)

Designated contracting state (EPC)

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DOCDB simple family (publication)

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