

Title (en)

PARALLEL ANALOG-DIGITAL CONVERTER WITH DUAL STATIC SCALE

Title (de)

PARALLEL-ANALOG-DIGITAL-UMSETZER MIT ZWEIFACHER STATISCHER SKALA

Title (fr)

CONVERTISSEUR ANALOGIQUE-NUMERIQUE PARALLELE A DOUBLE ECHELLE STATIQUE

Publication

EP 2135355 A1 20091223 (FR)

Application

EP 08717733 A 20080313

Priority

- EP 2008052989 W 20080313
- FR 0701932 A 20070316

Abstract (en)

[origin: WO2008113738A1] The invention relates to quick analog-digital converters, in particular those that include at least one flash-type conversion stage. The converter of the invention uses N differential amplifiers with four inputs. The amplifier of the j rank receives the input voltage to be converted V_{ep} - V_{en} on two first inputs, and a reference potential difference on the two other inputs. The reference potential difference is obtained between two network connections having the same resistance operating in parallel and supplied by a high voltage source and a low current source. The connections for an amplifier are respectively a P_j j-rank connection of a first network, and a P'_{N-j+1} of $N-j+1$ rank connection of a second network. The non linearity effects of the first and second networks are reduced due to the fact that the differential amplifiers are supplied with a current from the resistor networks. The invention can be used for quick converters having a very high resolution (12 to 14 bits).

IPC 8 full level

H03M 1/36 (2006.01)

CPC (source: EP US)

H03M 1/362 (2013.01 - EP US); **H03M 1/0682** (2013.01 - EP US)

Citation (search report)

See references of WO 2008113738A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2913833 A1 20080919; FR 2913833 B1 20090612; EP 2135355 A1 20091223; JP 2010521850 A 20100624; US 2010085232 A1 20100408; US 7999713 B2 20110816; WO 2008113738 A1 20080925

DOCDB simple family (application)

FR 0701932 A 20070316; EP 08717733 A 20080313; EP 2008052989 W 20080313; JP 2009553145 A 20080313; US 53052108 A 20080313