Title (en)

CIRCUIT ARRANGEMENT FOR DIGITALLY RECORDING ANALOG INFORMATION FORMED BY THE TIME INTERVAL BETWEEN TWO CONSECUTIVE STATES OF A SIGNAL

Publication

EP 0438469 B1 19920617 (DE)

Application

EP 89911553 A 19891012

Priority

DE 3834938 A 19881013

Abstract (en)

[origin: DE3834938C1] Circuit for digitally recording analog information, in particular the time interval between two consecutive states of at least one signal or the amplitude of said signal. Said circuit includes an integration condensator (23), which is charged during a charge phase with a tension Uc1, representing the analog information, over a parallel circuit including a first resistance (13) and a second resistance (17). At the end of the charge phase, a first switch (15), which is controlled by a control device (9) and connected in series with the first resistance (13), interrupts the flow of current through the first resistance (13), so that during the ensuing charge modification phase, the integration condensator (23) is charged only over the second resistance (17) until the condensator tension Uc reaches a predetermined threshold value Uc2 controlled by a comparator (5). The second resistance (17) has a higher resistance parameter R2 than the first resistance (13), so that the charge-time constant tau 2 during the charge modification phase is greater than the charge-time constant tau 1 during the charge phase. During the charge modification phase, which is generally longer than the charge phase, a counter (7) counts the periodical timing pulses of a reference phase signal. At the end of the charge modification phase, the result provided by the counter (7) is read and further processed by an evaluation device to obtain a digital value for the analog information.

IPC 1-7

G04F 10/10

IPC 8 full level

G04F 10/10 (2006.01); **H03M 1/00** (2006.01)

CPC (source: EP)

G04F 10/105 (2013.01)

Designated contracting state (EPC)

AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)

DE 3834938 C1 19891207; DE 58901716 D1 19920723; EP 0438469 A1 19910731; EP 0438469 B1 19920617; WO 9004219 A1 19900419

DOCDB simple family (application)

DE 3834938 A 19881013; DE 58901716 T 19891012; EP 8901209 W 19891012; EP 89911553 A 19891012