

Title (en)  
Time to Digital Converter

Title (de)  
Zeit-Digital Umsetzer

Title (fr)  
Convertisseur temps-numérique

Publication  
**EP 1521143 A1 20050406 (FR)**

Application  
**EP 03103642 A 20031001**

Priority  
EP 03103642 A 20031001

Abstract (en)  
The device includes a signal generator (40) for generating a periodic signal (8) synchronous with an event, and whose phase is corrected to the temporal position of the event. Analog-to-digital converters (51, 52) measure a set of samples of a reference signal during the event. The values of the samples determine the phase of the periodic signal. An independent claim is also included for a time-digital converter for measuring the temporal position of different events.

Abstract (fr)  
Convertisseur temps-numérique (10) comportant un circuit de mesure grossière (15) et un circuit de mesure fine (17). Le circuit de mesure fine permet la détermination précise de la position temporelle d'un événement à l'intérieur d'une période de la base des temps, par interpolation ou moyennage de sinusoides en quadrature (13, 14), échantillonnés (Ii, Qi) en coïncidence avec une salve d'impulsions (8) générées par le circuit de déclenchement du convertisseur. <IMAGE>

IPC 1-7  
**G04F 10/00**; **G04F 10/04**

IPC 8 full level  
**G04F 10/06** (2006.01); **G04F 10/00** (2006.01); **G04F 10/04** (2006.01)

CPC (source: EP US)  
**G04F 10/00** (2013.01 - EP US); **G04F 10/04** (2013.01 - EP US)

Citation (search report)

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Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1521143 A1 20050406**; CA 2482677 A1 20050401; JP 2005106826 A 20050421; US 2005122846 A1 20050609; US 7423937 B2 20080909

DOCDB simple family (application)  
**EP 03103642 A 20031001**; CA 2482677 A 20040928; JP 2004287119 A 20040930; US 95528204 A 20040930