

Title (en)

TIME-MEASUREMENT DEVICE FOR APPLICATIONS WITHOUT POWER SOURCE

Title (de)

ZEITMESSVORRICHTUNG FÜR ANWENDUNGEN OHNE STROMQUELLE

Title (fr)

DISPOSITIF DE MESURE DE TEMPS POUR DES APPLICATIONS SANS SOURCE D'ÉNERGIE

Publication

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Application

EP 09786666 A 20090722

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Abstract (en)

[origin: WO2010010519A1] The present invention relates to a time-measurement device comprising a timing-reference circuit on a single substrate or on multiple substrates; a source of radioactive radiation on or in the substrate; a counter for radioactive decay events on or in the substrate. A control circuit on the substrate is configured to control the integration time of the counter using the timing reference, receive the count signal from the counter, and calculate a time difference between a momentaneous time and a reference time using the count signal, the value of the integration time span, the half life, and a known decay rate of the at least one radioisotope at the reference time.

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