

Title (en)
PROPAGATION TIME MEASURING METHOD FOR DETERMINING A DISTANCE

Title (de)
LAUFZEITMESSVERFAHREN ZUR ERMITTLUNG DER DISTANZ

Title (fr)
PROCEDE DE MESURE SUR LA BASE DU TEMPS DE PROPAGATION POUR DETERMINER UNE DISTANCE

Publication
EP 1926974 A2 20080604 (DE)

Application
EP 06793156 A 20060901

Priority
• EP 2006065937 W 20060901
• DE 102005044724 A 20050919

Abstract (en)
[origin: WO2007033897A2] The invention relates to a device (1) for determining and monitoring a level (e). Said device (1) comprises a transceiver unit (2), a time-delay circuit (21) that is composed at least of a sampling clock oscillator (17) generating a sampling signal (S_{sampl}) having a certain sampling frequency (f_{sampl}), a transmission clock oscillator (18) generating a pulse repetition signal (S_{PRF}) having a certain pulse repetition frequency (f_{PRF}), and a frequency converter (11) generating a differential signal (S_{Diff}) by means of sequential sampling, and a control/evaluation unit (7) which determines the level (e) based on the propagation time. An external clock input (25) which is connected to a first clock output (26) of the sampling clock oscillator or a second clock output (27) of the transmission clock oscillator (18) via a timing circuit (24) is provided on the control/evaluation unit (7). The aim of the invention is to create a stabilized and inexpensive control circuit for generating an intermediate frequency signal with a transformation factor that can be determined with great accuracy.

IPC 8 full level
G01F 23/284 (2006.01)

CPC (source: EP US)
G01F 23/284 (2013.01 - EP US)

Citation (search report)
See references of WO 2007033897A2

Citation (examination)
DE 29815069 U1 19981224 - GRIESHABER VEGA KG [DE]

Cited by
CN107678275A; CN107678274A

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

DOCDB simple family (publication)
DE 102005044724 A1 20070322; EP 1926974 A2 20080604; US 2012056628 A1 20120308; US 8552744 B2 20131008; WO 2007033897 A2 20070329; WO 2007033897 A3 20070518

DOCDB simple family (application)
DE 102005044724 A 20050919; EP 06793156 A 20060901; EP 2006065937 W 20060901; US 99222706 A 20060901