

Title (en)

SYSTEM AND METHOD FOR DIGITALLY COMPENSATING FREQUENCY AND TEMPERATURE INDUCED ERRORS IN AMPLITUDE AND PHASE SHIFT IN CURRENT SENSING OF ELECTRONIC ENERGY METERS

Title (de)

SYSTEM UND VERFAHREN ZUM DIGITALEN KOMPENSIEREN VON FREQUENZ- UND TEMPERATURVERURSACHTEN FEHLERN BEI DER AMPLITUDE UND PHASENVERSCHIEBUNG DER STROMMESSUNG VON ELEKTRONISCHEN STROMZÄHLERN

Title (fr)

SYSTEME ET PROCEDE PERMETTANT DE COMPENSER NUMERIQUEMENT LES ERREURS PROVOQUEES PAR LA FREQUENCE ET LA TEMPERATURE DANS UNE VARIATION D'AMPLITUDE ET DE PHASE

Publication

EP 1257832 A1 20021120 (EN)

Application

EP 00903407 A 20000126

Priority

US 0001663 W 20000126

Abstract (en)

[origin: WO0155733A1] The phase shift in an electronic energy meter is compensated for by obtaining temperature (100) and frequency (200) readings in the meter and using these readings in a digital signal processor (DSP) (14) residing within the electronic energy meter. The frequency and temperature compensation is performed to each phase calibration and the result is stored in the DSP. To reduce the possible influence of noise in the system, the compensated DSP values are filtered (120) to provide a smoothing of the data.

IPC 1-7

G01R 11/32

IPC 8 full level

G01R 11/18 (2006.01); **G01R 21/14** (2006.01); **G01R 22/00** (2006.01); **G01R 22/10** (2006.01); **G01R 21/133** (2006.01)

CPC (source: EP)

G01R 21/14 (2013.01); **G01R 22/00** (2013.01); **G01R 21/133** (2013.01)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0155733 A1 20010802; AU 2515500 A 20010807; BR 0017072 A 20050209; BR 0017072 B1 20130827; BR PI0017072 B8 20151222; EP 1257832 A1 20021120; EP 1257832 A4 20060111

DOCDB simple family (application)

US 0001663 W 20000126; AU 2515500 A 20000126; BR 0017072 A 20000126; EP 00903407 A 20000126