

Title (en)  
MULTIFUNCTION ISOLATION TRANSFORMER

Title (de)  
MEHRFUNKTIONSISSOLATIONSTRANSFORMATOR

Title (fr)  
TRANSFORMATEUR D'ISOLEMENT MULTIFONCTIONS

Publication  
**EP 0518916 B1 19970730 (EN)**

Application  
**EP 91905145 A 19910221**

Priority  
• US 9101210 W 19910221  
• US 48306290 A 19900221

Abstract (en)  
[origin: WO9113417A1] A process transmitter (50) transmits a 4-20 mA current representing a sensed parameter to a loop (52) which energizes the transmitter (50). An output circuit (60) receives energization from the loop (52) and controls the 4-20 mA output as a function of a sensor data input. The output circuit (60) further generates a transformer driver output which also serves as a clock for isolated circuitry (106). A sensor circuit (82) generates a transformer driver output representing the sensed parameter. An isolation transformer (76) driven by the driver output excites the sensor circuit (82) and provides a clock reference as a function of the driver output oscillation to the sensor circuit (82). The isolation transformer (76) is a single coupling device which couples energization, clock reference, sensor data and programming data across an electrically insulating barrier between the output circuit (50) and the sensor circuit (82).

IPC 1-7  
**G08C 19/06**

IPC 8 full level  
**G08C 19/02** (2006.01)

CPC (source: EP)  
**G08C 19/02** (2013.01); **H01F 2019/085** (2013.01)

Cited by  
US2015236759A1; US9544027B2; US8000841B2; WO2005104056A3; WO2018140312A1; US10502608B2; US10761524B2; US7764162B2; US9674976B2

Designated contracting state (EPC)  
DE FR GB

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**WO 9113417 A1 19910905**; AU 646847 B2 19940310; AU 7349791 A 19910918; CA 2073447 A1 19910822; DE 69127075 D1 19970904; DE 69127075 T2 19980226; EP 0518916 A1 19921223; EP 0518916 A4 19921019; EP 0518916 B1 19970730

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