

Title (en)

Method and system for detecting and digitally transmitting analog output measured quantities of a number of transducers

Title (de)

Verfahren und Anordnung zum Erfassen und digitalen Übertragen von analogen Ausgangsmessgrößen mehrerer Wandler

Title (fr)

Procédé et système pour détecter et transmettre par voie numérique des grandeurs de sortie analogiques mesurées de plusieurs transducteurs

Publication

EP 1296436 B1 20090311 (DE)

Application

EP 02090218 A 20020620

Priority

DE 10135089 A 20010711

Abstract (en)

[origin: US2003011491A1] To develop a method according to WO 01/45232 in such a manner that it supplies good results in every case, in a method for detecting and digitally transmitting measured analog output values of a number of transducers to a protection or field device, the measured analog output values of each transducer (ECT1 . . . EVTBB) are converted into measured digital values (Md) at a sampling rate which is higher by a factor (m) than the minimum sampling rate, and are transmitted, the factor (m) being an integer divider of the number (n) of the filter coefficients of in each case one FIR filter (FIR) with filter coefficients of the value 1 in a data concentrator (26) for each transducer (ECT1 . . . EVTBB). The measured digital values (Md) are transmitted as a message to a data concentrator and from buffers (Buf1) associated with each transducer (ECT1 . . . EVTBB), data are transferred with a clock pulse into post-buffers (Buf2) preceding the FIR filters (FIR), the clock pulse being formed from the synchronous character of the respective message and the fixed clock of a clock generator. In the data concentrator, a transmit message with measured digital values of the transducers with reduced sampling rate are formed from output buffers (Buf3) following the FIR filters (FIR) by means of a multiplexer (27) and transmitted to the protection or field device.

IPC 8 full level

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