Title (en)

ELECTRONIC CIRCUIT ARRANGEMENT AND METHOD FOR CONTINUOUSLY CHECKING THE ELECTRICAL CONTINUITY OF A CONDUCTOR WIRE, IN PARTICULAR A WIRE CONNECTING A DEVICE EMITTING A DIGITAL ELECTRICAL SIGNAL AND A REMOTE PROCESSING UNIT OF SAID SIGNAL

Title (de)

ELEKTRONISCHE SCHALTUNGSANORDNUNG UND VERFAHREN ZUR KONTINUIERLICHEN ÜBERPRÜFUNG DER ELEKTRISCHEN KONTINUITÄT EINES LEITERDRAHTES, INSBESONDERE EINES DRAHTES, DER EINE EIN DIGITALES ELEKTRISCHES SIGNAL AUSSENDENDE VORRICHTUNG UND EINE ENTFERNTE VERARBEITUNGSEINHEIT DIESES SIGNALS VERBINDET

Title (fr)

AGENCEMENT DE CIRCUITS ÉLECTRONIQUES ET PROCÉDÉ POUR VÉRIFIER EN CONTINU LA CONTINUITÉ ÉLECTRIQUE D'UN FIL CONDUCTEUR, DANS UN FIL PARTICULIER CONNECTANT UN DISPOSITIF ÉMETTANT UN SIGNAL ÉLECTRIQUE NUMÉRIQUE ET UNE UNITÉ DE TRAITEMENT À DISTANCE DUDIT SIGNAL

Publication

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Application

EP 19773546 A 20190823

Priority

- IT 201800008166 A 20180823
- IB 2019057108 W 20190823

Abstract (en)

[origin: WO2020039395A1] An electronic circuit arrangement and a method are described for the remote transmission via wire of a digital signal emitted by an emitting device of an electrical state signal, associated with a plant in the field, to a remote processing unit of said digital signal. At the transmission end of a wired connection between the emitting device and a remote processing unit, a composite signal for transmission via wire is generated, comprising a signal portion representative of the logical state of the digital signal emitted by the emitting device and a signal portion for determining the electrical continuity of the transmission link. At a receiving end of the wired connection, a signal recognition electronic circuit that may be associated with the remote processing unit is arranged to receive the composite signal and to verify the existence of at least one change in the logical state of the composite signal within a time interval corresponding to a signaling period. The existence of at least one change in the logical state of the composite signal within a time interval corresponding to a signaling period is indicative of the integrity of the wired connection.

IPC 8 full level

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CPC (source: EP)

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See references of WO 2020039395A1

Designated contracting state (EPC)

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