

Title (en)

DATA TRANSMISSION METHOD, SEGMENT TELEGRAM AND AUTOMATION COMMUNICATION NETWORK

Title (de)

DATENÜBERTRAGUNGSVERFAHREN, SEGMENT-TELEGRAMM UND AUTOMATISIERUNGSKOMMUNIKATIONSNETZWERK

Title (fr)

PROCÉDÉ DE TRANSMISSION DE DONNÉES, TÉLÉGRAMME DE SEGMENT ET RÉSEAU DE COMMUNICATION D'AUTOMATISATION

Publication

EP 4026276 A1 20220713 (DE)

Application

EP 20768008 A 20200903

Priority

- DE 102019125545 A 20190923
- EP 2020074631 W 20200903

Abstract (en)

[origin: WO2021058254A1] The invention relates to an automation communication network (100) having at least one distribution node (VK) which has a plurality of input/output interfaces (PX), each connected to a network segment (NX), wherein each network segment (NX) has at least one subscriber (TN). Segment telegrams for processing by the subscriber (TN) in the network segment (NX) are assigned to the individual network segments (NX), wherein the segment telegrams have priorities. The segment telegrams additionally have a data field which is designed to contain a piece of telegram sequence information which indicates the priority that a subsequent segment telegram from the network segment (NX) has. The distribution node (VK) in the automation communication network (100) is designed to receive the segment telegram on an input/output interface (PX) and to transmit it on an additional input/output interface (PX) according to a routing specification, wherein the distribution node (VK) blocks the input/output interface (PX) on which the segment telegram was transmitted with respect to a further transmitting process if the telegram sequence information assigned to the transmitted segment telegram indicates a priority of a higher value for the subsequent segment telegram from the network segment (NX) having the same routing specification, than the priority value of telegrams present in the distribution node (VK) and designated for transmission on the input/output interface (PX), in order to send the subsequent segment telegram on the blocked input/output interface (PX) after receiving the subsequent segment telegram from the network segment (NX) having the same routing specification.

IPC 8 full level

H04L 12/40 (2006.01)

CPC (source: CN EP US)

H04L 12/40163 (2013.01 - CN EP US); **H04L 45/74** (2013.01 - US); **H04L 2012/4026** (2013.01 - CN EP)

Citation (search report)

See references of WO 2021058254A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102019125545 B3 20210325; CN 114531943 A 20220524; CN 114531943 B 20231114; EP 4026276 A1 20220713; US 2022209985 A1 20220630; WO 2021058254 A1 20210401

DOCDB simple family (application)

DE 102019125545 A 20190923; CN 202080066448 A 20200903; EP 2020074631 W 20200903; EP 20768008 A 20200903; US 202217693515 A 20220314