Title (en)

Chronometry method, centralized management system using this method and its application to the detection of leaks in a fluid transport network.

Title (de)

Zeitmessungsverfahren, zentralisiertes Verwaltungssystem mit diesem Verfahren und seine Anwendung zum Aufspüren von undichten Stellen in einem Flüssigkeitstransportnetzwerk.

Title (fr)

Procédé de chronométrie, système de gestion centralisée mettant en oeuvre ce procédé, et son application à la détection de fuites dans un réseau de transport de fluides.

Publication

EP 0077249 A1 19830420 (FR)

Application

EP 82401798 A 19821001

Priority

FR 8119074 A 19811009

Abstract (en)

1. A method of relative chronometry of events detected by stations which are remotely located from a central managing post, the stations being connected by transmission lines to said post, characterized in - that in the central post, time reference signals are generated and simultaneously transmitted to the stations, the time interval between two said successive signals defining time units of a duration which is by far longer than the cycle duration of interrogations-replies of the central post to all the stations ; - that in each station, a first counter is initialized by the received reference signal, that by means of a clock counting pulses are delivered simultaneously to said first and a second counter, that the second counter is charged with the contents of the first counter as soon as the second counter has reached its maximum capacity, this capacity being greater than the maximum number of counting pulses in a time unit, that to each event, time data are associated which are constituted by the contents of the second counter at the moment of the detection of the event, and by an information concerning the removal of ambiguity and having different states at the beginning and at the end of a time unit, and that the information relating to the event, together with corresponding time data, are transmitted during the interrogations of the stations by the central post, - and that in the central post, the received informations are allocated with supplementary time data corresponding to a time unit number.

Abstract (fr)

Le poste central du système de gestion technique centralisée comporte des moyens d'émission d'un signal quasi périodique à toutes les stations éloignées du système pour la synchronisation de circuits de chronométrie (CH1) de ces stations. Ces circuits (CH1) comportent une horloge (10) fournissant le même rythme de comptage à deux compteurs (11, 12). Le premier est remis à zéro par le signal émis par le centre de gestion tandis que le second continue à compter jusqu'à sa capacité maximum. Il est alors chargé automatiquement par la valeur atteinte par le premier compteur. Ce second compteur fournit sur commande des données horaires qui sont affectées aux évènements pris en compte par cette station, et transmises avec les informations relatives à ces évènements au centre de gestion. Application, notamment, à la détection et à la localisation de fuites dans un réseau de transport de fluides.

IPC 1-7

G04G 7/00; G06F 15/20

IPC 8 full level

G04G 7/00 (2006.01); **G06F 17/40** (2006.01)

CPC (source: EP)

G04G 7/00 (2013.01)

Citation (search report)

- [Y] US 3798650 A 19740319 - MC COMAS A, et al
- [Y] IEEE TRANSACTIONS ON POWER APPARATUS AND SYSTEMS, vol. PAS-99, no. 2, mars/avril 1980, pages 540-548, New York (USA);

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EP0807873A1; US6130860A; EP1170086A1; EP0816008A1; US5981905A; US6018136A; KR980003121A; US6288978B1

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DOCDB simple family (application)

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