

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 35

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte SHINJI NAKATANI

Appeal No. 1996-3276
Application 07/978,518¹

HEARD: November 4, 1999

Before JERRY SMITH, LALL and GROSS, Administrative Patent Judges.

LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection² of claims 1

¹ Application for patent filed November 20, 1992.

² An amendment after the final rejection, changing claim 22, was filed [paper no. 22] and was entered in the record by the Examiner [paper no. 23]. Other amendments after the final rejection, [paper nos. 14 and 17] were also entered, however, they made no changes to the claims.

and 11 to 25, other claims having been canceled.

The disclosed invention relates to the transfer of a communication signal composed of plural messages, where a group of pulse-string signals represents a message, the communication protocol prescribes the maximum bit length in one message and minimum idle time between successive messages. The invention is directed to a monitoring circuit which includes counting means and idle time measuring means. The counting means counts pulses in a message and outputs an abnormal signal indicating an abnormal situation of communication device when the counted number exceeds a predetermined number. The idle time measuring means inputs the communication signal, measures idle time between successive groups of the pulse-string signals, and resets the counting means when the measured idle time exceeds a predetermined time. The invention is further described by the following representative claim.

Claim 1 is reproduced as follows:

1. A monitoring circuit for a communication device which outputs a communication signal including plural groups of

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pulse-string signals, wherein each one of said plural groups of said pulse-string signals represents a message, and wherein there is a predetermined normal maximum number N_{1MAX} of pulses in each said group of said pulse-string signals and a predetermined normal minimum idle time T_{MIN} between successive ones of said groups of said pulse-string signals, said monitoring circuit comprising:

counting means receiving said communication signal, for counting a number of pulses in each said group of said pulse-string signals of said communication signal, and when said counted number of pulses exceeds a predetermined maximum number of pulses which is equal to at least said maximum number N_{1MAX} , for

outputting an abnormal condition signal which represents an abnormal condition of said communication device; and

idle time measuring means, receiving a reference clock signal and being responsive to said communication signal, for measuring an amount of idle time between successive ones of said groups of said pulse-string signals of said communication signal by counting a number of pulses of said reference clock signal, and for resetting said counting means when said measured idle time exceeds a predetermined minimum amount of idle time which is at most said minimum idle time T_{MIN} .

The references relied on by the Examiner are:

Matsuura et al. (Matsuura)	4,555,702	Nov. 26, 1985
Ihara et al. (Ihara)	4,623,884	Nov. 18, 1986

Class B Data Communication Network Interface-SAE J1850, Aug., 1991 (APA)

Claims 1 and 11 to 25 stand rejected under 35 U.S.C. §
103 over Ihara, Matsuura and APA.

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Reference is made to Appellant's briefs³ and the Examiner's answers for their respective positions.

OPINION

We have considered the record before us, and we will reverse the rejection of claims 1 and 11 to 25.

The Examiner has rejected all these claims under 35 U.S.C. § 103 as being obvious over Ihara in view of Matsuura and APA.

We first consider claim 1. After explaining what each reference discloses, the Examiner concludes that

The artisan would have arrived at ... (Tmin, ... , Nlmax, ...) indicated for the pulse counting and idle time measuring functions simply by performing a routine analysis of the communications signals and protocol defined in the SAE J1850 standard. It would then have been a matter of routine skill for the artisan to adjust the operating parameters of the Ihara and Matsuura counting and timing circuitry to operate to determine abnormal performance of the communications signal transmission [answer, pages 5 to 6].

The Examiner continues in the objective to establish a prima

facie case and states

³A reply brief was filed [paper no. 24] and was entered in the record, however, no further response was deemed necessary by the Examiner [paper no. 25].

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Thus, it would have been obvious ... to modify the Ihara signal monitoring device to monitor multiple parts of a transmission signal as taught Matsuura, It would have been further obvious ... to operate the resulting system in accordance with the pulse and timing relationships defined by the SAE J1850 standard thereby resulting in the system of claims 1 ..., since the standard was well known ... and it would have been a matter of routine skill ... to adjust the operating parameters of the signal monitoring circuitry to monitor the pulse and timing characteristics defined in the standard [answer, page 6].

The courts have provided us a guidance in determining the propriety of an obviousness rejection. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044,

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1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. System., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

Furthermore, the Federal Circuit states that "[the] mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." In re Fitch, 972 F.2d 1260, 1266 n.14, 23 USPQ2d 1780, 1783-84 n.14 (Fed. Cir. 1992), citing In re Gordon, 773 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). "Obviousness may not be established using hindsight or in view of the teachings or suggestions of the inventor." Para-Ordnance Mfg. V. SGS Importers Int'l, 73 F.3d 1085, 1087, 37 USPQ 2d 1237, 1239 (Fed. Cir. 1995), citing W. L. Gore &

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Assocs., v. Garlock, Inc., 721 F.2d 1551, 1553, 220 USPQ 311, 312-13 (Fed. Cir. 1983).

Here, the Examiner uses Ihara, Matsuura and APA to make the combination to meet the limitations of claim 1. We note that Ihara is directed to a transmission line control system which selectively connects and disconnects a communication apparatus, Si, from the transmission line, L. The monitoring devices W1 and W2, figure 3, monitor the power levels on lines M1 and M2 and control the switches C1, C2, C3 and C4 to connect or disconnect the communication apparatus from the transmission line. Counters 17 and 21, figure 10, which form a part of the monitoring device, help determine the length of time during which a given power level is present on lines M1 and M2. Matsuura, on the other hand, discloses a pulse detector for recovering data signals from a pulse-modulated signal in an infrared remote control communication system. Matsuura counts the pulses during different intervals of time and compares the resulting number with a respective reference number to distinguish the desired data signal from a noise signal. Thus, we note that there is a concept of counting

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pulses for a time interval in both Ihara and Matsuura. However, the two references are counting pulses for entirely different purposes. The Examiner introduces the teachings of APA to bridge the gap between Ihara and Matsuura. We note that APA does disclose the J1850 protocol which is a recognized standard for communicating data signals among various devices in an automotive environment. However, we find nothing in APA which would have led an artisan to combine the teachings of Ihara and Matsuura, each one of which is directed to solving a different problem. Thus, the suggested combination is tantamount to a reconstruction of the claimed invention by picking references from diverse arts and using Appellant's invention as a blue print to make the combination. That is impermissible as discussed above. Even if the combination of Ihara, Matsuura and APA were considered proper, it still does not meet the limitations of claim 1. For example, the combination does not meet the limitation "idle time... T_{MIN} ." (cl .1), notwithstanding the Examiner's contention. Therefore, we do not sustain the obviousness rejection of claim 1 over Ihara, Matsuura and APA.

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With respect to all the other claims, 11 to 25, since they are all rejected over the same combination of Ihara, Matsuura and APA as claim 1 discussed above, their obviousness rejection over Ihara, Matsuura and APA is also not sustained for the same reason.

DECISION

The decision of the Examiner rejecting claims 1 and 11 to 25 under 35 U.S.C. § 103 over Ihara, Matsuura and APA is reversed.

REVERSED

JERRY SMITH)	
Administrative Patent Judge)	
)	
)	
)	BOARD OF PATENT
PARSHOTAM S. LALL)	
Administrative Patent Judge)	APPEALS AND
)	
)	INTERFERENCES
)	
ANITA PELLMAN GROSS)	
Administrative Patent Judge)	

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PSL/pgg

Cushman, Darby & Cushman
1100 New York Ave., Ninth Floor
Washington, DC 20005-3918