

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte BERND PRZYBYLA, JUERGEN PISCHKE
and JANINA-URSULA LANGER

Appeal No. 96-3205
Application No. 08/157,198¹

ON BRIEF

Before KRASS, BARRETT and RUGGIERO, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

¹ Application for patent filed December 9, 1993. According to appellants, this application is the national stage application of PCT/DE92/00456 filed April 6, 1992.

This is a decision on appeal from the final rejection of claims 51 through 62. Claims 1 through 50 have been cancelled.

The invention pertains to information transmission in a bus system, best illustrated by reference to representative independent claim 51 reproduced as follows:

51. Process for serially transmitting information entities over a serial bus between a plurality of subscribers (ECU1 to ECU4) connected to said serial bus at a common transmission rate for all of said subscribers, each of said subscribers transmitting said information entities at said common transmission rate, said process comprising the steps of:

a) providing each of said information entities with a start bit (Sta), said start bit (Sta) being transmitted on said serial bus at a beginning of transmission of each of said information entities;

b) prior to transmitting said information entities on said serial bus each of said subscribers transmitting said information entities waits a predetermined bus monitoring time period prior to said transmitting;

c) setting a flag after one of said subscribers (ECU1 to ECU4) receives one of said information entities, said flag being set indicating receipt of said information entity by said subscriber;

d) monitoring a logic state of said serial bus with each of said subscribers during said bus monitoring time period (T_v) thereof at a monitoring rate sufficiently high so that receipt of one of said information entities is immediately detected during receipt of said start bit (Sta) of

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said information entity so detected, said start bit (Sta) being transmitted at said common transmission rate;

e) each of said subscribers (ECU1 to ECU4) determining a state of said flag after expiration of said bus monitoring time period (T_v) for said subscriber determining said state of said flag; and

f) only transmitting said information entities from one of said subscribers if said subscriber does not detect that said flag is set during said bus monitoring time period (T_v) of said subscriber.

The examiner relies on the following references:

Metcalfe et al. (Metcalfe) 1977	4,063,220	Dec. 13,
Ryckeboer 22, 1986	4,584,575	Apr.
Tanaka et al. (Tanaka) 1988	4,737,783	Apr. 12,
Botzenhardt et al. 1991 (Botzenhardt)	5,001,642	Mar. 19,

Claims 51 through 62 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites Ryckeboer with regard to claims 51 through 54 and 57 through 61², adding Tanaka with regard to claim 55, Metcalfe with regard to claim 56 and Botzenhardt with regard to claim 62.

² The rejection of claim 57 was entered as a new ground of rejection in the examiner's answer.

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Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

At the outset, we note that, in accordance with appellants' grouping of the claims at page 9 of the principal brief, all claims will stand or fall together.

We reverse.

Independent claim 51 requires, inter alia, the "setting a flag after one of the subscribers...receives one of said information entities," monitoring the logic state of the serial bus during the bus monitoring period "at a monitoring rate sufficiently high so that receipt of one of said information entities is immediately detected during receipt of said start bit...of said information entity so detected," and "determining a state of said flag after expiration of said bus monitoring time period." Independent claim 58 recites similar limitations.

Appellants argue that Ryckeboer never discusses the setting of a flag in a transmission ready subscriber in response to detection of the start bit of a message being

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transmitted or the subsequent testing of that flag. The examiner counters with the argument that the argument is not commensurate in scope with the claimed invention. More particularly, the examiner contends that claim 51 requires only that the flag be set after one of the subscribers receives one of the information entities and that the set flag indicates only receipt of an information entity by the subscriber. This does not, necessarily, entail the setting of the flag "in response to a start bit," as argued by appellants. Thus, the flag may be set in response to any part of the information entity, or message. That being the case, we agree with the examiner that since Ryckeboer teaches the transmission of a message if no transmission is detected on the bus, and claim 51 does not require setting the flag in response to a start bit, but only in response to any part of a message, this teaching by Ryckeboer of transmitting only if the bus is idle is equivalent to setting a flag and then checking as to the status of the flag.

Appellants take exception to this position, arguing in the reply brief that under this interpretation there would be no reason to include step d) in claim 51. However, it is our

view that appellants' argument in this regard is misplaced since the monitoring step d) makes no reference to either setting or determining the state of the flag. Hence, we do not view the examiner's rationale as reading step d) out of the claim as appellants appear to suggest. The problem here seems to stem from appellants' assumption that step c) of claim 51 requires setting the flag in response to a start bit, which it does not. If step c) did, indeed, include that language, then, perhaps, appellants' argument would have more credence because then step d), reciting the step of an information entity being "detected during receipt of said start bit," would have a connection to the preceding step c). As claim 51 is presently written, we do not find appellants' argument regarding the setting and determining the state of the flag to be persuasive.

However, we do find persuasive appellants' argument regarding the claimed monitoring at a "monitoring rate sufficiently high so that receipt of one of said information entities is immediately detected during receipt of said start bit." While we agree with the examiner that there is nothing in the claim which would require the setting of a flag in

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response to a start bit, step d) of the claim clearly recites a monitoring rate sufficiently high so that receipt of an information entity is "immediately detected during receipt of said start bit" [emphasis ours].

We find no teaching or suggestion of such a limitation in Ryckeboer. The indication by Ryckeboer [column 4, lines 32-35] that a "sampling rate is set at a higher frequency to make sure that the synchronization is adequate during the transmission of one character" clearly does not suggest a "monitoring rate sufficiently high so that receipt of one of said information entities is immediately detected during receipt of said start bit," as claimed.

Accordingly, we will not sustain the rejection of claims 51 through 62 under 35 U.S.C. 103. The references to Tanaka, Metcalfe and Botzenhardt, applied by the examiner for certain features in various dependent claims, do not provide for the deficiency of Ryckeboer noted supra.

The examiner's decision is reversed.

REVERSED

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Administrative Patent Judge)	
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