

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 48

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte KEVIN SCHOCH

Appeal No. 96-0734
Application No. 08/056,739¹

ON BRIEF

Before HAIRSTON, MARTIN, and GROSS, Administrative Patent Judges.

HAIRSTON, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 5 through 8, 10, 17 through 22, 26 and 30 through 36. Claims 23

¹ Application for patent filed April 30, 1993. According to appellant, the application is a continuation of Application No. 07/849,796, filed March 11, 1992, which is a continuation of Application No. 07/514,649, filed April 25, 1990.

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through 25, 28 and 29 are allowed, and claims 11 and 27 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The disclosed invention relates to a communications system wherein a terminal mapping means maps each one of a plurality of data terminals to a terminal group. The terminal mapping means changes the number of data terminals in a group, and the number of groups, in response to a count of the number of unsuccessful attempts by the data terminal to transmit a data message. An unsuccessful attempt to transmit occurs when two or more data terminals within a terminal group attempt to transmit data messages in response to a polling signal.

Claim 5 is illustrative of the claimed invention, and it reads as follows:

5. A communication system comprising:

a plurality of data terminals capable of transmitting and receiving data messages, each data terminal associated with a unique terminal identification number; and

terminal mapping means for mapping each data terminal to a terminal group and for dynamically adjusting the number of terminals in a group to be between a predetermined maximum

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number of terminals and predetermined minimum number of terminals, each data terminal being adapted to respond, if having a data message to transmit, to a polling signal made to the group to which the data terminal is mapped;

wherein an unsuccessful attempt occurs when two or more data terminals within a terminal group attempt to transmit data messages in response to a given polling signal;

wherein each data terminal maintains a count of the number of unsuccessful attempts it has made for each data message transmission and transmits this count to the terminal mapping means when each data message transmission is successfully completed; and

wherein the terminal mapping means changes the number of terminals in a group and the number of groups in response to the last count of the number of unsuccessful attempts to transmit a data message that it received from a data terminal.

The references relied on by the examiner are:

Haas et al. (Haas) 1973	3,755,781	Aug. 28,
Brophy et al. (Brophy) 1978	4,071,908	Jan. 31,
Hopkins et al. (Hopkins) 17, 1979	4,161,786	July
Citta 1985	4,528,663	July 9,
Cotie et al. (Cotie) 1987	4,667,193	May 19,

Claims 5 through 8, 10, 26 and 30 through 36 stand rejected under 35 U.S.C. § 103 as being unpatentable over Brophy in view of Citta.

Claims 17, 18, 21 and 22 stand rejected under 35 U.S.C.

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§ 103 as being unpatentable over Brophy in view of Citta and Haas.

Claim 19 stands rejected under 35 U.S.C. § 103 as being unpatentable over Brophy in view of Citta, Haas and Hopkins.

Claim 20 stands rejected under 35 U.S.C. § 103 as being unpatentable over Brophy in view of Citta, Haas, Hopkins and Cotie.

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

OPINION

The obviousness rejection of claims 5 through 8, 10, 17 through 22, 26 and 30 through 36 is reversed.

All of the claims on appeal require that each data terminal maintain or keep a count of unsuccessful attempts to transmit a data message, and to transmit that count with the data message to a terminal mapping means which uses that unsuccessful count to change the number of data terminals in a terminal group.

The polling station 101 in Brophy (Figure 1) "determines the quantity of message traffic by measuring the duration of time required to complete a polling sequence and, utilizing

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this measurement, calculates the polling level number for the initial polling word of the next polling sequence" (column 3, lines 47 through 53). In successive polling sequences, each polling sequence starts with "an initial poll word which is directed to a group of stations whose size is inversely related to the loading of the system, wherein during a very lightly loaded period the sequence starts at the highest level 000 and wherein during a very heavily loaded period, the sequence starts at the lowest poll level 100, at which level each station is individually polled" (column 5, lines 17 through 25). "Advantageously, the quantity of messages collected [by the polling station 101] is calculated by measuring the duration of polling . . . time required to collect the messages" (column 1, lines 56 through 59). "The size of the station group is advantageously calculated to be inversely related to the duration of polling time" (column 1, lines 60 through 62). Thus, any changes to the station groups in Brophy are made based upon a measure of the time duration required for the polling station 101 to poll the stations 0000

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through 1111, and for the polling station 101 to collect the messages from the stations.

Citta is concerned with peak upstream loading in a two-way cable television (CATV) contention system. During upstream retransmissions by subscriber terminals 11 to CATV headend 12, a transmission window time (Figure 5) is a function of the upstream message traffic load. In other words, the number of attempts by subscribers 11 to retransmit to the CATV headend 12 is directly related to the upstream transmission window size time (Figure 5; column 7, lines 23 through 37).

Based upon the foregoing, we agree with appellant (Brief, page 13) that "[t]he patents, when viewed alone or in combination, fail to suggest any incentive for a person of ordinary skill in the art to modify the data terminals to transmit an unsuccessful attempt count to the terminal mapping means or to modify the terminal mapping means to remap based on an unsuccessful attempt count instead of the time it takes to collect all available messages during a probing cycle."

In summary, the obviousness rejection of claims 5 through 8, 10, 26 and 30 through 36 is reversed.

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The obviousness rejection of claims 17 through 22 is reversed because the teachings of Haas, Hopkins and Cotie cannot cure the noted shortcomings in the teachings of Brophy and Citta.

DECISION

The decision of the examiner rejecting claims 5 through 8, 10, 17 through 22, 26 and 30 through 36 under 35 U.S.C. § 103 is reversed.

REVERSED

KENNETH W. HAIRSTON)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOHN C. MARTIN)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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Administrative Patent Judge)	

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APJ GROSS

APJ MARTIN

DECISION: REVERSED
Send Reference(s): Yes No
or Translation (s)
Panel Change: Yes No
Index Sheet-2901 Rejection(s): _____

Prepared: December 6, 1999

Draft Final

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PALM / ACTS 2 / BOOK
DISK (FOIA) / REPORT