

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 33

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte GREG JOHNSON, RICHARD D. JOHNSON
and DAVID A. WEINZIERL

Appeal No. 96-0651
Application No. 08/087,164¹

HEARD: February 11, 1999 (Telephonic)

Before KRASS, SMITH and LALL, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 4, 6 and 10 through 12, all of the claims remaining in the application.

¹ Application for patent filed July 2, 1993.

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The invention pertains to a system for downloading updated operating code over a phone line for updating the operating code of a reprogrammable modem.

Representative independent claim 1 is reproduced as follows:

1. A system for updating operating code in a reprogrammable modem the updated operating code being downloaded from a remote computer via telephone lines, comprising:

a field-upgradable modem having;

communications interface means connected for communicating with a local host computer and operable for transferring data between the local host computer and the modem;

telephone line interface means for connection to the telephone line;

control means connected to the telephone line interface means and the communications interface means for executing existing operating code to control the modem;

memory means connected to the control means for storing the existing operating code and for storing a boot program;

the control means further operable for executing the boot program to receive updated operating code packets from the local host computer, for checking the validity of the packets and replacing the existing operating code in the memory means with the updated operating code received by the communications interface means from the local host computer;

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the local host computer executing software to communicate with the remote computer through the modem connected to the telephone line and operable for initiating a telephone call to the remote computer in response to the commands by a local user of the local host computer and for controlling downloading of the updated operating code from the remote computer to the local host computer; and

the local host computer further executing software to communicate with the modem through the communications interface, to place the updated operating code into updated operating code packets and to control transfer of said updated operating code packets from the local host computer to the modem over the communications interface.

The examiner relies on the following references:

Seibert et al. (Seibert)	5,239,652	Aug.
24, 1993		
Herh et al. (Herh)	5,268,928	Dec. 7,
1993		

Claims 1 through 4, 6 and 10 through 12 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites Herh with regard to claims 1, 2, 4, 10 and 11, adding Seibert with regard to claims 3, 6 and 12.

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

OPINION

We reverse.

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While we agree with the examiner, in general, that Herh discloses a modem with remote firmware update capability and that Herh teaches many of the same elements recited in the instant claims, the instant claims recite structure and function which is not taught or suggested by Herh.

The instant claims all require a local computer and specific interaction between that local computer and the modem and remote computer. For example, in independent claim 1, data is transferred between the modem and the local computer regarding the updated operating code received from the remote computer and updated operating code packets are received from the local computer. The local computer also is recited as executing software for initiating a telephone call to the remote computer and for controlling downloading of the updated operating code from the remote computer. The local computer is further recited as executing software for placing the updated operating code into updated operating code packets to control transfer of the packets from the local host computer to the modem.

While Herh might be said to suggest a local computer as being connected to the modem 10 via the DTE interface 48 [see

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column 3, lines 41-45 of Herh], we find absolutely no suggestion within the four corners of Herh that the local computer serves the same or similar functions as recited in the instant claims. The examiner takes the position that it would have been equally obvious to have a local computer external to the modem or a computer [e.g., the microprocessor 14 or a plurality of microprocessors suggested by Herh] within the modem. However, if the "local computer" could, somehow, be considered the internal processor 14 of Herh, there would appear to be no need for the claimed "packets." Ergo, Herh provides no teaching or suggestion of the claimed packets. Further, as pointed out by appellants [brief - page 6], claim 1 provides for the local computer to initiate the telephone call for downloading the updated operating code while Herh apparently waits for such a call from the remote computer [in response to a flag being set].

With such substantial differences between the claimed invention [claim 1] and that taught by Herh, it is difficult to see how or why an artisan would have been motivated to

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modify Herh in order to arrive at the instant claimed subject matter.

While the examiner attempts to correlate the elements of claim 1 with those disclosed by Herh, at pages 3-5 of the answer, the examiner ascribes functions to the "control means," 14 of Herh [see page 4 of the answer], which simply are not present in Herh. For example, we find no suggestion in Herh, and the examiner has not clearly delineated where, in Herh, such function may be found, for the control means

operable for executing the boot program to receive updated operating code packets from the local host computer, for checking the validity of the packets and replacing the existing operating code in the memory means with the updated operating code received by the communications interface means from the local host computer.

Similarly, with regard to claim 12, the examiner sets forth a correlation, at pages 9-10 of the answer, of claimed elements with what is taught by Herh. However, we find no suggestion in Herh, and the examiner has not clearly delineated where, in Herh, there is support for a control means which executes software for initiating a telephone call to the remote computer [it would appear that Herh waits for the call in response to a flag being set] and which downloads

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the updated operating code from the remote computer to the host computer and then controls the transfer of the updated operating code from the local computer to the modem via the interface means.

The examiner appears to recognize the differences between Herh and the instant claimed subject matter but takes the position that even though Herh does not teach many of the functions being performed by the local host computer as claimed, Herh does not need to have the local host computer perform these functions because the microprocessor(s) of Herh's modem perform the same function. We disagree.

Merely because two systems perform the same or a similar function does not, per se, make those systems patentably indistinct. For example, a quill and ink, a ballpoint pen and an electronic word processor may all perform the same function, i.e., the writing of a document, but, clearly, they do not perform the same function in the same manner. Similarly, while Herh and appellants may perform the same function, i.e., remotely updating firmware using a modem, they perform this function in different manners. While the modem in Herh performs all of the processing, the instant claimed

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subject matter places much of the processing on the local host computer. In this manner, the updated operating code can be saved to a disk after downloading and the substantial processing power of the local host computer can be employed for the necessary processing, allowing the modem to be manufactured with a lower cost processor. Thus, the claimed subject matter recites more than merely a distinction without a difference over the prior art as represented by Herh. There is certainly some advantage to placing the processing outside of the modem and the examiner's apparent explanation that it would have been equally obvious to place the processor external or internal to the modem, without more, does not convince us that the claimed subject matter would have been obvious within the meaning of 35 U.S.C. 103.

Each of the instant independent claims requires, in one form or another, that the updated operating code received by the modem from the remote computer is passed on to a local host computer which then processes the data in order to provide for "packets" which are then transmitted back to the modem for storage in the modem at a particular address specified in the packet. Herh discloses no such "packets"

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because Herh has no need of such "packets" since all of the necessary processing of the updated operating code information takes place within the modem itself. Therefore, the claimed interaction between the modem and the local host computer and the claimed processing by the local host computer in creating the "packets" are not taught or suggested by Herh.

The reference to Seibert, applied together with Herh with regard to claims 3, 6 and 12, does not provide for the deficiencies of Herh.

Accordingly, we will not sustain the rejection of claims 1 through 4, 6 and 10 through 12 under 35 U.S.C. 103.

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The examiner's decision is reversed.

REVERSED

ERROL A. KRASS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JERRY SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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