

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 16

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ARNOLD A. AMES, CHARLES H. GOODEN,
DONALD P. KRAKAUSKAS and VINOD GEORGE

Appeal No. 96-2498
Application No. 08/250,139¹

ON BRIEF

Before THOMAS, KRASS, and DIXON, Administrative Patent Judges.
KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 through 15 and 17 through 21, all of the claims pending in the application.

¹Application for patent filed May 27, 1994.

The invention pertains to communication system simulators and is best illustrated by reference to representative independent claim 1, reproduced as follows:

1. A data communication analysis and simulation tool capable of simulating in real time the communication data transmissions and communication data responses of at least one line replaceable unit communicating on at least one communication bus with at least one line replaceable unit under test, comprising:

a computer operating under a real time operating system, said computer having available memory and means for accepting user input;

a programmed simulator resident in said computer, said programmed simulator comprising a plurality of processes to effectuate the simulation of the communication data transmissions and communication data responses of at least one line replaceable unit, said programmed simulator allocating a portion of said available memory as a shared memory segment serving as a central database and supporting inter-process communication, said programmed simulator further generating graphical and textural images in response to communicated data from the at least one line replaceable unit under test and user input;

a monitor coupled to said computer for displaying graphical and textural images generated by said programmed simulator;

at least one communication protocol interconnect module coupled to said simulator; and wherein

said simulator configures said communication protocol interconnect module to enable said simulator to communicate using a specific communication protocol as used by the at least one line replaceable unit under test;

means for inputting at least one user defined configuration file to said programmed simulator for use thereby, said configuration file containing data and rules which are specific to the line replaceable unit under test and parameters required during a particular test to be performed; and wherein

said programmed simulator automatically updates said communicated data based on said rules in said configuration file.

The examiner relies on the following references:

Herzberg et al. (Herzberg)	5,023,791	Jun. 11, 1991
Berner et al. (Berner)	5,260,874	Nov. 9, 1993

Claims 1 through 15 and 17 through 21 stand rejected under 35 U.S.C. 103. As evidence of obviousness, the examiner cites Berner with regard to claims 1 through 8, 12 through 15 and 17 through 21, adding Herzberg with regard to claims 9 through 11.

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

OPINION

We reverse.

The initial burden is on the examiner to establish a case of prima facie obviousness. In our view, the examiner has not presented such a case.

Independent claims 1 and 17 recite "at least one communication protocol interconnect module coupled to said simulator and wherein said simulator configures said communication protocol interconnect module..." This is a very important limitation in the claims since this is what allows for rapid reconfiguration for different test conditions occurring during aircraft development.

The examiner recognizes the deficiency in Berner in not disclosing or suggesting this claim limitation yet the examiner incredibly takes the position [bottom of page 20-answer] that the "claims do not explicitly state that the communication protocol interconnect module be configured by the simulator." Independent claims 1 and 17 clearly do explicitly require the protocol interconnect module to be coupled to the simulator and configured thereby. [See line 20 of these claims]. Accordingly, since the examiner has ignored a key limitation of the claims, either intentionally or unintentionally, no prima facie case of obviousness has been established with regard to

claims 1 through 15 and 17 and we will not sustain the rejection of these claims under 35 U.S.C. 103.²

Turning now to independent claim 18, this claim requires, inter alia, a means

for maintaining validity of transmit data by updating freshness counters at expected rates, said seventh means further creating invalid data by changing transmit schedules, inhibiting freshness update, setting system status bits, and parameter validity bits, and by creating data/data or data/hardware disagreements.

The examiner treats this limitation in the statement of the rejection and the rationale therefor at page 15 of the answer, contending that the means for providing a transmit data response to "instruction LRU/system status and to simulate reactions of LRUs" are shown in Berner's Figures 1-4, column 5-8 and as transmitting generators 78, 80 and 82 and signal emulator 86. Even assuming, arguendo, that we agreed with this part of the examiner's analysis, the examiner fails to treat the very specific claim limitations as to exactly how validity

²The examiner has applied Herzberg with regard to claims 9 through 11 but Herzberg does not provide for the deficiency of Berner.

of transmit data is maintained, i.e. by "updating freshness counters," etc.

Appellants have specifically argued these limitations at pages 12-13 of the brief, pointing out, for example, how Berner only receives data "normally exchanged" and therefore does not even deal with maintaining validity of transmit data. While the examiner responds, at page 22 of the answer, by contending that, in Berner, "any desired response data can be obtained," the examiner fails to address the limitations of "updating freshness counters at expected rates, ..."

Again, since the examiner has not adequately addressed all claim limitations, no prima facie case of obviousness is found.

The examiner's decision rejecting claims 1 through 15 and 17 through 21 under 35 U.S.C. 103 is reversed.

REVERSED

JAMES D. THOMAS)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
ERROL A. KRASS)	APPEALS
Administrative Patent Judge)	AND
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