

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(2) is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PETER C. HAYDEN

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Appeal No. 97-1265  
Application 07/981,274<sup>1</sup>

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ON BRIEF

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

JERRY SMITH, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on the appeal under 35 U.S.C. § 134  
from the examiner's rejection of claims 1-5 and 7-26, which  
constitute all the claims remaining in the application.

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<sup>1</sup> Application for patent filed November 25, 1992.

Appeal No. 97-1265  
Application 07/981,274

The disclosed invention pertains to a network of computers in which at least one transmitter or server computer is connected to a plurality of remote receiver or client computers. More particularly, the invention is directed to the selection and assignment of a multicast address to a particular data stream to be sent over the network.

Representative claim 1 is reproduced as follows:

1. In a network of computers interconnected by a network structure including a plurality of multicast addresses, and at least one transmitter computer for transmitting at least one data stream over the network structure to a plurality of remote receiver computers, a method of transmitting a data stream to a dynamically assigned multicast address, comprising the steps of:

selecting a multicast address that is not being used by any computer on the network;

assigning the selected multicast address to the data stream; and

transmitting the data stream from the at least one transmitter computer to the assigned multicast address for receipt by the receiver computers.

The examiner relies on the following references:

Perlman	5,079,767	Jan. 07, 1992
Cree et al. (Cree)	5,276,442	Jan. 04, 1994
		(filed Feb. 22,

Appeal No. 97-1265  
Application 07/981,274

1991)

Appeal No. 97-1265  
Application 07/981,274

Claims 1-5 and 7-26 stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Perlman in view of Cree.

Rather than repeat the arguments of appellant or the examiner, we make reference to the briefs and the answer for the respective details thereof.

#### OPINION

We have carefully considered the subject matter on appeal, the rejection advanced by the examiner and the evidence of obviousness relied upon by the examiner as support for the rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the briefs along with the examiner's rationale in support of the rejection and arguments in rebuttal set forth in the examiner's answer.

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of

Appeal No. 97-1265  
Application 07/981,274

ordinary skill in the art the obviousness of the invention as  
set forth in claims 1-5 and 7-26. Accordingly, we reverse.

Appeal No. 97-1265  
Application 07/981,274

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 (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, 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. Sys., 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

Appeal No. 97-1265  
Application 07/981,274

presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to independent claim 1, which is the broadest claim on appeal before us, the examiner cites Perlman for its teaching of a network in which a multicast message is sent from a transmitter node to one or more receiver nodes. The examiner indicates that Perlman does not teach the step of selecting a multicast address that is not being used by any node (computer) on the network as recited in claim 1 [answer, page 3]. The examiner cites Cree as teaching the step of selecting an address that is not being used by any node on the network. The examiner observes that it would have been obvious to the artisan to incorporate Cree's selecting step into the Perlman network [id.].

Appellant initially makes several arguments based on the position that there is no motivation for combining the teachings of Cree with those of Perlman except in an attempt to improperly reconstruct the invention in hindsight. We agree with each of appellant's arguments in support of this

Appeal No. 97-1265  
Application 07/981,274

position.

The selecting an address step of Cree has absolutely nothing to do with the transmission of data streams over a network for multicast distribution. Therefore, we agree with appellant that the artisan would have no motivation to modify the

Appeal No. 97-1265  
Application 07/981,274

Perlman multicast distribution network with an addressing scheme of the type taught by Cree. The examiner asserts that the Cree addressing scheme "would increase the reliability of the Perlman system by assuring that unique multicast addresses are assigned to the data stream (or messages)" [answer, page 7]. We are unpersuaded by this rationale because the data streams in Perlman are already given unique multicast addresses so that no modification for this purpose is suggested. Additionally, Cree deals with assigning unique addresses to the nodes of the network, and not to selecting and assigning a unique multicast address to a specific data stream. Thus, appellant is correct that there is no suggestion within the applied prior art to make the modifications proposed by the examiner. The only reason to combine the teachings of Perlman with those of Cree would be based on an improper attempt to reconstruct appellant's invention in hindsight.

Appellant also argues that even if the teachings of Perlman and Cree are combined, the limitations of independent claim 1 are still not met by the collective teachings of these

Appeal No. 97-1265  
Application 07/981,274

references. We again agree with appellant. Even though there is no valid basis for combining the teachings of Perlman with those

Appeal No. 97-1265  
Application 07/981,274

of Cree, the collective teachings would still not meet all the limitations recited in claim 1. The examiner has attempted to find steps of selecting, assigning and transmitting as recited in claim 1 within the applied references, but the examiner has failed to consider all the recitations making up these steps. The selecting step taught by Cree does not relate to a multicast address and would not have suggested that Perlman's multicast address be selected in this manner. Since the selection of the multicast address would not be suggested by Perlman and Cree, the claimed steps of assigning the selected multicast address and transmitting the assigned multicast address would also not be suggested by the combined teachings of Perlman and Cree.

For all the reasons just discussed, the invention of independent claim 1 is not suggested by the collective teachings of Perlman and Cree. Consequently, we do not sustain the rejection of claim 1 or of claims 2-4 which depend therefrom.

Independent claims 11, 19 and 26 recite a system for transmitting a data stream over a computer network in which

Appeal No. 97-1265  
Application 07/981,274

the transmitting node selects and dynamically assigns the multicast address exclusively to a selected data stream. Since the address assignments in Cree are not determined by the server nodes, and

Appeal No. 97-1265  
Application 07/981,274

since addresses are not dynamically assigned by Perlman, this feature of independent claims 11, 19 and 26 is not taught or suggested by the collective teachings of Perlman and Cree. Therefore, we do not sustain the rejection of these independent claims or any of the claims which depend therefrom.

Remaining independent claims 5 and 25 are directed to a method for assigning a multicast address by a server computer and include the step of generating a list of unassigned multicast addresses that are not being used by any computer on the network. For reasons provided by appellant and discussed above, the teachings of Cree do not suggest this feature of independent claims 5 and 25. Therefore, we do not sustain the rejection of independent claims 5 and 25 or of claims 7-10 which depend from claim 5.

In summary, the examiner's rejection of claims 1-5 and 7-26 under 35 U.S.C. § 103 is reversed for the reasons indicated by appellant in the brief and the reply brief. The examiner has failed to respond to each of appellant's arguments, and we remain

Appeal No. 97-1265  
Application 07/981,274

unconvinced that the artisan would have combined the teachings  
of Perlman and Cree in a manner to render the claimed  
invention obvious within the meaning of 35 U.S.C. § 103.

REVERSED

	JERRY SMITH	)	
	Administrative Patent Judge	)	
		)	
		)	
		)	
	LEE E. BARRETT	)	BOARD OF
PATENT	Administrative Patent Judge	)	APPEALS AND
		)	INTERFERENCES
		)	
	PARSHOTAM S. LALL	)	
	Administrative Patent Judge	)	

Appeal No. 97-1265  
Application 07/981,274

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Appeal No. 97-1265  
Application 07/981,274

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