

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. 36

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte CHERIE C. BARNES and DAVID J. WIERBOWSKI

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Appeal No. 1996-1243  
Application No. 08/226,224

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ON BRIEF

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Before HAIRSTON, JERRY SMITH and BARRETT, 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 final rejection of claims 27-30, 32, 33, 35-43 and 45-50, which constituted all the claims in the application. An amendment was filed concurrently with the Notice of Appeal on July 20, 1995. This amendment sought to add new claims 51-55 to the application, but the amendment was denied entry by the examiner [Paper #27]. Appellants filed a petition to the Commissioner on September 25, 1995 to require

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entry of the amendment by the examiner. This petition was granted on February 17, 1999 [Paper #32]. Accordingly, claims 27-30, 32, 33, 35-43 and 45-55 are now the claims on appeal in this application.

The disclosed invention pertains to the field of shared resources among a plurality of users. Competing requests by users for shared resources which may be "owned" by other users can cause conditions of deadlock to occur. A lock wait matrix is created which represents a hierarchy of transactions waiting to access a resource. The invention is concerned with reducing the search time through such a lock wait matrix in determining potential deadlock conditions.

Representative claim 27 is reproduced as follows:

27. A method of reducing search time through a lock wait matrix representing a hierarchy of transactions waiting to access a resource, each of said transactions which waits on another transaction descends from said other transaction in said hierarchy, said method comprising the computer implemented steps of:

searching in said hierarchy a path of transactions including a parent transaction and all descendants of said parent transaction, and recording transactions encountered in the search, said parent transaction not being deadlocked; and

subsequently searching, generally downwardly through said hierarchy, another path of transactions emanating from a transaction of the first said path, recording transactions

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encountered in the search of said other path, comparing transactions encountered in the search of said other path to said parent transaction, and terminating the searching and recording of transactions of said other path before an end of said other path when encountering said parent transaction.

The examiner relies on the following references:

Weinblatt	3,579,194	May 18, 1971
Trinchieri	4,224,664	Sep. 23, 1980

R. Agrawal et al. (Agrawal), "The Performance of Alternative Strategies for Dealing with Deadlocks in Database Management Systems," IEEE Transactions On Software Engineering, Vol. SE-13, No. 12, December 1987, pages 1349-1363.

Claims 27-30, 32, 33, 35-43 and 45-55 stand rejected under 35 U.S.C. § 112, second paragraph, as failing to particularly point out and distinctly claim the subject matter of the invention. Claims 27-30, 32, 33, 35-43 and 45-55 also stand rejected under 35 U.S.C. § 103. As evidence of obviousness the examiner offers Trinchieri in view of Agrawal and further in view of Weinblatt.

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

OPINION

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

It is our view, after consideration of the record before us, that the claims on appeal recite the invention in a manner which complies with the requirements of 35 U.S.C. § 112. We are also of the view that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in the appealed claims. Accordingly, we reverse.

We consider first the rejection of all appealed claims under the second paragraph of 35 U.S.C. § 112. With respect to independent claim 27 [appendix version], the examiner asserts the lack of antecedent basis for the phrase "the first said path" in line 14 of the claim and the phrase "said other

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path" in line 15 of the claim [answer, page 4]. With respect to each of the independent claims on appeal, the examiner asserts that the claims are missing essential elements of the invention and do not properly correspond to the disclosed invention [id., pages 4-5].

Appellants respond that the appealed claims correspond to what they consider to be their invention and that there is no ambiguity or indefiniteness in the claim language [brief, page 5; reply brief, page 1].

The general rule is that a claim must set out and circumscribe a particular area with a reasonable degree of precision and particularity when read in light of the disclosure as it would be by the artisan. In re Moore, 439 F.2d 1232, 1235, 169 USPQ 236, 238 (CCPA 1971). Acceptability of the claim language depends on whether one of ordinary skill in the art would understand what is claimed in light of the specification. Seattle Box Co., v. Industrial Crating & Packing, Inc., 731 F.2d 818, 826, 221 USPQ 568, 574 (Fed. Cir. 1984).

The lack of antecedent basis objections of the examiner are clearly improper. It is not always necessary that literal

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support be found for proper antecedent basis. The only question is whether the artisan would understand what is covered by the claim. As appellants point out in the reply brief, "the first said path" can only refer to "a path of transactions" in line 7 of claim 27 [appendix version], and the "said other path" is clearly referring to the "another path" in line 13. There is no other reasonable way for these phrases to be interpreted. Therefore, since the artisan would understand what is covered by the objected to phrases, these phrases are not indefinite under 35 U.S.C. § 112.

We also do not agree with the examiner's other finding that the claims are incomplete. The examiner has essentially decided that he will determine what appellants' invention is and the amount of detailed limitations which will be necessary to support the disclosed invention. The examiner's objection goes to the breadth of the claimed invention rather than to the indefiniteness of the claimed invention. It is up to appellants to decide what portion of their disclosed invention they wish to include in the claims. The claimed invention can typically be as broad as the prior art permits. Therefore, it is inappropriate for the examiner to seek to narrow the

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claimed invention by forcing appellants to amend the claims to additionally refer to graphs or cycles.

In summary, we do not agree with any of the examiner's objections of the claims, and we do not sustain the rejection of all claims under 35 U.S.C. § 112.

We now consider the rejection of claims 27-30, 32, 33, 35-43 and 45-55 under 35 U.S.C. § 103. 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.

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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 presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). If that burden is met, the burden then shifts to the applicant to overcome the prima facie case with argument and/or evidence. Obviousness is then determined on the basis of the evidence as a whole and the relative persuasiveness of the arguments. See Id.; In re Hedges, 783 F.2d 1038, 1039, 228 USPQ 685, 686 (Fed. Cir. 1986); In re Piasecki, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984); and In re Rinehart, 531 F.2d 1048, 1052, 189 USPQ 143, 147 (CCPA 1976). Only those arguments actually made by appellants have been considered in this decision. Arguments which appellants could have made but chose not to make in the brief have not been considered [see 37 CFR § 1.192(a)].

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The examiner reads exemplary claim 27 on various portions of the three applied prior art references [answer, pages 5-6]. The examiner broadly concludes that it would have been obvious to the artisan to combine these various features of the applied prior art. Appellants note the related features of each of the applied references, but appellants argue that the references, either alone or in combination, do not teach or suggest the specific steps and means recited in each of the independent claims on appeal [brief, pages 6-9]. The examiner's response appears to be a contention that the same results and goals of the claimed invention are achieved in Weinblatt which establishes obviousness under 35 U.S.C. § 103 [answer, pages 8-13]. Appellants respond that the specific functions recited in the appealed claims are not performed by the applied prior art even if a similar result is achieved [reply brief].

We agree with the position argued by appellants. It would be enough to point out that the examiner has simply taken disparate teachings from three prior art references and improperly combined them in an effort to reconstruct the invention in hindsight. In other words, the examiner has not

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really provided a cogent rationale for combining the disparate teachings of the three applied references. More importantly, however, the disclosure of Weinblatt does not teach or suggest the specific steps and means of the claimed invention. Even if Weinblatt achieved the exact same result as the claimed invention, a contention which we do not agree with, Weinblatt does not achieve this result in the manner recited in the appealed claims. Appellants have indicated how their process differs from Weinblatt in the reply brief, and the examiner has offered no response. Since we agree with appellants that the combined teachings of the applied prior art do not suggest the obviousness of the claimed invention within the meaning of 35 U.S.C. § 103, we do not sustain the examiner's rejection of the appealed claims on this basis.

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In conclusion, we have not sustained either of the examiner's rejections of the claims. Therefore, the decision of the examiner rejecting claims 27-30, 32, 33, 35-43 and 45-55 is reversed.

REVERSED

KENNETH W. HAIRSTON	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
JERRY SMITH	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
LEE E. BARRETT	)	
Administrative Patent Judge	)	

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Arthur J. Samodovitz  
IBM Corporation/IPLAW/N50  
1701 North Street  
Endicott, NY 13760

