

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 53

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AMERICAN ACADEMY OF SCIENCE TECH CENTER

Appeal No. 98-1483
Reexamination 90/003,463¹

HEARD: July 15, 1998

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

¹ Application for patent filed June 7, 1994. According to the appellant this application is a reexamination of Application 06/921,219, filed October 20, 1986, now U.S. Patent 4,714,989; which is a continuation of Application 06/826,721, filed February 6, 1986, now abandoned; which is a continuation of Application 06/350,159, filed February 19, 1982, now abandoned.

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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 1-26. An amendment after final rejection was filed on September 16, 1996 and was entered by the examiner. This amendment resulted in the withdrawal of the previous final rejection and the institution of a new final rejection [Paper #33]. An amendment after this final rejection was filed on January 22, 1997 but was denied entry by the examiner [Paper #39]. A further amendment was filed on February 24, 1997 and was entered by the examiner [Paper #41]. This amendment cancelled claims 18 and 19. Accordingly, this appeal is directed to the rejection of claims 1-17 and 20-26 which constitute all the claims remaining in this reexamination proceeding.

The disclosed invention pertains to a method and apparatus for networking computers using a functionally structured distribution. Each of the computers connected to the network is designated as either a user computer or a data

center computer. Each data center computer stores information to be shared by a plurality of users. The user computers provide an interface to the data center computers, execute application software for the user, and request information over the network from data center computers.

The distributed network of the invention operates as a data base management system. All data base management tasks are handled by the data center computers so that the user computers can be dedicated to other functions. Requests for data base management tasks at the user computers are sent to the data center computers as if the data were being stored locally on each user computer.

Representative claims 1 and 3 are reproduced as follows:

1. A method of operating a distributed data processing system including a plurality of independent, not necessarily uniform general purpose user computers to run respective user application programs to process user data and a data center computer to store, retrieve, and update user data, said user computers being selectively interconnected with said data center computer by respective data communications hardware over data communication network means, said method comprising the steps of:

(a) managing in a data center computer by means of a data base manager program a user data base of user data items to perform data operations of storing, updating, and

retrieving said user data items in response to data base calls for such operations from a user computer;

(b) running a user application program in a general purpose user computer to process user data, said user application program indirectly issuing data base calls for data operations regarding user data items in response to requirements for said data operations by said user application programs;

(c) in response to a data base call regarding a user data item from a user application program, initiating by said user computer only a data communication link with said data center computer over data communication network means;

(d) communicating said data base call from said user computer to said data center computer;

(e) performing by said data center computer said data operation regarding said user data item defined by said data base call; and

(f) communicating an appropriate response to said data base call from said data center computer to said user computer.

3. A method as set forth in claim 1 including the step of:

(a) issuing said data base calls from said user computer by a data base simulator program running in said user computer in cooperation with said application program.

The examiner relies on the following references:

R. H. Canaday et al. (Canaday), "A Back-end Computer for Data Base Management," Communications of the ACM, Vol. 17, No. 10, October 1974, pages 575-582 [exhibit #3 of reexamination request].

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E. Lowenthal, "Data Base Processors: What Can They Do?", June 1979, pages In Depth/1-12 [exhibit #8 of reexamination request].

F. J. Maryanski et al. (Maryanski), "A Prototype Distributed DBMS," January 1979, pages 205-214 [exhibit #9 of reexamination request].

J. J. Passafiume, "Providing Network Data Services Using a Backend Data Base Machine," February 1980, pages 251-262 [exhibit #10 of reexamination request].

Britton Lee, Inc. (Britton Lee), "IDM 500 Intelligent Database Machine (Product Description), 1980, pages 1-20 [exhibit #12 of reexamination request].

D. K. Hsiao et al. (Hsiao), "Database Machine Architecture In The Context Of Information Technology Evolution," October 1977, pages 63-84 [exhibit #7 of reexamination request].

Claims 1-17 and 20-26 each stand alternatively rejected under 35 U.S.C. § 102 or § 103 on various ones of the cited references applied individually. Canaday, Lowenthal and Maryanski are each individually applied against claims 1-17 and 20-26. Britton Lee is applied against claims 1-3, 5, 6, 8-11, 13-17 and 20-25. Hsiao and Passafiume are each individually applied against claims 1-17 and 20-25.

Rather than repeat the arguments of appellant or the examiner, we make reference to the brief 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 anticipation and obviousness relied upon by the examiner as support for the rejections. We have, likewise, reviewed and taken into consideration, in reaching our decision, the appellant's arguments set forth in the brief 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 rejections of the claims based on Canaday, Lowenthal, Maryanski, Passafiume and Hsiao are proper and are affirmed. We reach the opposite conclusion with respect to the rejection based on Britton Lee. Accordingly, the decision of the examiner is affirmed.

Appellant has indicated that for purposes of this appeal the claims will stand or fall together in the following two groups: Group I has claims 1, 2, 4, 5, 9-12, 14-15 [sic 17], 20, 21 and 23-26, and Group II has claims 3, 6-8, 13 and 22 [brief, page 4]. Consistent with this indication appellant has made no separate arguments with respect to any of the

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claims within each group. Therefore, all the claims within each group will stand or fall together. Note In re King, 801 F.2d 1324, 1325, 231 USPQ 136, 137 (Fed. Cir. 1986); In re Sernaker, 702 F.2d 989, 991, 217 USPQ 1, 3 (Fed. Cir. 1983). Accordingly, we will only consider the rejection against claims 1 and 3 as representative of all the claims on appeal.

As noted above, each of claims 1 and 3 stands rejected alternatively under 35 U.S.C. §§ 102 and 103 on each of the six prior art references cited above. Before we can properly address the question of whether any of the references anticipates or renders obvious the invention of claims 1 and 3, we must determine exactly to what invention are claims 1 and 3 directed. Appellant and the examiner disagree on the scope of claims 1 and 3 which plays a major role in the disagreement over whether the prior art has been properly applied.

Appellant has proposed specific definitions for several of the terms which appear in claims 1 and 3. Appellant's proposed definitions are as follows:

Distributed data processing system means

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A plurality of personal computers (PC's) for running user application programs networked with at least one data center computer for handling sharable data along with other limitations set forth in a specific claim [brief, page 32].

User computer means

A computer, typically a microcomputer, now more commonly called a personal computer or PC, and would not mean a mainframe computer or a minicomputer. Moreover, user computer means a PC that serves as interface with only a single user at a time, executes user-selected application programs, and stores no sharable data locally [Id.].

User application program indirectly issuing data base

calls means

When an application program running in a user computer issues a call for data as though from resident storage, an intermediate step is added to redirect the call and the final result is a call, instead, to the remote data center computer. Furthermore, this is the redirection function provided by the data base simulator program in the preferred embodiment, i.e., a call which the application program issues is one that would have been processed locally without the presence of the redirection software, and without revising the application source code [brief, page 28].

Data base simulator program means

A program that simulates, that is, transparently replaces and imitates a data base manager program, and enables calls for data, issued by an application program running in a networked personal computer and calling for data as though it were calling for data from a data base resident in the personal computer, to be redirected to a remote data center computer and further, through this redirection, the application program indirectly issues data base calls to the data center computer without the need for rewriting of the application source code [brief, pages 17-18].

It should be noted that none of these definitions actually appears in the patent disclosure. A careful review of the specification in this patent would reveal that the definitions proposed by appellant are far more limiting than the artisan would have deduced from simply reading the patent disclosure. Although the declaration evidence may be used by appellant to support the proposition that the original disclosure supports the limited claim definitions proposed by appellant, such evidence cannot be used to assert that such definitions are the only definitions which can apply when the artisan would clearly have recognized that the terms in

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dispute have much broader definitions than those proposed by appellant.

Appellant argues that the examiner erred in ignoring the claim definitions proposed by appellant. Specifically, appellant states that "[t]he claim constructions asserted by the applicant are now part of the file history of the '989 patent and this file history should be considered in determining the meaning of the claims" [brief, pages 12-13]. It appears that appellant is confusing the role the file history plays in interpreting claims involved in an infringement proceeding with that of claims involved in prosecution before the PTO. We would agree with appellant's argument if the proposed definitions specifically appeared in the patent disclosure, but they do not.

In reexamination proceedings claims are given their broadest reasonable interpretation consistent with the specification, and limitations appearing in the specification are not read into the claims. In re Yamamoto, 740 F.2d 1569, 1571, 222 USPQ 934, 936 (Fed. Cir. 1984). Where an inventor chooses to be his own lexicographer and to give terms uncommon meanings, he must set out his uncommon definition in some

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manner within the patent disclosure so as to give one of ordinary skill in the art notice of the change. Intellicall, Inc. v. Phonometrics, Inc., 952 F.2d 1384, 1388, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992). As we noted above, none of the definitions proposed by appellant would be apparent to the artisan who had only the patent disclosure before him.

It is interesting that even though each of appellant's proposed definitions is considerably narrower than would be apparent from the patent disclosure itself, the examiner accepted the proposed definitions of "distributed data processing system" and "user computer." It appears that the examiner accepted these limited definitions for the sole purpose of creating a file wrapper estoppel which would later prevent appellant from asserting a broader scope for these claims. Although the examiner clearly had good intentions, we are of the view that this technique for limiting the scope of the claims did a disservice to the public. The examiner should have required that these agreed upon definitions be specifically inserted into the patent disclosure. In the absence of such an amendment to the disclosure, the public would not be aware that the claims which appear in the patent

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had been given a much narrower scope than would appear from the patent alone. This could mislead the public into believing that broader, literal versions of the claims would infringe the patent and give the patentee protection for subject matter that he had specifically disclaimed. It could also drive the public to the expense of contesting a patent which does not in fact cover what it appears to cover. The availability of the file record is insufficient to overcome the above-noted problems. The file record in this reexamination proceeding includes seven boxes of materials in addition to the oversized file itself. The public should not have to sift through this record in order to understand what the terms in the claims mean.

In summary, since appellant's proposed definitions do not appear in the patent specification, and since the proposed definitions are not apparent from a reading of the patent disclosure, we will not consider appellant's definitions in considering the scope of invention as recited in claims 1 and 3. We will, instead, use the general rule that claims during prosecution are given their broadest reasonable interpretation. Even though the examiner had agreed with some

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of the more limited definitions, we do not accept the definitions because, as we noted above, such acceptance by the examiner was contrary to proper claim construction. We do note, however, that the examiner would appear to have no basis to object to definitions being inserted into the patent disclosure as long as the examiner had agreed with those definitions. As we noted above, the examiner agreed with the definitions for "distributed data processing system" and "user computer" but did not agree with the definitions for "indirectly issuing" or "data base simulator program." For purposes of considering the rejections of claims 1 and 3 based on the prior art, we will not import any of appellant's proposed definitions into the claims for reasons discussed above.

We now consider the prior art rejections based on the six applied references cited above. Each of the prior art references is directed to a similar computer architecture for data base management. This architecture consists of a dedicated back-end computer for performing data base management functions for a plurality of users. The users make data requests, and those requests are processed and sent to

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the back-end computer for handling those data requests. Results of the data requests are then communicated back to the user whose application program made the data request.

We consider first the propriety of each of the rejections based on anticipation under 35 U.S.C. § 102. Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data Systems, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

1. The rejection based on Canaday.

Claim 1

The examiner has set forth how he reads claim 1 on each of the prior art references including Canaday [answer, pages 7-17]. Appellant argues that Canaday does not meet the definitions of "distributed data processing system" and "user

computer" as used in claim 1 [brief, page 40]. The examiner's rejection of claim 1 under 35 U.S.C. § 102 was inconsistent with his acceptance of these proposed definitions by appellant. Appellant is correct that Canaday does not disclose personal computers (PCs) as these definitions require. The question of whether the artisan would have recognized the "equivalence" of PCs and mainframe computers in 1982 is a question related to obviousness rather than anticipation. Nevertheless, we have already observed that appellant's definitions are more limited than the broadest reasonable interpretation of the claim terms. A distributed data processing system only requires that processing operations be distributed among more than one computer. A user computer only requires that the computer be capable of running application programs for a user. When these broader definitions are used, Canaday clearly discloses a distributed data processing system and a general purpose user computer as recited in claim 1.

Appellant argues that Canaday does not disclose or suggest an application program indirectly issuing data base calls as recited in step (b) of claim 1 [brief, page 41]. As

noted above, we will give the phrase indirectly issuing data base calls its broadest reasonable interpretation. A data base call is a request for data from a data base, and indirectly means not directly. Thus, claim 1 only requires that the application program running on the host in Canaday make an indirect data request from the back-end data base computer. We construe indirect to require nothing more than the request going through some other component before it is sent to the data base in the back-end computer. Figure 7 of Canaday shows data requests going from an application program to an XDMS interface before the request is forwarded to the data base. In our view, this operation fully meets the broad recitations of step (b) of claim 1.

Therefore, when claim 1 is given the correct legal construction, we find that each of the recitations of claim 1 is fully met by the data base search system of Canaday.

Claim 3

Claim 3 recites that the data base calls are issued by a data base simulator program. As noted above, we do not accept appellant's definition as to what this phrase means. A data base simulator program, in our view, is simply any

program operating within a computer which simulates a data base access. The data base calls in Canaday are controlled by an interface program in the host [page 580, left column]. The interface program allows data to be accessed from the remote data base just as if the data were locally maintained. In our view, such an operation constitutes a data base simulator program as recited in claim 3.

In summary, our interpretation of claims 1 and 3 results in a finding that each of the recitations of claims 1 and 3 is fully met by the Canaday reference. Therefore, we sustain the rejection of the claims under 35 U.S.C. § 102 based on Canaday.

2. The rejection based on Lowenthal.

Claim 1

The examiner has set forth how he reads claim 1 on Lowenthal [answer, pages 7-17]. Appellant argues that Lowenthal suffers the same deficiencies as Canaday based on appellant's proposed definitions [brief, pages 44-46]. This argument is not persuasive for reasons we have already addressed above. The host computer(s) and the back-end computer of Lowenthal make up a distributed data processing

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system. The host computers are also user computers within the broad meaning of that term. The description of the connection between the host and the data base processor (DBP) notes that data base management systems (DBMS) statements are interpreted to determine which data is needed from the back-end data base and such data requests are then sent [In Depth/2, right column]. We consider this description to broadly meet the recitation of indirectly issuing a data base call from the user application program to the data base for reasons discussed above.

Claim 3

The indirect issuing of a data base call between the host and the data base of Lowenthal is deemed to be implemented by a data base simulator program as we have broadly interpreted that term. Therefore, we sustain the rejection of the claims under 35 U.S.C. § 102 based on Lowenthal.

3. The rejection based on Maryanski.

Claim 1

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The examiner has set forth how he reads claim 1 on Maryanski [answer, pages 7-17]. Appellant argues that Maryanski suffers the same deficiencies as the other back-end references based on appellant's proposed definitions [brief, pages 34-40]. This argument is not persuasive for reasons we have already addressed above. The structure shown in Figures 1 and 2 of Maryanski and the corresponding description in the article anticipate the disputed terms of claim 1 for the same reasons we discussed with respect to Canaday and Lowenthal.

Claim 3

The indirect issuing of a data base call between the host and the data base of Lowenthal is deemed to be implemented by a data base simulator program as we have broadly interpreted that term. Therefore, we sustain the rejection of the claims under 35 U.S.C. § 102 based on Maryanski.

4. The rejection based on Passafiume.

Claim 1

The examiner has set forth how he reads claim 1 on Passafiume [answer, pages 7-17]. Appellant argues that Passafiume suffers the same deficiencies as the other back-end

references based on appellant's proposed definitions [brief, pages 46-48]. This argument is not persuasive for reasons we have already addressed above. The structure shown in Figure 1 of Passafiume and the corresponding description in the article anticipate the disputed terms of claim 1 for the same reasons we discussed with respect to the other applied references.

Claim 3

The indirect issuing of a data base call between the host and the data base of Passafiume is deemed to be implemented by a data base simulator program as we have broadly interpreted that term. Therefore, we sustain the rejection of the claims under 35 U.S.C. § 102 based on Passafiume.

5. The rejection based on Hsiao.

Claim 1

The examiner has set forth how he reads claim 1 on Hsiao [answer, pages 7-17]. Appellant argues that Hsiao suffers the same deficiencies as the other back-end references based on appellant's proposed definitions [brief, pages 48-54]. This argument is not persuasive for reasons we have already addressed above. Additionally, appellant argues that

the personal computers of Hsiao may operate in a peer-to-peer mode which is contrary to the claimed invention. We find nothing in claim 1 which restricts the invention to user computers which have no contact with each other. The structure shown in Figure 2 of Hsiao and the corresponding description in the article anticipate the disputed terms of claim 1 for the same reasons we discussed with respect to the other applied references.

Claim 3

Hsiao discloses that information system manager software coordinates requests between the application-dependent software and the data base [page 65, right column]. Therefore, the indirect issuing of a data base call between the host and the data base of Hsiao is deemed to be implemented by a data base simulator program as we have broadly interpreted that term. Therefore, we sustain the rejection of the claims under 35 U.S.C. § 102 based on Hsiao.

6. The rejection based on Britton Lee.

Before we consider the merits of this rejection, we must consider appellant's argument that the Britton Lee reference used by the examiner is not prior art [brief, pages

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61-65]. The Britton Lee reference applied by the examiner has no date associated with it. It was cited by the reexamination requester, and its date was established based on testimony taken in a related civil proceeding involving this patent. The rejection is based on the deposition testimony of Paula Hawthorne who stated that the Britton Lee reference was publicly disseminated in 1980.

Appellant argues that there are two Britton Lee references on this record, and the Britton Lee reference applied by the examiner is not the one identified by Paula Hawthorne as being disseminated in 1980. The reference identified by Paula Hawthorne, according to appellant, is a substantially shorter version of the Britton Lee reference applied by the examiner and it does not show the features relied on by the examiner as anticipating the claimed invention. The examiner simply repeats in the answer that Paula Hawthorne identified Britton Lee as being prior art.

Based on the arguments presented by appellant and the examiner on this point, we will not sustain the rejection of the claims based on the Britton Lee reference applied by the examiner. The examiner has never addressed appellant's

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argument that the Britton Lee reference of the Hawthorne deposition is not the same reference as the Britton Lee reference applied by the examiner. Since the identification of the applied reference as being prior art has been placed in doubt, and since no effort has been made to substantiate the authenticity of the reference, we conclude that, on this record, the Britton Lee reference applied by the examiner is not prior art.

We now consider the propriety of each of the rejections based on obviousness under 35 U.S.C. § 103. Appellant argues that the examiner's bare allegations of equivalence between the claimed invention and the prior art references are not sufficient to set forth a prima facie case of obviousness [brief, pages 568-60]. We note that anticipation is the epitome of obviousness. Therefore, the examiner's prima facie case of anticipation is sufficient to also support a prima facie case of obviousness. Accordingly, the rejections of the claims under 35 U.S.C. § 103 are sustained with respect to Canaday, Lowenthal, Maryanski, Passafiume and Hsiao, but the rejection based on Britton Lee is not sustained.

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Appellant has additionally argued that the references applied here are cumulative to the references applied during prosecution of the original patent, and that the terms of the patent claims are not being interpreted in the same manner as during the original patent [brief, pages 56-58].

Specifically, appellant argues that the original claims were issued over a patent to Anderson et al. (Anderson), and the arguments which distinguish the invention from Anderson are also applicable here. We do not agree.

The prosecution record of the original patent does not reveal any information as to how the terms under dispute here were interpreted in that case. The invention of the patent was distinguished from Anderson based on the fact that the transaction terminals of Anderson could not operate as a plurality of user computers. That argument would not be effective against the references applied in this reexamination proceeding because each of the rejections is based on a reference which discloses a plurality of user computers in the front end of the system. Therefore, there is nothing inconsistent about finding that the claims distinguish over

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Anderson but do not distinguish over Canaday, Lowenthal,
Maryanski, Passafiume and Hsiao.

In conclusion the examiner's rejections of the claims
based on Canaday, Lowenthal, Maryanski, Passafiume and Hsiao
are affirmed. The rejection of the claims based on Britton
Lee is reversed. Therefore, the decision of the examiner
rejecting claims 1-17 and 20-26 is affirmed.

No time period for taking any subsequent action in
connection with this appeal may be extended under 37 CFR
§ 1.136(a).

AFFIRMED

ERROL A. KRASS)
Administrative Patent Judge))
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) BOARD OF PATENT
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