

The opinion in support of the decision being entered today was **not** written for publication and 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 CARY A. JARDIN and STEVEN SCHNETZLER

Appeal No. 2004-0587
Application 09/054,304

HEARD: November 18, 2004

Before FLEMING, GROSS, and MACDONALD, **Administrative Patent Judges**.

FLEMING, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1, 4 through 11, and 14 through 22, all the claims pending in the instant application. Claims 2, 3, 12 and 13 have been canceled.

Invention

The invention relates to the management of client requests in client-server computer based networks. See page 1 of Appellants' specification.

Figure 1 is a block diagram describing the structure of a TCP packet 100 in a transport layer. The term "packet", refers to a unit of messages, including data and control signals, that is communicated in a network layer. As shown in figure 1, the TCP header 102 comprises a source port field 104 followed by a destination port field 108. See page 4 of Appellants' specification. Figure 4 is a functional diagram of a client-server network applying the invention. As shown in figure 4, one or more clients 410 communicate with a broker 420. See page 8 of Appellants' specification. Depending on the availability of resources of the broker 420, the broker 420 determines whether to execute incoming client requests or to hand-off client command requests to a third party server 430. See page 9 of Appellants' specification. Figure 5 is a flowchart describing the control flow executed by broker 420. See page 10 of Appellants' specification. At block 508, the broker 420 determines whether to execute incoming client requests or to hand-off client requests to a third party server, server 430. If the broker decides to forward the request to server 430, the application software executes a hand-off system call to instruct the

operating system to hand-off the current client/broker session to the server 430. At block 516, the broker 420 modifies its destination address 252 of the IP header 200 shown in figure 2 by writing the destination address of the server 430 in the destination address field 252. See page 11 of Appellants' specification. At block 524, the broker 420 transmits to the server 430 a packet. Since the client 410 already has established a link with the broker 420, no link is needed to be established between the client 410 and the server 430. The client 410 transmits packets to server 430 through the broker 420. At block 532, the broker 420 generates a pseudo acknowledgment packet to the client 410. The pseudo acknowledgment is generated after the broker 420 receives a acknowledgment packet from the server 430. The pseudo acknowledgment packet from the server 430 is transparent to the client 410 and hence, does not disrupt the link already established between the client 410 and broker 420. See page 12 of Appellants' specification. At block 534, for all data packets received from the client 410, the broker 420 modifies the destination address shown in figure 2 by writing the destination address of the server 430 in the destination field 252. At block

536, the broker transmits to the server 430 all the packets received from the client 410. The process terminates upon delivery of all packets to server 430 at block 550. Figure 6 is a flowchart describing the decisional steps executed by the server 430. At the beginning at block 602, the server 430 cooperates with the broker 420 to respond to client command requests. At block 624, the server 430 receives from the broker 420 the packet in a handshake session. Hence, the broker 420 and the server 430 may exchange several packets until the server 430 and the broker 420 are in the same application state at block 628. See page 13 of Appellants' specification. At block 640, the server 430 receives data packets from the broker to execute command requests of the client 410. At block 644, in response to the command requests, the server 430 generates and prepares outgoing packets for transmission to the client 410. By writing the source address of the broker 420 in place of the source address, the server 430 causes the client 410 to believe that the information is being sent by the broker 420. Finally, at block 648, the server 430 transmits packets having the

destination address of the client to the network for delivery to the client. The process terminates upon delivery of all required packets at block 650. See page 14 of Appellants' specification.

Independent claim 1 is representative of Appellants' claimed invention, and is reproduced at follows:

1. A method of managing a client request in a client-server network having a client, a first server, and a second server, the method comprising:

performing a handshake between the client and the first server;

determining whether to fulfill the client request by the first server;

selecting the second server, when the client request cannot be fulfilled by the first server;

performing a handshake between the first server and the second server;

forwarding the client request to the second server for execution, the forwarding being transparent to the client; and

responding to the client by a one-way direct data transmission from the second server to the client.

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References

The references relied on by the Examiner are as follows:

Konrad	5,544,320	Aug. 6, 1996
Boll et al. (Boll)	5,644,720	Jul. 1, 1997
Colby et al. (Colby)	6,006,264	Dec. 21, 1999 (Filed Mar. 30, 1998)
Mogul	6,097,882	Aug. 1, 2000 (Filed Jun. 30, 1995)
Wallis et al. (Wallis) United Kingdom Patent	2,281,793	Mar. 15, 1995

Levy et al. (Levy) "Distributed File Systems: Concepts and Examples," ACM, Vol. 22, No. 4, December 1990, pages 321-336.

Banatre, "Hiding Distribution in Distributed Systems," IEEE, 1991, pages 189-196.

Coulouris et al. (Coulouris), "Distributed Systems Concepts and Design," 1994, pages 10-21.

Rejections at Issue

Claims 1, 4 through 11 and 14 through 22 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to provide a specification that would enable a person skilled in the art to make and use the claimed invention. Claims 1, 4 through 11 and 14 through 22 stand rejected under 35 U.S.C. § 102 as being anticipated by Boll, Colby, Konrad, Mogul, Wallis, Levy, Banatre or Coulouris.

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Throughout our opinion, we will make reference to the briefs¹ and the answer² for the respective details thereof.

OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the argument of the Appellants and the Examiner, for the reasons stated *infra*, we reverse the Examiner's rejection of claims 1, 4 through 11, and 14 through 22 under 35 U.S.C. § 102 and under 35 U.S.C. § 112, first paragraph.

Rejection under 35 U.S.C. § 112, first paragraph.

As noted by our reviewing court in **Enzo v. Calgene**, 188 F.3 1362, 1371, 52 USPQ2d 1129, 1135 "[t]he statutory basis for the enablement requirement is found in Section 112, Para. 1, which provides in relevant part that:

¹ Appellants filed an appeal brief on July 30, 2001. The Examiner mailed out an office communication stating that the appeal brief was defective on October 10, 2001. Appellants filed a corrected appeal brief on November 13, 2001. We will simply refer to this brief as the brief. Appellants filed a reply brief on July 21, 2003. The Examiner mailed out an office communication on August 25, 2003, stating that the reply brief has been entered into the record.

² The Examiner mailed out an Examiner's answer on May 21, 2003. We will refer to this Examiner's answer as simply the answer.

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same

35 U.S.C. § 112, Para. 1 (1994).” “To be enabling, the specification of a patent must teach those skilled in the art how to make and use the full scope of the claimed invention without ‘undue experimentation’.” **Genetech, Inc. v. Novo Nordisk**, A/S 108 F.3d 1361, 1365, 42 USPQ2d 1001, 1004 (Fed. Cir. 1997) (quoting **In re Wright**, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993)). Whether claims are sufficiently enabled by a disclosure in a specification is determined as of the date that the patent application was first filed, see **Hybritech, Inc. v. Monoclonal Antibodies, Inc.**, 802 F.2d 1367, 1384, 231 USPQ 81, 94 (Fed. Cir. 1986), . . . Our reviewing court has held that a patent specification complies with the statute even if a “reasonable” amount of routine experimentation is required in order to practice a claimed invention, but that such experimentation must not be “undue.” See, e.g., **Wands**, 858 F.2d at 736-37, 8 USPQ2d at 1404 (“Enablement is not precluded by the necessity for some experimentation However,

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experimentation needed to practice the invention must not be undue experimentation. The key word is 'undue,' not 'experimentation'." (footnote, citations, and internal quotation marks omitted). In **In re Wands**, the court sets forth a number of factors which a court may consider in determining whether a disclosure would require undue experimentation. These factors were set forth as follows: (1) the quantity of experimentation necessary, (2) the amount of direction or guidance presented, (3) the presence or absence of working examples, (4) the nature of the invention, (5) the state of the prior art, (6) the relative skill of those in the art, (7) the predictability or unpredictability of the art, and (8) the breadth of the claims. *Id.* at 737, 8 USPQ2d 1404. Our reviewing court has also noted that all of the factors need not be reviewed when determining whether a disclosure is enabling. **See Amgen, Inc. V. Chugai Pharm. Co., Ltd.**, 927 F.2d 1200, 1213, 18 USPQ2d 1016, 1027 (Fed. Cir. 1991) (noting that the **Wands** factors "are illustrative, not mandatory. What is relevant depends on the facts.").

The Examiner argues that the claims as presently constructed read upon any transparent method known or not known to a person of ordinary skill in the art, since the pseudo acknowledgment and

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related supporting operations or functions have yet to be positively claimed. See pages 10 and 11 of the answer. The Examiner argues that the problem has arisen since unclaimed protocol is disclosed starting at the last paragraph on page 11 through the end of the first paragraph on page 14. The Examiner believes that this is what the Appellants have attempted to cover, however, the protocol has not been recited in the claims. See pages 8 and 9 of the answer.

Appellants state that the Appellants appreciate the Examiner's effort to identify allowable subject matter. However, Appellants argue that 35 U.S.C. § 112, first paragraph, does not require the Appellants to recite narrow claims which would recite the additional step of using a pseudo acknowledgments. See pages 9 and 10 of the reply brief.

Turning to the claims, we note that claims 1 and 4 through 10 recite "a method of managing a client request in a client-server network having a client, a first server, and a second server, the method comprising:" followed by method steps. Similarly, we note that Appellants' claims 11 and 14 through 19 recite "a system for managing a client request in a client-

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server network, the system comprising:" followed by a combination of apparatus. Similarly, we note that Appellants' claimed 20 recites "a program storage device storing instructions that when executed by a computer perform the method comprising:" followed by a series of method steps. Claim 21 recites "a system for managing a client request in a client-server network having a client, a first server, and a second server, the system comprising:" followed by a combination of means. Claim 22 recites "a system for managing a client response in a client-server network, the system comprising:" followed by a combination of apparatus. Therefore, all the claims recite the transitional word "comprising".

"Comprising" is a term of art used in claim language which means that the named elements are essential, but other elements may be added and still form a construct within the scope of the claim. **Moleculon Research Corp. v. CBS, Inc.** 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986) and **In re Baxter**, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981) Also see MPEP 2111.03.

Thus, claims with the use of the term, "comprising," are open ended claims which allow other elements, apparatus, method steps to be included into the claims. Furthermore, the use of

the term, "comprising" does not mean that these are the only elements required for the invention. Thus, the Examiner's finding that the additional steps of providing a pseudo acknowledgment are not recited in Appellants' claims does not on its face provide evidence that the claims are not enabled.

However, we do have to consider whether the claims are so broad that it causes the claims to have a potential scope of protection beyond what is justified by the specification disclosure. For us to answer this question, we need to consider the *Wands* factors. In particular, we need to consider the predictability or the unpredictability of the art. We note that the Examiner has not provided us any factual findings on this basis. Furthermore, it is noted that "[i]n cases involving predictable factors, such as mechanical or electrical elements, a single embodiment provides broad enablement in the sense that, once imagined, other embodiments can be made without difficulty and their performance characteristics predicted by resort to known scientific laws." **See In re Fisher**, 427 F.2d 833, 839, 166 USPQ 18, 24 (CCPA 1970). Without further factual findings, we fail to find that the Examiner has established a **prima facie** case

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as to this question. Therefore, we will not sustain the Examiner's rejection of the claims under 35 U.S.C. § 112, first paragraph.

Rejection under 35 U.S.C. § 102

It is axiomatic that anticipation of a claim under § 102 can be found only if the prior art reference discloses every element of the claim. **See In re King**, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986) and **Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co.**, 730 F.2d 1452, 1458, 221 USPQ 481, 485 (Fed. Cir. 1984).

The Examiner has interpreted the language "one-way direct data transmission from the second server to the client" as a negotiated bi-directional communication between the server and the client. See page 18 of the Examiner's answer. For Independent claims 11 and 20 through 22 the Examiner has interpreted similar language in this same way. See page 20 of the Examiner's answer.

As pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." **In re Hiniker Co.**, 150 F.3d 1362, 1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Furthermore, "the terms used in the

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claims bear a "heavy presumption" that they mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." **Tex Digital Sys, Inc. v. Telegenix, Inc.**, 308 F.3d 1193, 1202, 64 USPQ2d 1812, 1817 (Fed. Cir. 2002).

We can not agree with the Examiner's interpretation of this claim language. The plain meaning of the terms would lead those skilled in the art to conclude that the claim is setting forth a one-way direct data transmission from the second server to the client without normal handshaking protocols. We note that this is consistent with Appellants' specification. See pages 13 and 14 of Appellants' specification.

Turning to the references, we note that the Examiner has not provided any evidence of a finding of a one-way communication between the second server to the client without the normal handshaking protocols. Upon our careful review of each of the references we fail to find this limitation as well.

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In view of the foregoing, we have not sustained the Examiner's rejection of claims 1, 4 through 11, and 14 through 22 under 35 U.S.C. § 112, first paragraph and 35 U.S.C. § 102.

REVERSED

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Administrative Patent Judge)	
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)	
)	BOARD OF PATENT
ANITA PELLMAN GROSS)	
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