

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROY HAROLD MAUGER
and SIMON DANIEL BRUECKHEIMER

Appeal No. 2004-0852
Application No. 09/354,651

ON BRIEF

Before BARRETT, RUGGIERO, and LEVY, Administrative Patent Judges.
LEVY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1-5 and 7-11, which are all of the claims pending in this application.

BACKGROUND

Appellants' invention relates to supporting multiple services in label switched networks. An understanding of the invention can be derived from a reading of exemplary claim 1, which is reproduced as follows:

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 13, mailed September 25, 2003) for the examiner's complete reasoning in support of the rejections, and to appellants' brief (Paper No. 12, filed July 17, 2003) and reply brief (Paper No. 16, filed November 28, 2003) for appellants' arguments thereagainst. 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 briefs have not been considered.

OPINION

In reaching our decision in this appeal, 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, 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.

Upon consideration of the record before us, we reverse, essentially for the reasons set forth by appellants.

We turn first to claim 1. To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in In re Oelrich, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting Hansgirg v. Kemmer, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

Turning to claim 1, appellants assert (brief, page 5) that in Rekhter, since the CE routers do not exchange routing information with each other, there is no virtual backbone for the enterprise to manage. It is argued (id.) that Rekhter "does not require the exchange of any routing information between said customer enterprise end points, i.e., the originating end point does not provide its IP address and a session identifier to the destination end point, nor does the destination end point return

its IP address together with the same session identifier in order to initiate such session." Appellants further assert (id.) that in Rekhter, packets of data are transported between end points by means of tags, because when a PE router receives a packet from a CE router, the PE router tags the packet with an indication of the CE network where it originated. The PE router then bases its determination of what router to forward the packet to not only on the packet's destination address, but also on the identity of the originating CE router. At each subsequent hop, the router looks up the packet destination address in the forwarding table specific to the CE network that the tag designates. In other words, a packet is routed on a hop-by-hop basis based on tags attached to the data packet and information stored in the router look-up table.

Appellants (brief, page 6) dispute the examiner's position (answer, page 6) that Rekhter "discloses the setting up of a TCP communication between an originating end point and a destination end point utilizing IP address and a session ID, wherein the destination returns its IP address and the session ID associated with the communication." Appellants maintain (id.) that:

The session to which the Examiner refers is that taught by Rekhter in which the service provider's routers utilize the tag distribution

protocol (TDP) in order that said routers can tell their neighboring routers the tags they want to see in the packets that they receive (see Rekhter, column 9, line 63 to column 10, line 7 and column 14, lines 44 onwards). Consequently, this part of the disclosure of Rekhter is not directed to the establishment of a communications session between end points where said end points inform each other of their respective IP addresses and share a session identifier. In the case of Rekhter, the tags are communicated between routers separately to any communication session being established between end points, said tags being stored in routing tables for use in connecting with routing packets across the network on a per hop basis.

The examiner responds (answer, page 9) by directing our attention, inter alia, to chapter 13 of the textbook "Internetworking with TCP/IP Volume I Principles, Protocols, and Architectures," by Douglas Comer, Prentice Hall, Third Edition, 1995 as background on TCP/IP. The examiner notes (id.) that "[e]ach router along the path from the source to the destination only needs to perform processing of the packet at layers 1 and 2 in order to route the packet to the next router." It is argued (answer, page 10) that during the TCP set-up phase, the source and destination end points exchange addresses and a session identifier, and that utilizing the TCP/IP protocol sessions, switched virtual circuits (SVCs) are set up and data packets are

routed from the source to the destination over a path which is available in order to route the packet from the source to the destination during the data phase.

Appellants respond (reply brief, page 2) that in Rekhter, upon receipt of a packet, the tags are utilized to determine which router to forward the packet to. Appellants add (id.) that the CEs, which connect the customer private network sites via the operator network have no knowledge and do not need to have any knowledge of the tags that are employed in the routers of the operator network.

From our review of the entire record, we find that in Rekhter, the transit routers base their routing decisions on packet fields that the transit (P) routers interpret without reliance on virtual private network (VPN) specific routing information (col. 3, lines 59-65). In describing one way to tag a packet, Rekhter discloses that different link-level protocols may be employed. An example of a protocol is a point-to-point protocol. Links in the IEEE 802 protocol family are similar to the Ethernet protocol. If the links connecting CE2 to PE2 are Ethernet links, the link-layer frame takes the form of figure 2's top row, consisting of a link-level payload encapsulated by an Ethernet header and trailer. The Ethernet trailer consists of

cyclic-redundancy-code (CRC). The header includes link-level (hardware) addresses of PE2s and CE2s. The code represents IP, and the receiving router interprets the contents as an IP datagram. However, the type field does not include the IP indicating code. Instead, the code tells the PE2 interface that the frame's contents should be interpreted as a tagged packet (col. 7, lines 23-65). Assuming that PE2 sends a packet to P2, P2 knows to forward the packet to neighboring router P1. Note that P2 is able to make this decision without having to maintain separate routing information for the VPN to which the packet is ultimately destined (col. 8, lines 15-24). Rekhter further discloses that every router runs an Internet Gateway Protocol (IGP). From time to time, a router sends to its same-domain neighbor routers IGP messages that advertise destinations to which it accords direct access. The neighbors in turn forward the messages to their neighbors. The next hop is always a directly connected neighbor (col. 11, lines 7-22).

From the disclosure of Rekhter, we agree with appellants that the references to TCP/IP in Rekhter are in the context of communications between neighboring routers, and not between endpoints. From Rekhter's disclosure of communications between directly connected neighboring routers, we do not agree with the

examiner (answer, page 11) that in Rekhter, the end points exchange addresses and establish a session ID for the connection. We find the examiner's arguments to the contrary to be speculation, unsupported by evidence in the record. The examiner may not resort to speculation or unfounded assumptions to supply deficiencies in establishing a factual basis. See In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967).

Accordingly, we agree with appellants (answer, page 6) that Rekhter is not directed to the establishment of a communications session between end points where the end points inform each other of their respective IP addresses and share a session identifier.

From all of the above, we find that the examiner has failed to establish a prima facie case of anticipation of claim 1. Accordingly, the rejection of claim 1, and claims 2-5, dependent therefrom, is reversed. As independent claim 8 contains similar language, the rejection of claim 8 and claims 9-11, dependent therefrom, is reversed.

We turn next to the rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over Rekhter in view of Sriram. We reverse the rejection of claim 7 because Sriram does not make up for the deficiencies of Rekhter.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1-6 and 8-11 under 35 U.S.C. § 102(e) is reversed. The decision of the examiner to reject claim 7 under 35 U.S.C. § 103(a) is reversed.

REVERSED

LEE E. BARRETT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
JOSEPH F. RUGGIERO)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
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