UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THOMAS BRUMM, UDO KLOTZ,
NORBERT LOEBIG, WALTER ZINKL, PATRICK KLEINER,
ROBERT KRESNIK, and IRENA ROMANSKI

Appeal 2008-3299
Application 09/827,487
Technology Center 2600

Decided: November 20, 2008

Before MAHSHID D. SAADAT, JOHN A. JEFFERY, and
CARLA M. KRIVAK, *Administrative Patent Judges*.

KRIVAK, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants appeal under 35 U.S.C. § 134 from a final rejection of claims 1 and 3-27. We have jurisdiction under 35 U.S.C. § 6(b).

We affirm.

STATEMENT OF CASE

Appellants' claimed invention is directed to a system that provides a subscriber having a packet-switching communications network with the same communications convenience as that of a subscriber line of a line-switching communications network (Spec. 3:25-28). Appellants' invention can be used to connect known communications terminals, such as ISDN telephones, telephone answering machines, facsimile devices and modems that connect to a line-switching communications network, to a packet-switching communications network (Spec. 4:2-6). An interface unit converts user data and/or signaling data fed to the subscriber terminal using the packet-switching communications network into user or signaling data of the line-switching communications network and vice versa (Spec. 4:23-26).

Independent claim 1, reproduced below, is representative of the subject matter on appeal.

> 1. A system for connecting a telecommunications device to a packet-switching communications network, the system comprising:
>
> at least one telecommunications device communicatively coupled to a line-switching communications network;
>
> a packet-switching communications network, wherein first signaling data is transmitted between a first subscriber line and a second subscriber line of the packet-switching communications network; and
>
> an interface unit connected to both the packet-switching communications network and the telecommunications device, the interface unit converting at least some of the first signaling data, which is intended for the subscriber line using the packet-switching communications network, into second signaling data of the line-switching communications network, and feeding the second signaling data to the telecommunications device, and vice versa,

> wherein the second signaling data is transmitted to the packet-switching communications network instead of the first signaling data when the second signaling data cannot be converted to the first signaling data.

REFERENCES

Rose	US 6,396,840 B1	May 28, 2002 (filed Jun. 3, 1998)
Ress	US 6,885,658 B1	Apr. 26, 2005 (filed Feb. 18, 2000)

The Examiner rejected claims 1 and 3-27 under 35 U.S.C. § 103(a) based upon the teachings of Rose and Ress.

Appellants assert that the Examiner has improperly combined these references (App. Br. 8; Reply Br. 2). Appellants further argue that the cited art, alone or in combination, fails to teach the claimed limitations of Appellants' invention (App. Br. 10; Reply Br. 4).

ISSUE

Did the Examiner improperly construe the combination of Rose and Ress under 35 U.S.C. § 103(a) as teaching all the limitations of Appellants' claimed invention?

FINDINGS OF FACT

1. Appellants' invention teaches an interface unit and system for connecting a telecommunications device to a packet-switching communications network. The system includes at least one telecommunications device that can be connected to a line-switching communications network. A packet-switching communications network is

used to transmit data between first and second subscriber lines of the packet-switching communications network (Spec. 1:8-15).

2. The interface unit (22, Figs. 1-4) of Appellants' invention converts user data (B-channel 26, Fig. 1) and/or signaling data (D-channel 24, Fig. 1) fed to a subscriber terminal (ISDN 20, Fig. 1) using the packet-switching communications network, into user or signaling data of the line-switching communications network and vice versa (Spec. 4:23-26). "This ensures that the communications device can be used to exchange both user data, for example voice data, with a further subscriber line and signaling information can be exchanged between the telecommunications device and the packet-switching communications network, for example for performing connection setups and/or for activating, deactivating and controlling features." (Spec. 4:26-5:2)

3. Signaling information such as DSS1 can be transmitted using data packets in accordance with the tunnel principle "in which signaling information is transmitted from apparatus to apparatus (end-to-end) in the form of user data." (Spec. 11:26-28)

4. Rose teaches a system connecting communication traffic across an intermediate network. A connection supervisor (120, Fig. 5) establishes media paths through an intermediate network (142, Fig. 5) dependent upon types of control message sent across the control channel. The media paths transfer traffic components across the intermediate network. (Abstract) A gateway interface (112, Fig. 6) converts call signaling information received on a call signaling channel (14, Fig. 6) into an appropriate form such as DSS1. This information is then forwarded to a call handler (116, Fig. 6; col. 9, ll. 6-23).

5. Ress teaches a method and apparatus for interworking between internet protocol telephony protocols including a call server. The call server has a first protocol agent communicating with a first protocol device and a second protocol agent communicating with a second protocol device. The interworking provides a third protocol that is a superset of functions provided by the first and second protocols and enables the first and second protocol agents to communicate with each other (Abstract). Capabilities that are rarely used are not included as "these rarely used capabilities can be communicated between agents that support these capabilities using tunneling" (col. 6, ll. 25-37).

6. Tunneling in Ress refers to "transferring the native protocol message from one protocol agent to another protocol agent without converting to and from the agent interworking protocol" (col. 9, ll. 11-14).

7. Fig. 9a of Ress teaches a sending protocol agent determining whether a mapping is available to the agent interworking protocol (AIP). If so, the sending protocol agent formulates a corresponding AIP message using functions provided by the interworking agent associated with the sending protocol agent and "transmits the message to the receiving protocol agent (step ST4). In step ST2, if the sending protocol agent determines that the mapping to the agent internetworking protocol is not available, the sending protocol agent simply transmits the protocol message without modification to the receiving protocol agent (step ST4)" (col. 9, l. 56-col. 10, l. 3).

PRINCIPLES OF LAW

"Section 103 forbids issuance of a patent when 'the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007).

In *KSR*, the Supreme Court reaffirmed that "[t]he combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results." *Id.* at 1739. The Court explained:

> When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or a different one. If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability. For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.

Id. at 1740. The Court also explained that:

> [o]ften, it will be necessary. . . to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.

Id. at 1740-41.

"[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning

with some rational underpinning to support the legal conclusion of obviousness." *In re Kahn*, 441 F.3d 980, 988. "To facilitate review, this analysis should be made explicit." *KSR*, 127 S. Ct. at 1741. However, "the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.*

If the Examiner's burden is met, the burden then shifts to the Appellants 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 In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992).

ANALYSIS

The Examiner rejected claims 1 and 3-27 under 35 U.S.C. § 103(a) as unpatentable over Rose and Ress. Appellants argue this rejection with respect to independent claims 1, 21, 24, and 26. We address this rejection with respect to representative claim 1, as the independent claims are substantially similar in scope.

The Examiner contends that Rose teaches all the features of Appellants' invention except for transmitting second signaling data to a packet-switching communications network instead of first signaling data when the second signaling data cannot be converted to the first signaling data (Ans. 4). The Examiner further contends that Ress teaches this feature and thus, it would be obvious to an ordinarily skilled artisan to combine the tunneling teachings of Ress with the interworking teachings of Rose to

communicate messages or parameters that do not map to any other agent protocols, as claimed by Appellants (Ans. 4).

Appellants do not argue that Rose does not teach all the elements of Appellants' claims except for the step of transmitting the second signaling data when the second signaling data cannot be converted to first signaling data. Rather, Appellants assert that Ress cannot be combined with Rose because Ress uses "a protocol-independent agent interworking protocol to correlate disparate protocols being used across a gateway to ultimately provide a protocol-neutral system" (App. Br. 11).[1] Thus, since Rose does not suggest the use of a protocol-neutral configuration or AIP messaging, "it is not understood how a configuration such as that in Ress would even be incorporated into the teaching of Rose" (App. Br. 11). Appellants further argue that Ress tunnels signals only when there is no "corresponding mapping of the internetworked protocol" (emphasis deleted) (Reply Br. 4).

The Examiner cites Ress as teaching the tunneling claimed by Appellants. The Examiner relies on Fig. 9a to show that a determination is made in step ST2 as to whether a protocol mapping is available for an incoming message. If so, an "an AIP message is formulated, a multiprotocol message is formulated, or the message is transmitted without modification (tunneled) to the receiving agent" (Ans. 11, FF 5). Additionally, Figure 12 of Ress teaches that the messages can be multipart messages. Thus, the tunneling principle taught by Ress (FF 6; col. 9, ll. 1-45) teaches the features of claim 1 lacking in Rose. (Ans. 11)

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[1] We refer throughout this opinion to (1) the Appeal Brief filed April 21, 2006; (2) the Examiner's Answer mailed Aug. 22, 2007; and (3) the Reply Brief filed Oct. 22, 2007.

We agree with the Examiner that Ress teaches transmitting data via tunneling (Fig. 9a). Appellants rebut this allegation by referring to column 10, lines 35-41 of Ress that states, "[i]f the signaling is not supported, the data is simply discarded" (Reply Br. 3). However, this part of Ress is referring to Fig. 9b—the receiving portion of the system and the receiving protocol. Claim 1 specifically refers to transmitting the signaling data to the packet-switching communications network. Ress teaches transmitting a message to a receiving agent protocol without modification if a mapping protocol is not available (col. 9, ll. 64-col. 10, ll. 3, FF 7). Thus, claim 1 does not preclude the use of tunneling in the manner suggested by Ress. Furthermore, employing the tunneling of Ress into the system of Rose would be a predictable use of established functions (*KSR*,127 S. Ct. at 1739). A person ordinarily skilled in the art at the time of the invention would recognize that employing tunneling in the manner taught by Ress would improve similar devices in the same way (*KSR*, 127 S. Ct. at 1740) particularly since Ress teaches a multi-protocol based system having the benefit of passing through unconverted signals.

Appellants have provided no reasons for not adopting the tunneling of Ress nor for combining the references in the manner suggested by the Examiner. Thus, Appellants' arguments have not convinced us that they have overcome the Examiner's prima facie case of obviousness. For these reasons, we sustain the Examiner's rejection of independent claims 1, 21, 24, and 26.

Appellants have made no separate arguments for patentability of any of the other claims subject to the Examiner's 35 U.S.C. § 103(a) rejection.

Therefore, we also sustain the Examiner's obviousness rejection of dependent claims 3-20, 22, 23, 25, and 27.[2]

CONCLUSION

The Examiner did not err by combining Ress and Rose in rejecting claims 1 and 3-27 under 35 U.S.C. § 103(a).

DECISION

We affirm the Examiner's decision rejecting claims 1 and 3-27.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

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[2] Appellants provided no arguments with respect to claims 3-20, 22, 23, 25, and 27.