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

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DONALD J. REMBOSKI, ODA D. DRAKE IV,
JUERGEN REINOLD, and DENNIS F. WILKIE

Appeal 2007-1047
Application 09/944,892
Technology Center 2600

Decided: June 28, 2007

Before HOWARD B. BLANKENSHIP, ALLEN R. MACDONALD, and ST. JOHN COURTENAY III, *Administrative Patent Judges*.

COURTENAY, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134(a) from the Examiner's rejection of claims 1-9 and 11-21. Claim 10 has been cancelled. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

THE INVENTION

The disclosed invention relates generally to the field of communication systems for vehicles such as automobiles and trucks, and more particularly, to communicatively coupling devices within the vehicle (Specification 1).

Representative claim 1 is illustrative:

> 1. A vehicle comprising:
>
> a first device;
>
> a second device;
>
> an active network, wherein the active network communicatively couples the first and second devices, the active network having an overall communication capability and a portion of the overall communication begin [sic] reserved for communication usage by the first device.

THE REFERENCES

The Examiner relies upon the following references as evidence of unpatentability:

Matsuda	US 5,499,247	Mar. 12, 1996
Bertin	US 5,940,372	Aug. 17, 1999

THE REJECTION

Appellants seek our review of the following rejection:

1. Claims 1-9 and 11-21 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the teachings of Matsuda in view of Bertin.

Rather than repeat the arguments of Appellants or the Examiner, we make reference to the Briefs and the Answer for the respective details thereof.

Claims 1-9 and 11-21

We consider the Examiner's rejection of claims 1-9 and 11-21 as being unpatentable over Matsuda in view of Bertin. Since Appellants' arguments with respect to this rejection have treated these claims as a single group which stand or fall together, we will select independent claim 1 as the representative claim for this rejection because we find it is the broadest independent claim before us. *See* 37 C.F.R. § 41.37(c)(1)(vii)(2004).

Appellants state that they do not provide a special definition of the claim term "active network." Instead, Appellants assert that the term "active network" must be given its *plain meaning*, i.e., it must be read as it would be interpreted by those of ordinary skill in the art (Br. 9, ¶ 3, emphasis added).

Referring to the RULE 132 affidavit of record [1] and evidence of prior art active networks, [2] Appellants argue that the meaning of the term "active network" given by those of ordinary skill in the art is clear, as follows:

> [A]n active network is a network including nodes capable of performing custom operations on the messages that pass through the nodes; does not require a central server

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[1] *See* RULE 1.132 Affidavit, p. 3, ¶ 1, i.e., "As understood by those skilled in the art of computing and networking, an active network is a network in which the nodes can perform custom operations on the messages that pass through the nodes. An active network does not require a central server or computing resource. Active network nodes are aware of the contents of the messages transported and can participate in the processing and modification of the messages while they travel through the network."

[2] *See* Appendices B-I, B-II, B-III, and B-IV attached to the Brief.

> or computing resource; are aware of the contents of the messages transported and can participate in the processing and modification of the message while they travel through the network.

(Br. 10, ¶ 1).

Thus, Appellants assert that the Examiner's interpretation of the term "active network" does not conform to what one of ordinary skill in the art would have understood an "active network" to be, and, further, is inconsistent with the Specification (Br. 9-10). Therefore, Appellants conclude that the networks taught by Matsuda and Bertin are not "active networks," as that term is used in the instant claims (Br. 12). Nevertheless, Appellants specifically admit:

> Notwithstanding that Bertin fail[s] to teach an active network, the applicants admit that active networks are known. See Appendices B-I[,] B-II, B-III and B-IV.

(Br. 12, ¶ 3, ll. 1-2).

In particular, Appellants argue that the prior art of record fails to establish a suggestion or motivation *to use an active network in a vehicle*. Appellants conclude the Examiner has impermissibly used hindsight in formulating the rejection (Br. 12, ¶ 3).

The Examiner disagrees. The Examiner points to page 8 of the Specification and finds an "active network" may broadly include a plurality of active elements enabling communication paths. The Examiner concludes that the term "active network" is not defined in the Specification with reasonable clarity, deliberateness, and precision. Thus, the Examiner

broadly construes the claimed "active network" as encompassing Matsuda's network, as shown in Fig. 1 (Answer 9).

In the Reply Brief, Appellants restate that no specific definition of the term "active network" is included in the Specification (Reply Br. 3, ¶ 2). Appellants argue the Examiner has failed to rebut Appellants' evidence of ordinary and plain meaning (*id.*). Appellants restate that neither Matsuda nor Bertin teaches or suggests the use of an "active network," as claimed (Reply Br. 2-4).

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 must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). Furthermore, "'there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness' . . . [H]owever, 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." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

After carefully considering all of the evidence before us, we note that Matsuda expressly teaches "a multiplex transmission system [that] is installed in an automotive vehicle" (col. 3, ll. 51-52, Fig. 1). Matsuda further teaches the multiplex transmission system is a network:

> These multiplex nodes 11 to 17 are interconnected by the multiplex bus 18 to constitute a network. In this network, signals representing wheel speeds etc. are transmitted serially in a multiplex mode.

(Matsuda, col. 3, ll. 63-67).

In particular, we note that Matsuda discloses at least one embodiment where the multiplex nodes are implemented using dedicated-purpose computers (*see e.g.,* engine computer 11, anti-lock traction computer 12, and transmission computer 13, col. 3, ll. 55-59, *see also* Fig. 1). We note that Matsuda's computers operate *independently of one another and individually transmit messages*:

> The computers 11 to 13 are operated independently of one another and individually transmit a message shown in FIG. 3 to the multiplex bus 18 at respective desired timing.

(Matsuda, col. 4, ll. 50-52).

We further note that Matsuda discloses the *processing* of message data having the format shown in Figs. 3 and 4 (*see also* col. 4, l. 53 through col. 5, l. 27). Thus, we find the weight of the evidence strongly supports the Examiner's view that Matsuda's nodes are *intelligent nodes* within an "active network" because each node in the vehicle network may include a computer that processes message data.

Indeed, when we construe the claim term "active network" in accordance with Appellants' proffered "plain meaning," we find that Matsuda's intelligent multiplex nodes are:

(1) *capable of* performing custom operations on messages that pass through the nodes (e.g., error checking, col. 6, ll. 49-53),

(2) do not require a central server or computing resource (Matsuda, col. 4, ll. 50-52),

(3) are aware of the contents of transported messages (*id.*), and,

(4) *can* participate (i.e., are *capable of* participating) in the processing and modification of messages traveling through the network (Matsuda, col. 4, l. 53 through col. 5, l. 27, Figs. 3 and 4) (*See* Br. 10, ¶ 1).

We emphasize that Appellants have specifically used the language "capable of" and "can participate" in construing the plain meaning of an "active network" (*see* Br. 10, ¶ 1). Thus, we find that each element of Appellants' proffered plain meaning of the claim term "active network" is met by Matsuda's teaching of intelligent multiplex nodes in a vehicle network (*see* Br. 10, ¶ 1).

Furthermore, we do not agree with Appellants' assertion that the Examiner has impermissibly used hindsight in formulating the rejection. We note that the U.S. Supreme Court recently reaffirmed that a factfinder should be aware of the distortion caused by hindsight bias and must be cautious of argument reliant upon *ex post* reasoning. *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. at 1742, 82 USPQ2d at 1397. *See also Graham v. John Deere Co.*, 383 U.S. at 36, 148 USPQ at 474. Nevertheless, in *KSR* the Supreme Court also qualified the issue of hindsight by stating that "[r]igid preventative rules that deny factfinders recourse to common sense, however, are neither

necessary under our case law nor consistent with it." *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. at 1742-43, 82 USPQ2d at 1397. The Supreme Court further stated:

> 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.

KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. at 1740, 82 USPQ2d at 1396.

In the instant case, we have found *supra* that Matsuda teaches an active network in a vehicle. We further conclude that the proffered modification of Matsuda's network with Bertin's reserved network connections would have been a *predictable variation* to a person of ordinary skill in the art *having common sense* at the time of the invention. We acknowledge that Bertin is not directed to active networks *in a vehicle*. However, Bertin must be read, not in isolation, but for what it fairly teaches in combination with the prior art as a whole. [3] In particular, we agree with the Examiner that the features of reserving communication capacity bandwidth, reconfiguring network bandwidth in response to overcapacity, under-capacity, and failure, are notoriously well known in the data

[3] *See In re Merck & Co., Inc.*, 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986) (One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references).

communications art (*See* Answer 10). The Examiner, as finder of fact, has determined that these well known networking features are taught and/or suggested by Bertin (*id.*). We agree. Thus, the Examiner has concluded it would have been obvious to an artisan to have implemented these well-known features for the purpose of providing *efficient data communications and guaranteed quality of service* (*See* Answer 11). Therefore, when we take account of the inferences and creative steps that a person of ordinary skill in the art would have employed (or would have found obvious to try), we conclude the Examiner has articulated an adequate reasoning with a rational underpinning that reasonably supports the legal conclusion of obviousness.

Accordingly, we conclude the Examiner has met the burden of establishing a prima facie case of obviousness. Thus, we will sustain the Examiner's rejection of representative claim 1 as being unpatentable over Matsuda in view of Bertin.

Pursuant to 37 C.F.R. § 41.37(c)(1)(vii)(2004), we have decided the appeal with respect to claims 2-9 and 11-21 on the basis of the selected claim alone. Therefore, we will sustain the Examiner's rejection of these claims as being unpatentable over Matsuda in view of Bertin for the same reasons discussed *supra* with respect to representative claim 1.

DECISION

In summary, we have sustained the Examiner's rejection of all claims on appeal. Therefore, the decision of the Examiner rejecting claims 1-9 and 11-21 is affirmed.

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.

tdl/gw

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