EXHIBIT 1(a)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
95/000,344	02/06/2008	7283519	062891.2233	2651

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EXAMINER	
GAGLIARDI, ALBERT J	

ART UNIT	PAPER NUMBER
3992	

MAIL DATE	DELIVERY MODE
06/13/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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Date:
MAILED

JUN 13 2008

CENTRAL REEXAMINATION UNIT

EX PARTE REEXAMINATION COMMUNICATION TRANSMITTAL FORM

REEXAMINATION CONTROL NO. : 95000344
PATENT NO. : 7283519
ART UNIT : 3992

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified ex parte reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the ex parte reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

INTER PARTES REEXAMINATION COMMUNICATION	Control No.	Patent Under Reexamination	
	95/000,344	7283519	
	Examiner	Art Unit	
	ALBERT J. GAGLIARDI	3992	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS ACTION IS SET TO EXPIRE ☒ 2 MONTH(S) ☐ THIRTY DAYS FROM THE MAILING DATE OF THIS LETTER. EXTENSIONS OF TIME FOR PATENT OWNER ARE GOVERNED BY 37 CFR 1.956.

Each time the patent owner responds to this Office action, the third party requester of the *inter partes* reexamination may once file written comments within a period of 30 days from the date of service of the patent owner's response. This 30-day time period is statutory (35 U.S.C. 314(b)(2)), and, as such, it cannot be extended. See also 37 CFR 1.947.

All correspondence relating to this *inter partes* reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

Transmittal of Communication to Third Party Requester Inter Partes Reexamination	Control No.	Patent Under Reexamination	
	95/000,344	7283519	
	Examiner	Art Unit	
	ALBERT J. GAGLIARDI	3992	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above-identified reexamination proceeding. 37 CFR 1.903.

Prior to the filing of a Notice of Appeal, each time the patent owner responds to this communication, the third party requester of the *inter partes* reexamination may once file written comments within a period of 30 days from the date of service of the patent owner's response. This 30-day time period is statutory (35 U.S.C. 314(b)(2)), and, as such, it cannot be extended. See also 37 CFR 1.947.

If an *ex parte* reexamination has been merged with the *inter partes* reexamination, no responsive submission by any *ex parte* third party requester is permitted.

All correspondence relating to this inter partes reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of the communication enclosed with this transmittal.

OFFICE ACTION IN INTER PARTES REEXAMINATION	Control No.	Patent Under Reexamination	
	95/000,344	7283519	
	Examiner	Art Unit	
	ALBERT J. GAGLIARDI	3992	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address. --

Responsive to the communication(s) filed by:
Patent Owner on _____
Third Party(ies) on 6 February 2008 (Request)

RESPONSE TIMES ARE SET TO EXPIRE AS FOLLOWS:

For Patent Owner's Response:
2 MONTH(S) from the mailing date of this action. 37 CFR 1.945. EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.956.
For Third Party Requester's Comments on the Patent Owner Response:
30 DAYS from the date of service of any patent owner's response. 37 CFR 1.947. NO EXTENSIONS OF TIME ARE PERMITTED. 35 U.S.C. 314(b)(2).

All correspondence relating to this inter partes reexamination proceeding should be directed to the **Central Reexamination Unit** at the mail, FAX, or hand-carry addresses given at the end of this Office action.

This action is not an Action Closing Prosecution under 37 CFR 1.949, nor is it a Right of Appeal Notice under 37 CFR 1.953.

PART I. THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☐ Notice of References Cited by Examiner, PTO-892
2. ☐ Information Disclosure Citation, PTO/SB/08
3. ☒ Office Action Appendix (349 pages)

PART II. SUMMARY OF ACTION:

1a. ☒ Claims 1-19 are subject to reexamination.
1b. ☐ Claims _____ are not subject to reexamination.
2. ☐ Claims _____ have been canceled.
3. ☐ Claims _____ are confirmed. [Unamended patent claims]
4. ☐ Claims _____ are patentable. [Amended or new claims]
5. ☒ Claims 1-19 are rejected.
6. ☐ Claims _____ are objected to.
7. ☐ The drawings filed on _____ ☐ are acceptable ☐ are not acceptable.
8. ☐ The drawing correction request filed on _____ is: ☐ approved. ☐ disapproved.
9. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119 (a)-(d). The certified copy has:
☐ been received. ☐ not been received. ☐ been filed in Application/Control No 95000344.
10. ☐ Other _____

DETAILED ACTION

Summary

This office action addresses the claims for which reexamination has been requested and a substantial new question of patentability has been determined to exist; that is claims 1-19 (all the original claims) of Girard – US 7,283,519 (hereafter *Girard*).

At least one proposed rejection of claims 1-19 is currently adopted essentially as proposed or as modified. No claims are currently confirmed as patentable.

References Cited in this Office Action

Osterhout *et al.* – US 7,197,029 (*Osterhout*)

Wengrovitz – US 7,035,248 (*Wengrovitz*)

Baratz *et al.* – US 5,742,596 (*Baratz*)

Czajkowski *et al.* – US 6,256,058 (*Czajkowski*)

Gerszberg *et al.* – US 2002/0033416, (but relying on US 6,510,152 in the Request) (*Gerszberg*)

Janning *et al.* – US 7,024,461 (*Janning*)

Nodoushani *et al.* – US 6,563,816 (*Nodoushani*)

Chow *et al.* – US 2003/0185203 (*Chow*)

Chung *et al.* – US 6,584,108 (*Chung*)

Oran – US 6,275,574 (*Oran*)

Inbar *et al.* – US 6,885,660 (*Inbar*)

Kung *et al.* – US 6,917,610 (*Kung*)

Girard *et al.*, SIP Telephony Service Interface Overview (*Girard-SIP*, corresponding to *Girard* as cited in the Request)

Summary of Proposed Rejections and Status

Note: The references to the various appendices (C1, C2 . . . M1, N1) refer to the various claim charts submitted by the requester to explain how the cited patents and printed publications are applied to each claim for which reexamination is requested. The "OAA" page numbers refer to the Office Action Appendix (attached) which both consolidates and reorganizes the relevant portions of the submitted claims charts into one easy to access (at least for the examiner) document. The examiner notes that some portions of the submitted claim charts have not been included in the OAA, particularly those pages that merely repeat a claim rejection found in another claim chart, or that only relate to claims for which the proposed rejection has not been adopted. In some cases, the order of the pages has been changed.

Issue 1

Issue 1A	Appendix C1 – **OAA pages 1-9**
The Requester asserts that claims 1-19 are anticipated by *Osterhout*.	Adopted essentially as proposed with regard to claims 1-6 and 9-12. Not adopted in regard to claims 7-8 and 13-19.

Issue 1B	Appendix C2 – **OAA pages 10-11**
The Requester asserts that claims 7 and 8 are obvious over *Osterhout* in view of *Chung*.	Adopted essentially as proposed.

Issue 1C	Appendix C3 – **OAA pages 12-17**
The Requester asserts that claims 13-19 are obvious over *Osterhout* in view of *Inbar*.	Adopted essentially as proposed.

Issue 1D	Appendix C4 – **OAA pages 18-22**
The Requester asserts that claims 13-19 are obvious over *Osterhout* in view of *Kung*.	Adopted as proposed.

Issue 2

Issue 2A	Appendix D1 – **OAA pages 23-28**
The Requester asserts that claims 1-19 are anticipated by *Wengrovitz*.	Adopted essentially as proposed with regard to claims 1, 3-6 and 9-12. Not adopted in regard to claims 2, 7-8, 11 and 13-19.

Issue 2B	Appendix D2 – **OAA pages 29-30**
The Requester asserts that claims 7 and 8 are obvious over *Wengrovitz* in view of *Chung*.	Adopted as proposed.

Issue 2C	Appendix D3 – **OAA pages 31-33, 40 and 48**
The Requester asserts that claims 2, 11 and 19 are obvious over *Wengrovitz* in view of *Osterhout*.	Adopted essentially as proposed with regard to claims 2 and 11. Adopted as modified (with *Inbar*; and with *Kung*) with regard to claim 19.

Issue 2D	Appendix D4 – **OAA page 41**
The Requester asserts that claim18 is obvious over *Wengrovitz* in view of *Osterhout*.	Adopted as modified (with *Inbar*) with regard to claim 18.

Issue 2E	Appendix D5 – **OAA pages 34-41**
The Requester asserts that claims 13-19 are obvious over *Wengrovitz* in view of *Inbar*.	Adopted as proposed with regard to

	claims 13-17. Adopted as modified (further in view of *Osterhout*) with regard to claims 18 and 19.

Issue 2F	Appendix D6 – **OAA pages 42-48**
The Requester asserts that claims 13-19 are obvious over *Wengrovitz* in view of *Kung*.	Adopted as proposed with regard to claims 13-18. Adopted as modified (further in view of *Osterhout*) with regard to claim 19.

Issue 3

Issue 3A	Appendix E1 – **OAA pages 49-55**
The Requester asserts that claims 1-5, 7-8, 13-14 and 17-19 are anticipated by *Baratz*.	Adopted as proposed with regard to claims 1, 3-5, 13-14 and 17-18. Not adopted in regard to claims 2, 7-8 and 19.

Issue 3B, 3E and 3H	Appendix E2, E5, E8 – **OAA pages 56-70**
The Requester asserts that claims 2, 6, 9-12, 15-16 and 19 are obvious over *Baratz* in view of *Osterhout*.	Adopted as proposed.

Issues 3C and 3F	Appendix E3 and E6 – **OAA pages 71-80**
The Requester asserts that claims 6, 9-12 and 15-16 are obvious over *Baratz* in view of *Wengrovitz*.	Adopted as proposed with regard to claims 6, 9-10, 12, and 15-16. Not adopted in regard to claim 11.

Issues 3D and 3G	Appendix E4 and E7 – **OAA pages 81-90**
The Requester asserts that claims 6, 9-12 and 15-16 are	Adopted as proposed with regard to

obvious over *Baratz* in view of *Girard-SIP*.	claims 6, 9-10, 12, and 15-16. Not adopted in regard to claim 11.

Issue 3I	Appendix E9 – **OAA pages 91-92**
The Requester asserts that claims 7-8 are obvious over *Baratz* in view of *Chung*.	Adopted as proposed.

Issue 3J	Appendix E10 – **OAA page 93**
The Requester asserts that claim 5 is obvious over *Baratz* in view of *Czajkowski*.	Adopted as proposed.

Issue 4

Issue 4A	Appendix F1 – **OAA pages 94-98**
The requester asserts that claims 1-5, 7-8, 13-14 and 17-19 are anticipated by *Czajkowski*.	Adopted as proposed with regard to claims 1-5. Not adopted with regard to claims 7-8, 13-14 and 17-19.

Issue 4B and 4E	Appendix F2 and F5 – **OAA pages 99-105, 128-131 and 146-149**
The requester asserts that claims 6, 9-12 and 15-16 are obvious over *Czajkowski* in view of *Osterhout*.	Adopted as proposed with regard to claims 6 and 9-12. Adopted as modified (with *Inbar*; and with *Kung*) with regard to claims 15-16.

Issues 4C and 4F	Appendix F3 and F6 – **OAA pages 106-112, 132-135 and 150-153**
The requester asserts that claims 6, 9-12 and 15-16 are obvious over *Czajkowski* in view of *Wengrovitz*.	Adopted as proposed with regard to claims 6 and 9-12. Adopted as modified (with *Inbar* and with *Kung*) with regard to claims 15-16.

Issues 4D and 4G	Appendix F4 and F7 – **OAA pages 113-119, 136-139 and 154-157**
The requester asserts that claims 6, 9-12 and 15-16 are obvious over *Czajkowski* in view of *Girard-SIP*.	Adopted as proposed with regard to claims 6 and 9-12. Adopted as modified (with *Inbar* and with *Kung*) with regard to claims 15-16.

Issue 4H	Appendix F8 – **OAA pages 120-121**
The requester asserts that claims 7-8 are obvious over *Czajkowski* in view of *Chung*.	Adopted as proposed.

Issue 4I	Appendix F9 – **OAA pages 122-127**
The requester asserts that claims 13-14 and 17-18 are obvious over *Czajkowski* in view of *Inbar*.	Adopted as proposed with regard to claims 13-14 and 17-18.

Issue 4J	Appendix F10 – **OAA pages 140-145**
The requester asserts that claims 13-14 and 17-18 are obvious over *Czajkowski* in view of *Kung*.	Adopted as proposed with regard to claims 13-14 and 17-18.

Issue 5

Issue 5A	Appendix G1 – **OAA pages 158-167**
The requester asserts that claims 1-5, 7-8, 13-14 and 17-19 are anticipated by *Gerszberg*.	Adopted as proposed with regard to claims 1-5, 13-14 and 17-19. Not adopted with regard to claims 7-8.

Issue 5B and 5E	Appendix G2 and G5 – **OAA pages 168-176**
The requester asserts that claims 6, 9-12 and 15-16 are obvious over *Gerszberg* in view of *Osterhout*.	Adopted as proposed.

Issues 5C and 5F	Appendix G3 and G6 – **OAA pages 177-**

	187
The requester asserts that claims 6, 9-12 and 15-16 are obvious over *Gerszberg* in view of *Wengrovitz*.	Adopted as proposed.

Issues 5D and 5G	Appendix G4 and G7 – **OAA pages 188-197**
The requester asserts that claims 6, 9-12 and 15-16 are obvious over *Gerszberg* in view of *Girard-SIP*.	Adopted as proposed.

Issue 5H	Appendix G8 – **OAA pages 198-199**
The requester asserts that claims 7-8 are obvious over *Gerszberg* in view of *Chung*.	Adopted as proposed.

Issue 6

Issue 6A	Appendix H1 – **OAA pages 200-208**
The requester asserts that claims 1-19 are anticipated by *Janning*.	Adopted as proposed with regard to claims 1-6 and 9-12. Not adopted with regard to claims 7-8 and 13-19.

Issue 6B	Appendix H2 – **OAA pages 208-210**
The requester asserts that claims 7-8 are obvious over *Janning* in view of *Chung*.	Adopted as proposed.

Issue 6C	Appendix H3 – **OAA pages 217-218 and 226-227**
The requester asserts that claim 18 is obvious over *Janning* in view of *Osterhout*.	Adopted as modified (with *Inbar*; and with *Kung*).

Issue 6D	Appendix H4 – **OAA pages 211-218**
The requester asserts that claims 13-19 are obvious over *Janning* in view of *Inbar*.	Adopted as proposed with regard to claims 13-17 and 19. Adopted as

	modified (further in view of *Osterhout*) with regard to claim 18.

Issue 6E	Appendix H5 – **OAA pages 219-227**
The requester asserts that claims 13-19 are obvious over *Janning* in view of *Kung*.	Adopted as proposed with regard to claims 13-17 and 19. Adopted as modified (further in view of *Osterhout*) with regard to claim 18.

Issue 7

Issue 7A	Appendix I1 – **OAA pages 228-234**
The Requester asserts that claims 1-5, 7-8, 13-14 and 17-19 are anticipated by *Nodoushani*.	Adopted as proposed with regard to claims 1, 3-5, 13-14 and 17-18. Not adopted in regard to claims 2, 7-8 and 19. Also adopted as modified in regard to claims 13-14 and 17-18.

Issues 7B, 7F and 7I	Appendix I2, I5 and I8 – **OAA pages 235-248**
The Requester asserts that claims 2, 6, 9-12, 15-16 and 19 are obvious over *Nodoushani* in view of *Osterhout*.	Adopted as proposed.

Issues 7C and 7G	Appendix I3 and I6 – **OAA pages 249-258**
The Requester asserts that claims 6, 9-12 and 15-16 are obvious over *Nodoushani* in view of *Wengrovitz*.	Adopted as proposed with regard to claims 6, 9-10, 12, and 15-16. Not adopted in regard to claim 11.

Issues 7E and 7H	Appendix I4(modified) and I7 – **OAA pages 259-270**

The Requester asserts that claims 6, 9-12 and 15-16 are obvious over *Nodoushani* in view of *Girard-SIP*.	Adopted as proposed with regard to claims 6, 9-10, 12, and 15-16. Not adopted in regard to claim 11.

Issue 7J	Appendix I9 – **OAA pages 271-273**
The Requester asserts that claims 7-8 are obvious over *Nodoushani* in view of *Chung*.	Adopted as proposed.

Issue 8

Issue 8A	Appendix J1 – **OAA pages 274-280**
The Requester asserts that claims 1-5, 7-8, 13-14 and 17-19 are anticipated by *Chow*.	Adopted as proposed with regard to claims 1-5, 7-8, 13-14 and 17-18. Also adopted as modified in regard to claims 7-8.

Issues 8B and 8F	Appendix J2 and J5 – **OAA pages 281-291**
The Requester asserts that claims 6, 9-12 and 15-16 are obvious over *Chow* in view of *Osterhout*.	Adopted as proposed.

Issues 8C and 8G	Appendix J3 and J6 – **OAA pages 292-302**
The Requester asserts that claims 6, 9-12 and 15-16 are obvious over *Chow* in view of *Wengrovitz*.	Adopted as proposed.

Issues 8E and 8H	Appendix J4 and J7 – **OAA pages 303-312**
The Requester asserts that claims 6, 9-12 and 15-16 are obvious over *Chow* in view of *Girard-SIP*.	Adopted as proposed.

Issue 9

Issue 9A	Appendix K1 – **OAA pages 313-318**
The Requester asserts that claims 1-5, 7-8, 13-14 and 17-19 are anticipated by *Chung*.	Adopted as proposed.

Issue 9B	Appendix K2 – **OAA pages 319-325**
The Requester asserts that claims 6 and 15-16 are obvious over *Chung* in view of *Osterhout*.	Adopted as proposed.

Issue 9C	Appendix K3 – **OAA pages 326-332**
The Requester asserts that claims 6 and 15-16 are obvious over *Chung* in view of *Wengrovitz*.	Adopted as proposed.

Issue 9D	Appendix K4 – **OAA pages 333-339**
The Requester asserts that claims 6 and 15-16 are obvious over *Chung* in view of *Girard-SIP*.	Adopted as proposed.

Issue 10

Issue 10A	Appendix L1 – **OAA pages 340-342**
The Requester asserts that claims 9-12 are anticipated by *Oran*.	Adopted as proposed with regard to claims 9-10 and 12. Not adopted in regard to claim 11.

Issue 10B	Appendix L2 – **OAA pages 343-344**
The Requester asserts that claim 11 is obvious over *Oran* in view of *Osterhout*.	Adopted as proposed.

Issue 11

Issue 11A	Appendix M1 – **OAA pages 345-346**
The Requester asserts that claims 13-14, 17 and 19 are	Adopted as proposed.

anticipated by *Inbar*.	

Issue 12

Issue 12A	Appendix N1 – **OAA pages 347-349**
The Requester asserts that claims 13-14, 17 and 19 are anticipated by *Kung*.	Adopted as proposed.

Claim Rejections – Relevant Statutes

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if 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. Patentability shall not be negatived by the manner in which the invention was made.

Detailed Analysis

Issue 1 – ***Osterhout***

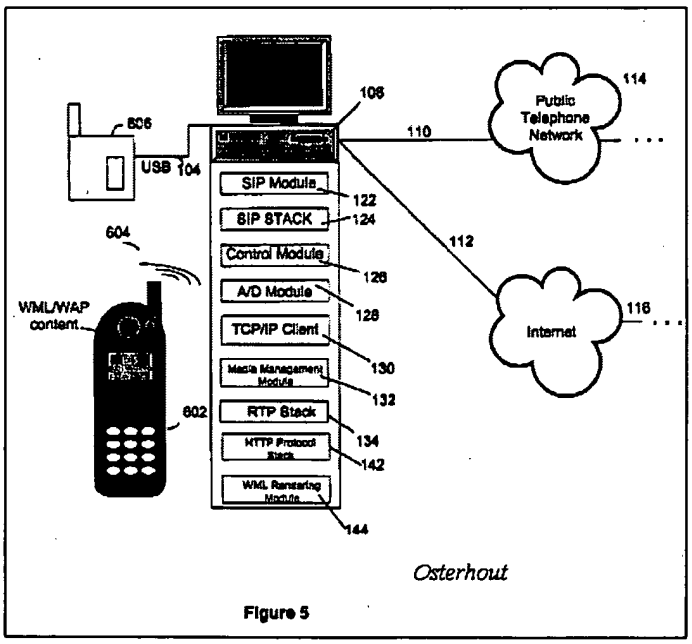
Issue 1A – Claims 1-6 and 9-19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Osterhout.*

Note: The Requester also proposed rejections to claims 7-8 and 13-19 as being anticipated by *Osterhout*, but such proposed rejections are not adopted for the reasons noted below.

Claim 1

Osterhout discloses (Figs. 2, 4) a network device (host computer (106) comprising:

a plurality of communication interfaces, including a telephone line interface (110), a computer data interface (104), and a broadband network interface (112);



a processor (col. 2, lines 55-60);

a machine-readable storage medium (col. 2, lines 60-65) which during use stores a call processing application (col. 4, lines 30-38; col. 4, line 60 to col. 5, line 24) and service profiles (col. 4, lines 39-59), and which stores executable instructions to mediate communications between the plurality of communication interfaces (col. 4, lines 56-59; col. 6, lines 17-27), the

instructions causing the network device to detect network signaling events or trigger points in a telephone call (col. 4, lines 30-34; col. 6 lines 6-16; col. 5, lines 19-24); and

invoke the call processing application in response to the detected network signaling events or trigger points (col. 4, line 65 to col. 5, line 30; the call processing application operating according to parameters defined in the service profiles (col. 4, lines 39-59), wherein the network device consists of one or more customer premise equipment modules (106).

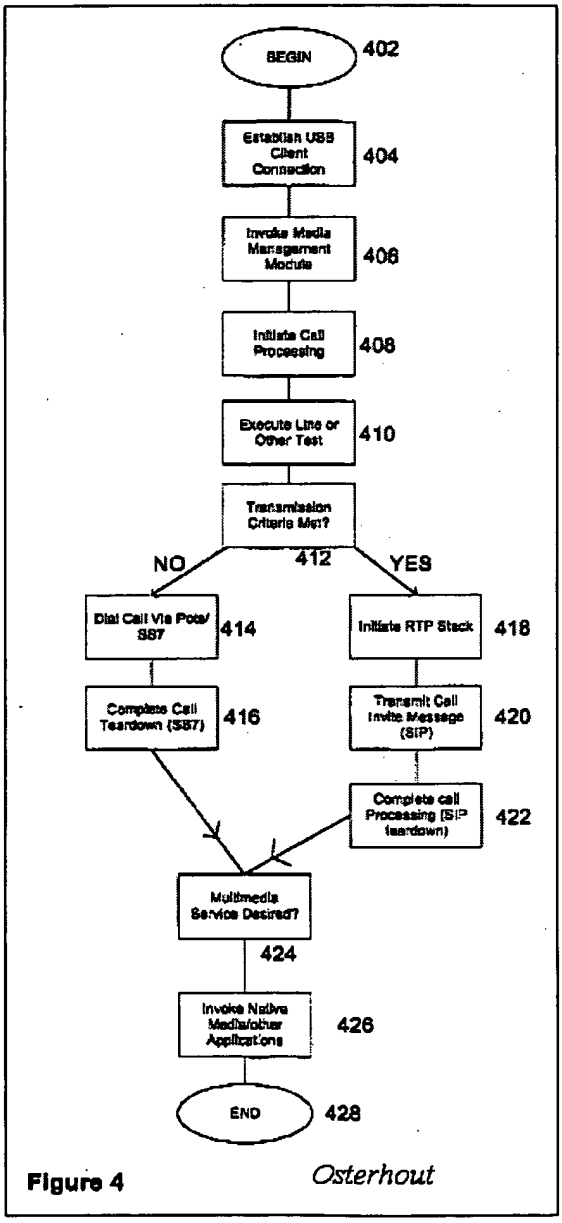


Figure 4 *Osterhout*

Claim 2

Osterhout discloses that the plurality of communication interfaces further includes a video streaming device interface (col. 5, line 62 to col. 6, line 5).

Claim 3

Osterhout discloses that the broadband network interface terminates a broadband network link that joins a customer premises to a packet carrier network (col. 3, lines 49-62).

Claim 4

Osterhout discloses that the instructions further cause the network device to route IP data

between the computer data interface and the broadband network interface (col. 4, line 65 to col. 5, line 6).

Claim 5

Osterhout discloses that the network device is contained in a single physical enclosure (inherent aspect of host computer 106).

Claim 6

Osterhout discloses that the instructions further cause the network device to provide a SIP user agent to represent a telephone that uses the telephone line interface.

Claim 9

Osterhout discloses (Figs. 2, 4) a network device (host computer (106) comprising:

a plurality of communication interfaces, including a telephone line interface (110), a computer data interface (104), and a broadband network interface (112);

a processor (col. 2, lines 55-60);

a machine-readable storage medium that stores processor-executable instructions (col. 2, lines 60-65) to provide SIP agents (122), the instructions causing the SIP agents to

provide a SIP user agent to represent a non-SIP telephone (102) that uses the telephone line interface, and

the instructions further causing the network device to implement a SIP proxy server (SIP stack 124) that mediates all SIP communications over the broadband network interface involving the non-SIP phone (col. 4, line 60 to col. 5, line 17).

Claim 10

Osterhout discloses that the computer data interface passes IP data (col. 4, line 65 to col. 5, line 6).

Claim 11

Osterhout discloses that the plurality of interfaces further includes a video streaming device interface (col. 5, line 62 to col. 6, line 5).

Claim 12

Osterhout discloses that the network device is contained in a single physical enclosure (inherent aspect of host computer 106).

Note: The preceding rejection is essentially the same as that proposed by the Requestor as set forth in Appendix C1 of the Request (excluding the proposed rejections of claims 7-8 and 13-19 which have not been adopted). To the extent that Appendix C1 provides a more detailed explanation of the adopted rejection, such explanation is made part of this office action by reference to the OAA (pp. 1-9).

Issue 1A – Proposed rejections not adopted

Claims 7-8

The proposed anticipation rejection of claims 7-8 is not adopted because *Osterhout* does not specifically disclose that the routing information is stored as a routing table.

Claims 13-19

The proposed anticipation rejection of claims 13-19 is not adopted because *Osterhout* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured host computers 106).

Issue 1B – Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Osterhout* as applied above, and further in view of *Chung*.

Claim 7

Osterhout discloses that the storage medium during use further stores call routing information, and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface (col. 4, lines 49-59).

Although *Osterhout* does not specifically disclose that the routing information is stored as a routing table, those skilled in the art appreciate that a variety of forms for storing call routing information are well known in the art including storing information in table from. *Chung*, for example, discloses a system for routing information across networks wherein the call routing and switching information can, as a non-limiting example, be stored in a table (col. 16, lines 14-18 and lines 41-50). Absent some degree of criticality, storing the information in table form, as known in the art, would have been a matter of routine design choice within the skill of a person of ordinary skill in the art.

Claim 8

Osterhout discloses that the storage medium during use further stores call routing information, and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface (col. 4, lines 49-59).

Although *Osterhout* does not specifically disclose that the routing information is stored as a routing table, those skilled in the art appreciate that a variety of forms for storing call routing information are well known in the art including storing information in table from. *Chung*, for

example, discloses a system for routing information across networks wherein the call routing and switching information can, as a non-limiting example, be stored in a table (col. 16, lines 14-18 and lines 41-50). Absent some degree of criticality, storing the information in table form, as known in the art, would have been a matter of routine design choice within the skill of a person of ordinary skill in the art.

Note: The preceding rejection is essentially the same as that proposed by the Requestor as set forth in Appendix C2 of the Request. To the extent that Appendix C2 provides a more detailed explanation of the adopted rejection, such explanation is made part of this office action by reference to the OAA (pp. 10-11).

Issue 1C – Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Osterhout* as applied above, and further in view of *Inbar*.

Claim 13

Osterhout discloses (Figs. 2, 4) a method for establishing a voice-over-packet network architecture, the method comprising:

locating a system management platform (control module 126) in a network device (106) connected to a sheared packet network (116), the system management platform collecting call data from the network device (col. 3, lines 49-58).

distributing (inherent or obvious aspect of the system) a plurality of network devices (106) that each include a telephone line interface (110), a computer data interface (104), a broadband network interface (112) terminating a link from the shared packet network (116), a processor (col. 2, lines 55-60, and a machine-readable storage medium (col. 2, lines 60-65)

storing processor-executable instructions to control telephone calls (col. 5, lines 7-10), the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (col. 5, lines 11-17) and to send call log data to the system management platform (col. 4, lines 39-48; col. 6, lines 17-27).

Although *Osterhout* discloses a system management platform for the actual network device itself (i.e., each network device has its own management platform), *Osterhout* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (e.g., other similarly configured host computers 106).

Regarding the system management platform in a shared packet network collecting data from a plurality of the network devices, those skilled in the art appreciate that it is well known in the art to further facilitate voice-over-packet network communications by the use of a system management platform in the shared network that collects data, such as call log data from a plurality of network devices. *Inbar*, for example, discloses (Fig. 1 a system manageable for peer-to-peer communications which includes both local network devices (IP Centers 2) and a Master-Server (6) which acts as a system management platform collecting call log data from the plurality of network devices (2) (col. 4, lines 16-19; col. 5, line 62 to col. 6, line 14; col. 6, lines 43-50; col. 8, lines 54-64). As those skilled in the art appreciate, such a system

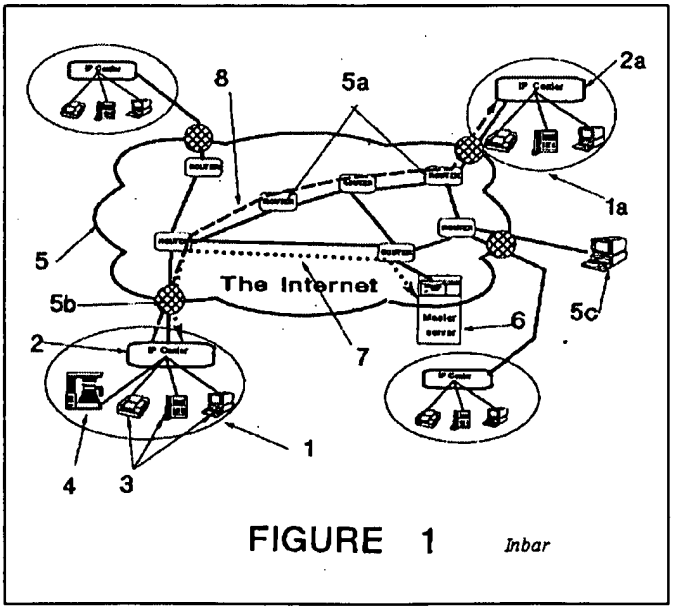


FIGURE 1 *Inbar*

management platform enables improved peer-to-peer communications and centralized billing. *Inbar* also teaches that such an arrangement has the advantage that it allows subscribers to make direct connections without making use of intermediate servers and further allows for remote access to the network center (col. 7, lines 20-37 and). Therefore it would have been obvious to modify the method suggested by Osterhout to further include a step a locating a system management platform collecting call log data from the plurality of network devices in a centralized system to facilitate billing and to allow for the integration of additional services without use of intermediate servers.

Claim 14

Osterhout discloses that the broadband network interface terminates a broadband network link that joins a customer premises to a packet carrier network (col. 3, lines 49-62).

Claim 15

Osterhout discloses that the routing of telephone calls includes SIP signaling (Col. 5, lines 7-16).

Claim 16

Osterhout discloses that the system includes an SIP stack (126). Such SIP stack, together with the SIP control module (124) would store processor-executable instructions to act as an SIP proxy server for devices using the telephone line interface (110) and for devices using the computer data interface (104).

Claim 17

Osterhout discloses that the shared packet network uses IP protocols 9col. 4, line 65 to col. 5, line 6).

Claim 18

Osterhout discloses that the shared packet network uses ATM protocols (col. 5, lines 7-17).

Claim 19

Osterhout discloses that the plurality of interfaces further includes a video streaming device interface (col. 5, line 62 to col. 6, line 5).

Note: The preceding rejection is essentially the same as that proposed by the Requestor as set forth in Appendix C3 of the Request. To the extent that Appendix C3 provides a more detailed explanation of the adopted rejection, such explanation is made part of this office action by reference to the OAA (pp. 12-16).

Issue 1D – Claims 13-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Osterhout*, as applied above, and further in view of *Kung*.

Claim 13

As noted above with regard to Issue 1C, although *Osterhout* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured host computers 106), but, as also noted above, such arrangements are well known in the art to further facilitate voice-over-packet network communications. *Kung*, like the *Inbar* reference, teaches locating a system management platform on the shared packet network (at IP Central Station 200) arranged to collect call log data from other network devices (Customer Premise Equipment) (col. 31, lines 10-17), such system allowing for improved call efficiency.

This proposed rejection is substantially similar to the obviousness rejection of claims 13-19 over *Osterhout* in view of *Kung* as adopted above with regard to Issue 1C. In order to preserve the parties' appeal rights as to the proposed rejection, the rejection is adopted as set forth in Appendix C4 of the Request, which is made part of this office action by reference to the OAA (pp. 17-22).

Issue 2 -- ***Wengrovitz***

Issue 2A – Claims 1, 3-6 and 9-10 19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Wengrovitz*.

Note: The Requester also proposed rejections to claims 2, 7-8, 11 and 13-19 as being anticipated by *Wengrovitz*, but such proposed rejections are not adopted for the reasons noted below.

Claim 1

Wengrovitz discloses (Figs. 2-5) a network device (e.g., switch 50) comprising:

a plurality of communication interfaces, including a telephone line interface (PBX signaling), a computer data interface (to location server 55), and a broadband network interface (to internet 45) (col. 3, lines 52-67);

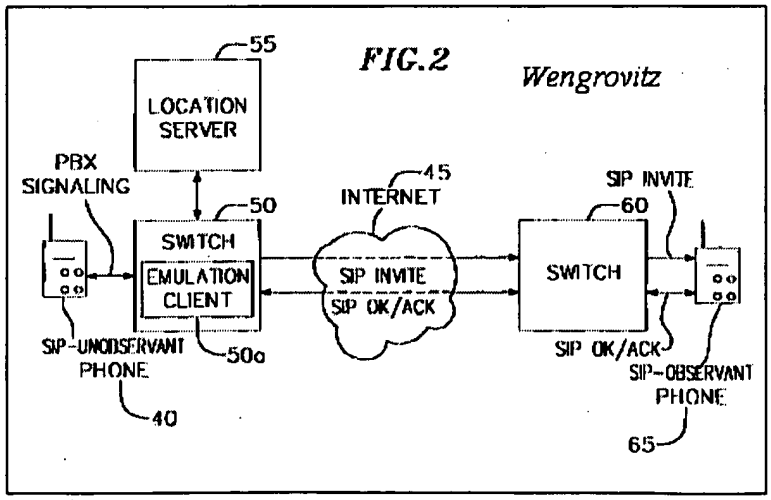


FIG.2 Wengrovitz

a processor (emulation client 50a) (col. 4, lines 18-21);

a machine-readable storage medium (inherent) which during use stores (col. 4, lines 11-21) a call processing application (emulation client 50a) (col. 4, lines 34-47) and service profiles (col. 4, lines 1-9), and which stores executable instructions to mediate communications between the plurality of communication interfaces (col. 4, lines 11-21), the instructions causing the network device to

detect network signaling events or trigger points in a telephone call (col. 4, lines 31-34); and

invoke the call processing application in response to the detected network signaling events or trigger points, the call processing application operating according to parameters defined in the service profiles (col. 4, lines 34-47); and

wherein the network device consists of one or more customer premise equipment (col. 4, lines 11-13).

Claims 3-6

The proposed anticipation rejection of claims 3-6 over *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Wengrovitz* reference as recited in Appendix D1 of the Request.

Claim 9

Wengrovitz discloses (Figs. 2-5) a network device (e.g., switch 50) comprising:

a broadband network interface (to internet 45);

a plurality of communication interfaces, including a telephone line interface (PBX signaling), a computer data interface (to location server 55) (col. 4, lines 11-21);

a processor (emulation client 50a) (col. 4, lines 18-21);

a machine-readable storage medium (inherent) that stores processor executable instructions to provide SIP agents ((col. 4, lines 11-21), the instructions causing the network device to

provide a SIP user agent to represent a non-SIP telephone that uses the telephone line interface (col. 4, lines 11-21), and

the instructions further causing the network device to implement a SIP proxy server that mediates all SIP communications over the broadband network interface involving the non-SIP telephone (col. 4, lines 31-47).

Claim 10 and 12

The proposed anticipation rejection of claims 10 and 12 over *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Wengrovitz* reference as recited in Appendix D1 of the Request.

Note: The preceding rejection is essentially the same as that proposed by the Requestor as set forth in Appendix D1 of the Request (excluding the proposed rejections of claims 2, 7-8, 11 and 13-19 which have not been adopted). To the extent that Appendix D1 provides a more detailed explanation of the adopted rejection, such explanation is made part of this office action by reference to the OAA (pp. 23-28).

Issue 2A – Proposed rejections not adopted

Claims 2 and 11

The proposed anticipation rejection of claims 7-8 is not adopted because *Wengrovitz* does not specifically disclose that the plurality of network devices include includes a video streaming device interface.

Claims 7-8

The proposed anticipation rejection of claims 7-8 over *Wengrovitz* is not adopted because *Wengrovitz* does not specifically disclose that the routing information is stored as a routing table.

Claims 13-19

The proposed anticipation rejection of claims 13-19 over *Wengrovitz* is not adopted because *Wengrovitz* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured switches 50).

Issue 2B – Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wengrovitz* and further in view of *Osterhout*.

Claims 7 and 8

The proposed obviousness rejection of claims 7 and 8 over *Wengrovitz* in view of *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Wengrovitz* reference as recited in Appendix D2 of the Request, which is made part of this office action by reference to the OAA (pp. 29-30).

Issue 2C – Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wengrovitz*, as applied above, and further in view of *Osterhout*.

Note: The Requester also proposed a rejection to claim 19 as unpatentable over *Wengrovitz* in view of *Osterhout*, but the proposed rejection is not adopted for the reasons noted below.

Claim 2

Although *Wengrovitz* does not specifically disclose the plurality of communication interfaces further includes a video streaming device interface, *Wengrovitz* teaches, as is well known in the art, that SIP is a signaling protocol for creating, modifying and terminating multimedia sessions (col. 1, lines 19-21). In addition, it is routine in the art to arrange a network device to include a video streaming device interface (see for example *Osterhout* at col. 5, line 62 to col. 6, line 5). Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system disclosed by *Wengrovitz* to further include a video streaming device interface in order to allow for a system that takes full advantage of SIP.

Claim 11

Although *Wengrovitz* does not specifically disclose the plurality of communication interfaces further includes a video streaming device interface, *Wengrovitz* teaches, as is well known in the art, that SIP is a signaling protocol for creating, modifying and terminating multimedia sessions (col. 1, lines 19-21). In addition, it is routine in the art to arrange a network device to include a video streaming device interface (see for example *Osterhout* at col. 5, line 62 to col. 6, line 5). Therefore, it would have been obvious to a person of ordinary skill in the art to

modify the system disclosed by *Wengrovitz* to further include a video streaming device interface in order to allow for a system that takes full advantage of SIP.

Note: The preceding rejection is essentially the same as that proposed by the Requestor as set forth in Appendix D3 of the Request (excluding the proposed rejections of claim 19 which has not been adopted). To the extent that Appendix D3 provides a more detailed explanation of the adopted rejection, such explanation is made part of this office action by reference to the OAA (pp. 31-33).

Issue 2C – Proposed rejections not adopted

Claim 19

The proposed obviousness rejection of claim 19 over *Wengrovitz* in view of *Osterhout* is not adopted at least because claim 19 is dependent on claim 13, and neither *Wengrovitz* nor *Osterhout* specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured switches 50).

Issue 2D – Proposed rejections not adopted

Claim 18

The proposed obviousness rejection of claim 18 is not adopted at least because claim 18 is dependent on claim 13, and neither *Wengrovitz* nor *Osterhout* specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured switches 50).

Issue 2E – Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wengrovitz* in view of *Inbar*.

Note: The Requester also proposed a rejection to claims 18 and 19 as unpatentable over *Wengrovitz* in view of *Inbar*, which is adopted as modified (further in view of *Osterhout*).

Claims 13-17

As noted above, *Wengrovitz* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured switches). *Inbar* teaches such a platform. Accordingly, the proposed rejection of claims 13-17 as obvious over *Wengrovitz* in view of *Inbar* is adopted as set forth in Appendix D5 of the Request, which is made part of this office action by reference to the OAA (pp. 34-39).

Issue 2E (Modified) – Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wengrovitz* in view of *Inbar*, as applied above, and further in view of *Osterhout*.

Claim 18

Although *Wengrovitz* and *Inbar* do not specifically disclose the use of ATM protocol, the use of ATM protocols in network devices is well known (see for example *Osterhout* at col. 6, line 1-5). Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system suggested by *Wengrovitz* and *Inbar* as applied to claim 13 above, to further accommodate the use of ATM protocols in order to allow for a more versatile system that takes full advantage of known protocols.

Claim 19

Although *Wengrovitz* and *Inbar* do not specifically disclose the plurality of communication interfaces further includes a video streaming device interface, *Wengrovitz* teaches, as is well known in the art, that SIP is a signaling protocol for creating, modifying and terminating multimedia sessions (col. 1, lines 19-21). In addition, it is routine in the art to arrange a network device to include a video streaming device interface (see for example *Osterhout* at col. 5, line 62 to col. 6, line 5). Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system suggested by *Wengrovitz* and *Inbar* as applied to claim 13 above, to further include a video streaming device interface in order to allow for a system that takes full advantage of SIP.

Note: The preceding rejection is essentially equivalent to that proposed by the Requestor as set forth in Appendix D5 as applied above, and further in view of Appendix D3, which is made part of this office action by reference to the OAA (pp. 40-41).

Issue 2F – Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Wengrovitz* in view of *Kung*.

Note: The Requester also proposed a rejection to claim 19 as unpatentable over *Wengrovitz* in view of *Kung*, which is adopted as modified (further in view of *Osterhout*).

Claim 13-18

As noted above, *Wengrovitz* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured switches). *Kung* teaches such a platform. Accordingly, the proposed rejection of claims 13-18

as obvious over *Wengrovitz* in view of *Kung* is adopted as set forth in Appendix D6 of the Request, which is made part of this office action by reference to the OAA (pp. 42-47).

Issue 2F (Modified) – Claims 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Wengrovitz* in view of *Kung*, as applied above, and further in view of *Osterhout*.

Claim 19

Although *Wengrovitz* and *Kung* do not specifically disclose the plurality of communication interfaces further includes a video streaming device interface, *Wengrovitz* teaches, as is well known in the art, that SIP is a signaling protocol for creating, modifying and terminating multimedia sessions (col. 1, lines 19-21). In addition, it is routine in the art to arrange a network device to include a video streaming device interface (see for example *Osterhout* at col. 5, line 62 to col. 6, line 5). Therefore, it would have been obvious to a person of ordinary skill in the art to modify the system suggested by *Wengrovitz* and *Kung* as applied to claim 13 above, to further include a video streaming device interface in order to allow for a system that takes full advantage of SIP.

Note: The preceding rejection is essentially equivalent to that proposed by the Requestor as set forth in Appendix D6 as applied above, and further in view of Appendix D3, which is made part of this office action by reference to the OAA (p. 48).

Issue 3 -- ***Baratz***

Issue 3A – Claims 1, 3-5, 13-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by *Baratz*.

Note: The Requester also proposed rejections to claims 2, 7-8 and 19 as being anticipated by *Baratz*, but such proposed rejections are not adopted for the reasons noted below.

Claims 1, 3-5, 13-14 and 17-18

The proposed anticipation rejection of claims 1, 3-5, 13-14 and 17-18 over *Baratz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* reference as recited in Appendix E1 of the Request, which is made part of this office action by reference to the OAA (pp. 49-55).

Issue 3A – Proposed rejections not adopted

Claims 2 and 19

The proposed anticipation rejection of claims 2 and 19 is not adopted because *Baratz* does not specifically disclose that the plurality of network devices include includes a video streaming device interface.

Claims 7-8

The proposed anticipation rejection of claims 7-8 is not adopted because *Baratz* does not specifically disclose that the routing information is stored as a routing table.

Issues 3B, 3E and 3H – Claims 2, 6, 9-12, 15, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Baratz* in view of *Osterhout*.

Claims 2, 11 and 19

The proposed obviousness rejection of claims 2 and 19 over *Baratz* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Osterhout* references as recited in Appendix E8 of the Request, which is made part of this office action by reference to the OAA (pp. 56-57 and 69-70, 17-22).

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Baratz* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Osterhout* references as recited in Appendix E5 of the Request, which is made part of this office action by reference to the OAA (pp. 58-59 and 65-68).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Baratz* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Osterhout* references as recited in Appendix E2 of the Request, which is made part of this office action by reference to the OAA (pp. 60-64).

Issues 3C and 3F – Claims 6, 9-10, 12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Baratz* in view of *Wengrovitz*.

Note: The Requester also proposed a rejection to claim 11 as unpatentable over *Baratz* in view of *Wengrovitz*, but such proposed rejection is not adopted for the reasons noted below.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Baratz* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Wengrovitz* references as recited in Appendix E6 of the Request, which is made part of this office action by reference to the OAA (pp. 71-72 and 77-80).

Claims 9-10 and 12

The proposed obviousness rejection of claims 9-10 and 12 over *Baratz* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Wengrovitz* references as recited in Appendix E3 of the Request, which is made part of this office action by reference to the OAA (pp. 73-76).

Issue 3C – Proposed rejections not adopted

Claim 11

The proposed obviousness rejection of claim 11 is not adopted because neither *Baratz* nor *Wengrovitz* specifically disclose that the plurality of network devices include a video streaming device interface.

Issue 3D and 3G – Claims 6, 9-10, 12, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Baratz* in view of *Girard-SIP*.

Note: The Requester also proposed a rejection to claim 11 as unpatentable over *Baratz* in view of *Girard-SIP*, but such proposed rejection is not adopted for the reasons noted below.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Baratz* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Girard-SIP* references as recited in Appendix E7 of the Request, which is made part of this office action by reference to the OAA (pp. 81-82 and 87-90).

Claims 9-10 and 12

The proposed obviousness rejection of claims 9-10 and 12 over *Baratz* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Girard-SIP* references as recited in Appendix E4 of the Request, which is made part of this office action by reference to the OAA (pp. 83-86).

Issue 3D – Proposed rejections not adopted

Claim 11

The proposed obviousness rejection of claim 11 is not adopted because neither *Baratz* nor *Girard-SIP* specifically disclose that the plurality of network devices include a video streaming device interface.

Issue 3I -- Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Baratz* in view of *Chung*.

Claims 7 and 8

The proposed obviousness rejection of claims 7 and 8 over *Baratz* in view of *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Chung* references as recited in Appendix E9 of the Request, which is made part of this office action by reference to the OAA (pp. 91-92).

Issue 3J -- Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Baratz* in view of *Czajkowski.*

Claim 5

The proposed obviousness rejection of claim 5 over *Baratz* in view of *Czajkowski* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Baratz* and *Czajkowski* references as recited in Appendix E10 of the Request, which is made part of this office action by reference to the OAA (p. 93).

Issue 4 – *Czajkowski*

Issue 4A -- Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by *Czajkowski.*

Note: The Requester also proposed rejections to claims 7-8, 13-14 and 17-19 as being anticipated by *Czajkowski*, but such proposed rejections are not adopted for the reasons noted below.

Claims 1-5

The proposed anticipation rejection of claims 1-5 over *Czajkowski* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* reference as recited in Appendix F1 of the Request, which is made part of this office action by reference to the OAA (pp. 94-98).

Issue 4A – Proposed rejections not adopted

Claims 7-8

The proposed anticipation rejection of claims 7-8 is not adopted because *Czajkowski* does not specifically disclose that the routing information is stored as a routing table.

Claims 13-14 and 17-19

The proposed anticipation rejection of claims 13-14 and 17-19 is not adopted because *Czajkowski* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured network devices).

Issue 4B and 4E – Claims 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Osterhout.*

Note: The Requester also proposed rejection to claims 15 and 16 as unpatentable over *Czajkowski* in view of *Osterhout*, but the proposed rejection is not adopted for the reasons noted below.

Claim 6

The proposed obviousness rejection of claim 6 over *Czajkowski* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Osterhout* references as recited in Appendix F5 of the Request, which is made part of this office action by reference to the OAA (pp. 99-100).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Czajkowski* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Osterhout* references as recited in Appendix F2 of the Request, which is made part of this office action by reference to the OAA (pp. 101-105).

Issue 4E – Proposed rejections not adopted

Claims 15-16

The proposed obviousness rejection of claims 15-16 is not adopted at least because claims 15 and 16 are dependent on claim 13, and neither *Czajkowski* nor *Osterhout* specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured network devices).

Issue 4C and 4F – Claims 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Wengrovitz*.

Note: The Requester also proposed rejection to claims 15 and 16 as unpatentable over *Czajkowski* in view of *Wengrovitz*, but the proposed rejection is not adopted for the reasons noted below.

Claim 6

The proposed obviousness rejection of claim 6 over *Czajkowski* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Wengrovitz* references as recited in Appendix F6 of the Request, which is made part of this office action by reference to the OAA (pp. 106-107).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Czajkowski* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Wengrovitz* references as recited in Appendix F3 of the Request, which is made part of this office action by reference to the OAA (pp. 109-112).

Issue 4F – Proposed rejections not adopted

Claims 15-16

The proposed obviousness rejection of claims 15-16 is not adopted at least because claims 15 and 16 are dependent on claim 13, and neither *Czajkowski* nor *Wengrovitz* specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured network devices).

Issue 4D and 4G – Claims 6 and 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Girard-SIP*.

Note: The Requester also proposed rejection to claims 15 and 16 as unpatentable over *Czajkowski* in view of *Girard-SIP*, but the proposed rejection is not adopted for the reasons noted below.

Claim 6

The proposed obviousness rejection of claim 6 over *Czajkowski* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Girard-SIP* references as recited in Appendix F7 of the Request, which is made part of this office action by reference to the OAA (pp. 113-114).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Czajkowski* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Girard-SIP* references as recited in Appendix F4 of the Request, which is made part of this office action by reference to the OAA (pp. 115-119).

Issue 4G – Proposed rejections not adopted

Claims 15-16

The proposed obviousness rejection of claims 15-16 is not adopted at least because claims 15 and 16 are dependent on claim 13, and neither *Czajkowski* nor *Girard-SIP* specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured network devices).

Issue 4H – Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Chung*.

Claims 7 and 8

The proposed obviousness rejection of claims 7 and 8 over *Czajkowski* in view of *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Chung* references as recited in Appendix F8 of the Request, which is made part of this office action by reference to the OAA (pp. 120-121).

Issue 4I – Claims 13-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Inbar*.

Claims 13-14 and 17-19

The proposed obviousness rejection of claims 13-14 and 17-19 over *Czajkowski* in view of *Inbar* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Inbar* references as recited in Appendix F9 of the Request, which is made part of this office action by reference to the OAA (pp. 122-127).

Issue 4I (Modified) – Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Inbar*, as applied above, and further in view of *Osterhout*.

Claims 15-16

The proposed obviousness rejection of claim 15-16 over *Czajkowski* in view of *Osterhout* is adopted as modified. The examiner incorporates by reference the detailed explanation of the

manner of applying the *Osterhout* reference as recited in Appendix F9 further in view of F5 of the Request, which is made part of this office action by reference to the OAA (pp. 128-131).

Issue 4I (Modified) – Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Inbar*, as applied above, and further in view of *Wengrovitz*.

Claims 15-16

The proposed obviousness rejection of claim 15-16 over *Czajkowski* in view of *Wengrovitz* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Wengrovitz* reference as recited in Appendix F9 further in view of Appendix F6 of the Request, which is made part of this office action by reference to the OAA (pp. 132-135).

Issue 4I (Modified) – Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Inbar*, as applied above, and further in view of *Girard-SIP*.

Claims 15-16

The proposed obviousness rejection of claim 15-16 over *Czajkowski* in view of *Girard-SIP* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Girard-SIP* reference as recited in Appendix F9 further in view of Appendix F7 of the Request, which is made part of this office action by reference to the OAA (pp. 136-139).

Issue 4J -- Claims 13-14 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Kung*.

Claims 13-14 and 17-19

The proposed obviousness rejection of claims 13-14 and 17-19 over *Czajkowski* in view of *Kung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Kung* references as recited in Appendix F10 of the Request, which is made part of this office action by reference to the OAA (pp. 140-145).

Issue 4J (Modified) – Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Kung*, as applied above, and further in view of *Osterhout*.

Claims 15-16

The proposed obviousness rejection of claim 15-16 over *Czajkowski* in view of *Osterhout* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Osterhout* reference as recited in Appendix F10 further in view of Appendix F5 of the Request, which is made part of this office action by reference to the OAA (pp. 146-149).

Issue 4J (Modified) – Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Kung*, as applied above, and further in view of *Wengrovitz*.

Claims 15-16

The proposed obviousness rejection of claim 15-16 over *Czajkowski* in view of *Wengrovitz* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Wengrovitz* reference as recited in Appendix F10 further in view of Appendix F6 of the Request, which is made part of this office action by reference to the OAA (pp. 150-153).

Issue 4J (Modified) – Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Czajkowski* in view of *Kung*, as applied above, and further in view of *Girard-SIP*.

Claims 15-16

The proposed obviousness rejection of claim 15-16 over *Czajkowski* in view of *Girard-SIP* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Girard-SIP* reference as recited in Appendix F10 further in view of Appendix F7 of the Request, which is made part of this office action by reference to the OAA (pp. 154-157).

Issue 5 – *Gerszberg*

Issue 5A – Claims 1-5, 7, 8, 13, 14 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Gerszberg*.

Note: The Requester also proposed rejections to claims 7-8 as being anticipated by *Gerszberg*, but such proposed rejections are not adopted for the reasons noted below.

Claims 1-5, 13, 14 and 17-19

The proposed anticipation rejection of claims 1-5, 13, 14 and 17-19 over *Gerszberg* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* reference as recited in Appendix G1 of the Request, which is made part of this office action by reference to the OAA (pp. 158-166).

Issue 5A – Proposed rejections not adopted

Claims 7-8

The proposed anticipation rejection of claims 7-8 is not adopted because *Gerszberg* does not specifically disclose that the routing information is stored as a routing table.

Issue 5B and 5E – Claims 6, 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gerszberg* in view of *Osterhout*.

Claims 6 and 15-16

The proposed obviousness rejection of claims 6 and 15-16 over *Gerszberg* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Osterhout* references as recited in Appendix G5 of the Request, which is made part of this office action by reference to the OAA (pp. 167-168 and 173-176).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Gerszberg* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Osterhout* references as recited in Appendix G2 of the Request, which is made part of this office action by reference to the OAA (pp. 169-172).

Issue 5C and 5F – Claims 6, 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gerszberg* in view of *Wengrovitz*.

Claims 6 and 15-16

The proposed obviousness rejection of claims 6 and 15-16 over *Gerszberg* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Wengrovitz* references as recited in Appendix G6 of the Request, which is made part of this office action by reference to the OAA (pp. 177-178 and 184-187).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Gerszberg* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Wengrovitz* references as recited in Appendix G3 of the Request, which is made part of this office action by reference to the OAA (pp. 179-183).

Issue 5D and 5G – Claims 6, 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gerszberg* in view of *Girard-SIP*.

Claims 6 and 15-16

The proposed obviousness rejection of claims 6 and 15-16 over *Gerszberg* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Girard-SIP* references as recited in Appendix G7 of the Request, which is made part of this office action by reference to the OAA (pp. 188-189 and 194-197).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Gerszberg* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Girard-SIP* references as recited in Appendix G4 of the Request, which is made part of this office action by reference to the OAA (pp. 190-193).

Issue 5H – Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Gerszberg* in view of *Chung*.

Claims 7 and 8

The proposed obviousness rejection of claims 7 and 8 over *Gerszberg* in view of *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Gerszberg* and *Chung* references as recited in Appendix G8 of the Request, which is made part of this office action by reference to the OAA (pp. 198-199).

Issue 6 – *Janning*

Issue 6A – Claims 1-6 and 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by *Janning*.

Note: The Requester also proposed rejections to claims 7-8, 13-19 as being anticipated by *Janning*, but such proposed rejections are not adopted for the reasons noted below.

Claims 1-6 and 9-12

The proposed anticipation rejection of claims 1-6 and 9-12 over *Janning* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Janning* reference as recited in Appendix H1 of the Request, which is made part of this office action by reference to the OAA (pp. 200-207).

Issue 6A – Proposed rejections not adopted

Claims 7-8

The proposed anticipation rejection of claims 7-8 is not adopted because *Janning* does not specifically disclose that the routing information is stored as a routing table.

Claims 13-19

The proposed anticipation rejection of claims 13-19 is not adopted because *Janning* does not specifically disclose a system management platform that is arranged to collect call log data from other network devices (such as other similarly configured network devices).

Issue 6B – Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Janning* in view of *Chung*.

Claims 7 and 8

The proposed obviousness rejection of claims 7 and 8 over *Janning* in view of *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Janning* and *Chung* references as recited in Appendix H2 of the Request, which is made part of this office action by reference to the OAA (pp. 208-210).

Issue 6C – Proposed rejections not adopted

Claim 18

The proposed obviousness rejection of claim 18 is not adopted at least because claim 18 is dependent on claim 13, and neither *Janning* nor *Osterhout* specifically disclose a system management platform that is arranged to collect call log data from other network devices.

Issue 6D – Claims 13-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Janning* in view of *Inbar*.

Claims 13-17 and 19

The proposed obviousness rejection of claims 13-17 and 19 over *Janning* in view of *Inbar* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Czajkowski* and *Inbar* references as recited in Appendix H4 of the Request, which is made part of this office action by reference to the OAA (pp. 211-216).

Issue 6D (modified) – Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Janning* in view of *Inbar*, as applied above, and further in view of *Osterhout*.

Claim 18

The proposed obviousness rejection of claim 18 over *Janning* in view of *Osterhout* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Osterhout* reference as recited in Appendix H4 further in view of Appendix H3 of the Request, which is made part of this office action by reference to the OAA (pp. 217-218).

Issue 6E – Claims 13-17 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Janning* in view of *Kung*.

Claims 13-17 and 19

The proposed obviousness rejection of claims 13-17 and 19 over *Janning* in view of *Kung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Janning* and *Kung* references as recited in Appendix H5 of the Request, which is made part of this office action by reference to the OAA (pp. 219-225).

Issue 6E (Modified) – Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Janning* in view of *Kung*, as applied above, and further in view of *Osterhout*.

Claim 18

The proposed obviousness rejection of claim 18 over *Janning* in view of *Osterhout* is adopted as modified. The examiner incorporates by reference the detailed explanation of the manner of applying the *Osterhout* reference as recited in Appendix H5 further in view of Appendix H3 of the Request, which is made part of this office action by reference to the OAA (pp. 226-227).

Issue 7 – *Nodoushani*

Issue 7A -- Claims 1, 3-5, 13-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by *Nodoushani.*

Note: The Requester also proposed rejections to claims 2, 7-8 and 19 as being anticipated by *Nodoushani*, but such proposed rejections are not adopted for the reasons noted below.

Claims 1, 3-5, 13-14 and 17-18

The proposed anticipation rejection of claims 1, 3-5, 13-14 and 17-18 over *Nodoushani* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* reference as recited in Appendix I1 of the Request, which is made part of this office action by reference to the OAA (pp. 228-234).

Issue 7A (Modified) – Claims 13-14 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nodoushani.*

To the extent that *Nodoushani* does not inherently disclose that the system management platform performs call logging, such call logging is well known and routine in the art, and as such, would have been and matter of routine design choice.

Issue 7A – Proposed rejections not adopted

Claims 2 and 19

The proposed anticipation rejection of claims 2 and 19 is not adopted because *Nodoushani* does not specifically disclose that the plurality of network devices include includes a video streaming device interface.

Claims 7-8

The proposed anticipation rejection of claims 7-8 is not adopted because *Nodoushani* does not specifically disclose that the routing information is stored as a routing table.

Issues 7B, 7F and 7I -- Claims 2, 6, 9-12, 15, 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nodoushani* in view of *Osterhout*.

Claims 2, 11 and 19

The proposed obviousness rejection of claims 2, 11 and 19 over *Nodoushani* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Osterhout* references as recited in Appendix I8 of the Request, which is made part of this office action by reference to the OAA (pp. 235-236 and 249-250).

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Nodoushani* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Osterhout* references as recited in Appendix I5 of the Request, which is made part of this office action by reference to the OAA (pp. 237-239 and 243-246).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Nodoushani* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Osterhout* references as recited in Appendix I2 of the Request, which is made part of this office action by reference to the OAA (pp. 240-242).

Issue 7C and 7G – Claims 6, 9-10, 12, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nodoushani* in view of *Wengrovitz*.

Note: The Requester also proposed a rejection to claim 11 as unpatentable over *Nodoushani* in view of *Wengrovitz*, but such proposed rejection is not adopted for the reasons noted below.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Nodoushani* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Wengrovitz* references as recited in Appendix I6 of the Request, which is made part of this office action by reference to the OAA (pp. 249-251 and 255-258).

Claims 9-10 and 12

The proposed obviousness rejection of claims 9-10 and 12 over *Nodoushani* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Wengrovitz* references as recited in

Appendix I3 of the Request, which is made part of this office action by reference to the OAA (pp. 252-254).

Issue 7C – Proposed rejections not adopted

Claim 11

The proposed obviousness rejection of claim 11 is not adopted because neither *Nodoushani* nor *Wengrovitz* specifically disclose that the plurality of network devices include a video streaming device interface.

Issue 7D – The Request does not include a 7D rejection

Issue 7E and 7H – Claims 6, 9-10, 12, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nodoushani* in view of *Girard-SIP*.

Note: The Requester also proposed a rejection to claim 11 as unpatentable over *Nodoushani* in view of *Girard-SIP*, but such proposed rejection is not adopted for the reasons noted below.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Nodoushani* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Girard-SIP* references as recited in Appendix I7 of the Request, which is made part of this office action by reference to the OAA (pp. 259-261 and 267-270).

Claims 9-10 and 12

The proposed obviousness rejection of claims 9-10 and 12 over *Nodoushani* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Girard-SIP* references as recited in Appendix I4 of the Request, which is made part of this office action by reference to the OAA (pp. 262-266).

Issue 4E – Proposed rejections not adopted

Claim 11

The proposed obviousness rejection of claim 11 is not adopted because neither *Nodoushani* nor *Girard-SIP* specifically disclose that the plurality of network devices include a video streaming device interface.

Issue 7J – Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Nodoushani* in view of *Chung*.

Claims 7 and 8

The proposed obviousness rejection of claims 7 and 8 over *Nodoushani* in view of *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Nodoushani* and *Chung* references as recited in Appendix I9 of the Request, which is made part of this office action by reference to the OAA (pp. 271-273).

Issue 8 – *Chow*

Issue 8A – Claims 1-5, 7-8, 13-14 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Chow*.

Claims 1-5, 7-8, 13-14 and 17-19

The proposed anticipation rejection of claims 1-5, 7-8, 13-14 and 17-19 over *Chow* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* reference as recited in Appendix J1 of the Request, which is made part of this office action by reference to the OAA (pp. 274-280).

Issue 8A (Modified) – Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chow*.

To the extent that *Chow* does not inherently disclose that the call routing information is stored as a table, the use of table fro strong information is well known and routine in the art, and as such, would have been and matter of routine design choice.

Issues 8B and 8F – Claims 6, 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chow* view of *Osterhout*.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Chow* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* and *Osterhout* references as recited in Appendix

J5 of the Request, which is made part of this office action by reference to the OAA (pp. 281-283 and 288-291).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Chow* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* and *Osterhout* references as recited in Appendix J2 of the Request, which is made part of this office action by reference to the OAA (pp. 284-287).

Issues 8C and 8G – Claims 6, 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chow* in view of *Wengrovitz*.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Chow* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* and *Wengrovitz* references as recited in Appendix J6 of the Request, which is made part of this office action by reference to the OAA (pp. 292-294 and 299-302).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Chow* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* and *Wengrovitz* references as recited in Appendix J3 of the Request, which is made part of this office action by reference to the OAA (pp. 295-298).

Issues 8E and 8H – Claims 6, 9-12 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chow* in view of *Girard-SIP*.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Chow* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* and *Girard-SIP* references as recited in Appendix J7 of the Request, which is made part of this office action by reference to the OAA (pp. 303-305 and 310-312).

Claims 9-12

The proposed obviousness rejection of claims 9-12 over *Chow* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chow* and *Girard-SIP* references as recited in Appendix J4 of the Request, which is made part of this office action by reference to the OAA (pp. 306-309).

Issue 9 – *Chung*

Issue 9A – Claims 1-5, 7-8, 13-14 and 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Chow*.

Claims 1-5, 7-8, 13-14 and 17-19

The proposed anticipation rejection of claims 1-5, 7-8, 13-14 and 17-19 over *Chung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the

manner of applying the *Chung* reference as recited in Appendix K1 of the Request, which is made part of this office action by reference to the OAA (pp. 313-318).

Issue 9B – Claims 6 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chung* view of *Osterhout*.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Chung* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chung* and *Osterhout* references as recited in Appendix K2 of the Request, which is made part of this office action by reference to the OAA (pp. 319-325).

Issue 9C – Claims 6 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chung* in view of *Wengrovitz*.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Chung* in view of *Wengrovitz* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chung* and *Wengrovitz* references as recited in Appendix K3 of the Request, which is made part of this office action by reference to the OAA (pp. 326-332).

Issue 9D – Claims 6 and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Chung* in view of *Girard-SIP*.

Claims 6, 15 and 16

The proposed obviousness rejection of claims 6, 15 and 16 over *Chung* in view of *Girard-SIP* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Chung* and *Girard-SIP* references as recited in Appendix K4 of the Request, which is made part of this office action by reference to the OAA (pp. 333-339).

Issue 10 – *Oran*

Issue 10A – Claims 9-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by *Oran*.

Note: The Requester also proposed a rejection to claim 11 as being anticipated by *Oran*, but such proposed rejection is not adopted for the reasons noted below.

Claims 9-10 and 12

The proposed anticipation rejection of claims 9-10 and 12 over *Oran* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Oran* reference as recited in Appendix L1 of the Request, which is made part of this office action by reference to the OAA (pp. 340-342).

Issue 10A – Proposed rejections not adopted

Claim 11

The proposed anticipation rejection of claim 11 is not adopted because *Oran* doers not specifically disclose that the plurality of network devices include a video streaming device interface.

Issue 10B – Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Oran* view of *Osterhout.*

Claims 6, 15 and 16

The proposed obviousness rejection of claim 11 over *Oran* in view of *Osterhout* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Oran* and *Osterhout* references as recited in Appendix L2 of the Request, which is made part of this office action by reference to the OAA (pp. 343-344).

Issue 11

Issue 11A – Claims 13-14, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Inbar.*

Claims 13-14, 17 and 19

The proposed anticipation rejection of claims 13-14, 17 and 19 over *Inbar* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Inbar* reference as recited in Appendix M1 of the Request, which is made part of this office action by reference to the OAA (pp. 345-346).

Issue 12

Issue 12A – Claims 13-14, 17 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by *Kung*.

Claims 13-14, 17 and 19

The proposed anticipation rejection of claims 13-14, 17 and 19 over *Kung* is adopted as proposed. The examiner incorporates by reference the detailed explanation of the manner of applying the *Kung* reference as recited in Appendix N1 of the Request, which is made part of this office action by reference to the OAA (pp. 347-349).

Conclusion

SUBMISSIONS

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be an Action Closing Prosecution (ACP), will be governed by 37 CFR 1.116(b) and (d), which will be strictly enforced.

EXTENSIONS OF TIME

Extensions of time under 37 CFR 1.136(a) will not be permitted in inter partes reexamination proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to the patent owner in a reexamination proceeding. Additionally, 35 U.S.C. 314(c) requires that inter partes reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.937). Patent owner extensions of time in inter partes reexamination proceedings are

provided for in 37 CFR 1.956. Extensions of time are not available for third party requester comments, because a comment period of 30 days from service of patent owner's response is set by statute. 35 U.S.C. 314(b) (3).

SERVICE OF PAPERS

Any paper filed with the USPTO, i.e., any submission made, by either the Patent Owner or the Third Party Requester must be served on every other party in the reexamination proceeding, including any other third party requester that is part of the proceeding due to merger of the reexamination proceedings. As proof of service, the party submitting the paper to the Office must attach a Certificate of Service to the paper, which sets forth the name and address of the party served and the method of service. Papers filed without the required Certificate of Service may be denied consideration. 37 CFR 1.903; MPEP 2666.06.

AMENDMENT IN REEXAMINATION PROCEEDINGS

Any proposed amendment to the specification and/or claims in this reexamination proceeding must comply with 37 CFR 1.530(d)-(j), must be formally presented pursuant to 37 CFR 1.52(a) and (b), and must contain any fees required by 37 CFR 1.20(c). Amendments in an inter partes reexamination proceeding are made in the same manner that amendments in an ex parte reexamination are made. MPEP 2666.01. See MPEP 2250 for guidance as to the manner of making amendments in a reexamination proceeding.

NOTIFICATION OF CONCURRENT PROCEEDINGS

The patent owner is reminded of the continuing responsibility under 37 CFR 1.985(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving the patent undergoing reexamination or any related patent throughout the course of this

reexamination proceeding. The third party requester is also reminded of the ability to similarly inform the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP § 2686 and 2686.04.

All correspondence relating to this *inter partes* reexamination proceeding should be directed:

By Mail to: Mail Stop *Inter Partes* Reexam
Attn: Central Reexamination Unit
Commissioner of Patents
United States Patent & Trademark Office
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APPENDIX C1

Osterhout

'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029
Claim 1	A network device (**host computer 106**) comprising: a plurality of communication interfaces, including a telephone line interface (**host computer 106 interface to public telephone network 114**), a computer data interface (**USB connection 104**), and a broadband network interface (**host computer 106 interface to Internet 116**);	"USB phone 102 may be connected to the host computer 106 via a wired USB connection 104. The host computer 106 is in turn connected to telecommunications and network resources for call processing. The host computer 106 may for instance be connected over communications link 110 to the public switched telephone network 114, to which in turn a recipient telephone device 118 is connected. The communications link 110 may be or include, for instance, the local loop connected to the local telephone central office in the user's area, or other resources." Col. 3, ll. 49-58. "The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient telephone device 120 may in turn be connected." Col. 3, ll. 49-62. "Each of communications links 110 and 112 may be, include or interface to any one or more of, for instance, the Internet, an intranet, a PAN (Personal Area Network), a LAN (Local Area Network), a WAN (Wide Area Network) or a MAN (Metropolitan Area Network), a storage area network (SAN), a frame relay connection, an Advanced Intelligent Network (AIN) connection, a synchronous optical network (SONET) connection, a digital T1, T3, E1 or E3 line, Digital Data Service (DDS) connection, DSL (Digital Subscriber Line) connection, an Ethernet connection, an ISDN (Integrated Services Digital Network) line, a dial-up port such as a V.90, V.34 or V.34bis analog modem connection, a cable modem, an ATM (Asynchronous Transfer Mode) connection, or an FDDI (Fiber Distributed Data Interface) or CDDI (Copper Distributed Data Interface) connection." Col. 3, l. 63 - col. 4, l. 10.
	a processor (**microprocessor of host computer 106**);	"The host computer 106 may include a microprocessor such as an Intel x86-based device, a Motorola 68K or PowerPC.TM. device, a MIPS, Hewlett-Packard Precision.TM., or Digital Equipment Corp. Alpha.TM. RISC processor, a microcontroller or other general or special purpose device operating under programmed control." Col. 2, ll. 55-60.
	a machine-readable storage medium (**memory of host computer 106**) which during use stores	**storage medium:** The host computer 106 may furthermore include electronic memory such as RAM (random access memory) or EPROM (electronically programmable read only memory), storage. Col. 2, ll. 60-62.

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'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029
	a call processing application (**collectively, SIP module 122, SIP stack 124, A/D module 128, TCP/IP client 130 and RTP stack 134**) and	**call processing application:** "If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based connection to a recipient telephone device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing." Col. 4, l. 65 - Col. 5 - l. 6. For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established. Col. 5, ll. 7-17. Conversely, if during call initiation the control module 126 determines that conditions on communications link 112 or other variables are insufficient to prepare a call event according to the user's criteria, the control module 126 may automatically revert to delivering the call over the public switched telephone network 114, illustratively via communications link 110. Col. 5, ll. 18-24.
	service profiles (**user-defined call parameters stored in control module 126 define conditions under which the user will make a network based call as opposed to a POTS call**),	**service profiles:** "The control module 126 may receive and store desired call parameters for the user, for instance minimum call quality parameters which will be acceptable for the user to place a network-based call. For instance, the control module 126 may monitor the communications link 112 to determine line conditions or other variables for the placement of a digital network call. These variables may include signal-to-noise ratio (SNR), packet congestion or delay, or other parameters affecting the quality, features, costs or other aspects of a call." Col. 4, ll. 39-48. "A user may set via the human interface 108 a minimum set of parameters

'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029
		including sound quality which they will accept for a SIP-based network call, which may be translated into SNR and other criteria by control module 126. Other parameters besides audio or network variables may be programmed, such as time of day, day of week, long distance or other telephone cost to take advantage of Internet-based telephony during high rate periods. User-defined routing variables, such as the routing of all 1+ numbers (long distance) using SIP or IP compliant networks but all other calls over POTS, may also be programmed." Col. 4, ll. 39-59.
	and which stores executable instructions to mediate communications between the plurality of communication interfaces (**control module 126 determines whether to make SIP or POTS call**),	**mediate communications:** Control module 126 mediates communications. "In step 412, a determination may be made whether the transmission criteria for the user may be met. The control module 126 may record different criteria for different users, and present a user login screen to apply those criteria. If the determination of step 412 is that the transmission criteria are not met, then call processing proceeds to step 414. In step 414 a call may be dialed using the public switched telephone network via POTS and SS7 signaling, or other telephony standards. In step 416, call teardown of the public telephony network call may be completed and processing continues to step 424." Col. 6, ll. 17-27.
	the instructions causing the network device to detect network signaling events or trigger points in a telephone call (**step 406 of Figure 4 in which host computer 106 invokes control module 126 to perform call testing, channel selection and call setup after detecting call event from USB telephone 102**) and	Telephone 102 initiates a call event and the instructions on host computer detect the event and activate control module 126. "As illustrated in FIG. 2, in one embodiment a user wishing to use the USB telephone 102 to initiate a call event my activate the host computer 106, which may invoke, execute or manage a set of media and other resources for that purpose. As illustrated, upon activation a control module 126 may establish the connection with the USB telephone 102." Col. 4, ll. 30-34. "Overall processing according to an embodiment of the invention is illustrated in FIG. 4. In step 402, processing begins. In step 404, a USB client connection may be established to USB telephone 102. In step 406, the host computer 106 may invoke the control module 126 to perform call testing, channel selection and call setup. In step 408, call processing may begin. In step 410, the control module 126 may execute line condition or other tests on communications link 112 to determine if minimum criteria are satisfied, such as SNR or packet delay." Col. 6, ll. 6-16.

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		In addition: "if during call initiation the control module 126 determines that conditions on communications link 112 or other variables are insufficient to prepare a call event according to the user's criteria then control module 126 may automatically revert to delivering the call over the public switched telephone network 114, illustratively via communications link 110." Col. 5, ll. 19-24.
	invoke the call processing application in response to the detected network signaling events or trigger points (**PBX call processing module 154 in telephony server 44, Fig. 6**),	**invoking of call processing application:** The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing. Col. 5, ll. 1-6. For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established. Col. 5, ll. 7-17. Conversely, if during call initiation the control module 126 determines that conditions on communications link 112 or other variables are insufficient to prepare a call event according to the user's criteria, the control module 126 may automatically revert to delivering the call over the public switched telephone network 114, illustratively via communications link 110. Col. 5, ll. 18-24. In this instance, the control module 126 may activate other resources, such as Analog-to-Digital (A/D) module 128 to convert the serial voice data received via

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		USB connection 104 to analog output to the local loop. Call setup may then proceed according to the SS7 or other telephony protocols to recipient telephone device 118." Col 4, l. 65 - Col. 5, l. 30.
	the call processing application operating according to parameters defined in the service profiles	**Service Profiles:** The control module 126 may receive and store desired call parameters for the user, for instance minimum call quality parameters which will be acceptable for the user to place a network-based call. For instance, the control module 126 may monitor the communications link 112 to determine line conditions or other variables for the placement of a digital network call. These variables may include signal-to-noise ratio (SNR), packet congestion or delay, or other parameters affecting the quality, features, costs or other aspects of a call. Col 4, ll. 39-48.
	wherein the network device consists of one or more customer premise equipment modules (**Host computer 106**).	**Customer premise:** Host computer 106 may be one of many different devices used at a customer premises and it is intended to allow a user to place a call using a USB phone using either SIP or POTS. For example, while referred to as a computer, the host computer 106 may also be or include other intelligent devices, for instance a network-enabled appliance such as a WebTV.TM. unit, radio-enabled Palm.TM. Pilot or similar unit, a set-top box, a networkable game-playing console such as Sony Playstation.TM. or Sega Dreamcas.TM., a browser-equipped cellular telephone, or other TCP/IP client or other device.
Claim 2	The network device of claim 1, wherein the plurality of communication interfaces further includes a video streaming device interface (video input).	"The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5.
Claim 3	The network device of claim 1, wherein the broadband network interface terminates a broadband network link that joins a customer premises to a packet	"The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient

'519 Claim	Claim Limitations	Osterhout v. US Patent 7,197,029
	carrier network (interface to internet 116).	telephone device 120 may in turn be connected." Col. 3, ll. 49-62.
Claim 4	The network device of claim 1, wherein the instructions further cause the network device to route IP data between the computer data interface and the broadband network interface.	"If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based connection to a recipient telephone device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing." Col. 4, l. 65 - Col. 5 - l. 6.
Claim 5	The network device of claim 1, wherein the network device is contained in a single physical enclosure.	Host computer 106 contained in a single physical enclosure. Figure 5.
Claim 6	The network device of claim 1, wherein the instructions further cause the network device to provide a SIP user agent to represent a telephone that uses the telephone line interface.	SIP module 122 causes the network device to provide a SIP user agent to represent a telephone that uses the telephone line interface. Figure 5.
Claim 7	The network device of claim 1, wherein the storage medium during use further stores call routing tables (user-defined routing variables), and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface.	"A user may set via the human interface 108 a minimum set of parameters including sound quality which they will accept for a SIP-based network call, which may be translated into SNR and other criteria by control module 126. Other parameters besides audio or network variables may be programmed, such as time of day, day of week, long distance or other telephone cost to take advantage of Internet-based telephony during high rate periods. User-defined routing variables, such as the routing of all 1+ numbers (long distance) using SIP or IP compliant networks but all other calls over POTS, may also be programmed." Col. 4, ll. 49-59.
Claim 8	The network device of claim 1, wherein the storage medium during use further stores call routing tables (user-defined routing variables), and the instructions further cause the network device to perform call routing for telephone calls according to the call routing tables, the telephone calls using the telephone line	"A user may set via the human interface 108 a minimum set of parameters including sound quality which they will accept for a SIP-based network call, which may be translated into SNR and other criteria by control module 126. Other parameters besides audio or network variables may be programmed, such as time

'519 Claim	Claim Limitations	Osterhout '439 / US Patent 7,197,029
	~~interface.~~	~~of day, day of week, long distance or other telephone cost to take advantage of Internet-based telephony during high rate periods. User-defined routing variables, such as the routing of all 1+ numbers (long distance) using SIP or IP compliant networks but all other calls over POTS, may also be programmed." Col. 4, ll. 49-59.~~
Claim 9	A network device (**host computer 106**) comprising: a broadband network interface (**host computer 106 interface to internet 116**); a plurality of communication interfaces, including a telephone line interface (**interface to USB phone 102**) and a computer data interface (**wireless interface module 136**);	"USB phone 102 may be connected to the host computer 106 via a wired USB connection 104. The host computer 106 is in turn connected to telecommunications and network resources for call processing. The host computer 106 may for instance be connected over communications link 110 to the public switched telephone network 114, to which in turn a recipient telephone device 118 is connected. The communications link 110 may be or include, for instance, the local loop connected to the local telephone central office in the user's area, or other resources." Col 3, ll. 49-58. The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient telephone device 120 may in turn be connected." Col 3, ll. 49-62. "Each of communications links 110 and 112 may be, include or interface to any one or more of, for instance, the Internet, an intranet, a PAN (Personal Area Network), a LAN (Local Area Network), a WAN (Wide Area Network) or a MAN (Metropolitan Area Network), a storage area network (SAN), a frame relay connection, an Advanced Intelligent Network (AIN) connection, a synchronous optical network (SONET) connection, a digital T1, T3, E1 or E3 line, Digital Data Service (DDS) connection, DSL (Digital Subscriber Line) connection, an Ethernet connection, an ISDN (Integrated Services Digital Network) line, a dial-up port such as a V.90, V.34 or V.34bis analog modem connection, a cable modem, an ATM (Asynchronous Transfer Mode) connection, or an FDDI (Fiber Distributed Data Interface) or CDDI (Copper Distributed Data Interface) connection." Col. 3, l. 63 - col. 4, l. 10.
	a processor (**microprocessor of host computer 106**);	"The host computer 106 may include a microprocessor such as an Intel x86-based device, a Motorola 68K or PowerPC.TM. device, a MIPS, Hewlett-Packard

'519 Claim	Claim Limitations	Osterhout '439 / US Patent 7,197,029
		Precision.TM., or Digital Equipment Corp. Alpha.TM. RISC processor, a microcontroller or other general or special purpose device operating under programmed control." Col. 2, ll. 55-60.
	a machine-readable storage medium that stores processor-a machine-readable storage medium that stores processor-executable instructions to provide SIP agents (**SIP module 122**)	**storage medium:** The host computer 106 may furthermore include electronic memory such as RAM (random access memory) or EPROM (electronically programmable read only memory), storage. Col. 2, ll. 60-62.
	the instructions causing the network device to provide a SIP user agent to represent a non-SIP telephone that uses the telephone line interface (**SIP module 122 represents USB phone 102),** and the instructions further causing the network device to implement a SIP proxy server (**SIP stack 124**) that mediates all SIP communications over the broadband network interface involving the non-SIP telephone.	**SIP user agent and SIP proxy server:** The '519 patent states that the SIP proxy server functionality is essentially a SIP protocol stack. Col. 24, ll. 24-38. SIP stack 124 of Osterhout acts as an intermediary and transmits and receives SIP commands. "If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based connection to a recipient telephone device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing." Col. 4, l. 65 - Col. 5 - l. 6. For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established. Col. 5, ll. 7-17.
Claim 10	The network device of claim 9, wherein the computer data interface passes IP data.	"If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based connection to a recipient telephone

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'519 Claim	Claim Limitations	Osterhout U.S. Patent 6,197,029
		device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing." Col. 4, l. 65 - Col. 5 - l. 6.
Claim 11	The network device of claim 9, wherein the plurality of interfaces includes a video streaming device interface (video input).	"The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5.
Claim 12	The network device of claim 9, wherein the network device is contained in a single physical enclosure.	Host computer 106 is contained in a single physical enclosure.
~~Claim 13~~	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (control module 126), the system management platform collecting call log data from a plurality of network devices ; and	"USB phone 102 may be connected to the host computer 106 via a wired USB connection 104. The host computer 106 is in turn connected to telecommunications and network resources for call processing. The host computer 106 may for instance be connected over communications link 110 to the public switched telephone network 114, to which in turn a recipient telephone device 118 is connected. The communications link 110 may be or include, for instance, the local loop connected to the local telephone central office in the user's area, or other resources." Col 3, ll. 49-58. "Each of communications links 110 and 112 may be, include or interface to any one or more of, for instance, the Internet, an intranet, a PAN (Personal Area Network), a LAN (Local Area Network), a WAN (Wide Area Network) or a MAN (Metropolitan Area Network), a storage area network (SAN), a frame relay

APPENDIX C2

Osterhout in view of Chung

'519 Claim	Claim Limitations	Osterhout U.S. Patent 6,197,029	Secondary References
		such as a WebTV.™. unit, radio-enabled Palm.™. Pilot or similar unit, a set-top box, a networkable game-playing console such as Sony Playstation™., or Sega Dreamcas.™., a browser-equipped cellular telephone, or other TCP/IP client or other device.	
Claim 7	The network device of claim 1, wherein the storage medium during use further stores call routing tables (user-defined routing variables), and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface.	"A user may set via the human interface 108 a minimum set of parameters including sound quality which they will accept for a SIP-based network call, which may be translated into SNR and other criteria by control module 126. Other parameters besides audio or network variables may be programmed, such as time of day, day of week, long distance or other telephone cost to take advantage of Internet-based telephony during high rate periods. User-defined routing variables, such as the routing of all 1+ numbers (long distance) using SIP or IP compliant networks but all other calls over POTS, may also be programmed." Col. 4, ll. 49-59.	To the extent that Osterhout does not explicitly teach call routing tables, Chung (U.S. Patent 6584108) teaches call routing tables. "The extra digits are passed on to the private branch exchange which will use them to connect the call to the correct extension. Call routing is supported via a static mapping table in each MAC, but the embodiment is not so limited." (Col. 16, ll. 14-18). Chung teaches the use of call routing tables in order to efficiently route telephone calls and avoid the need for call routing through the private branch exchange. Col. 16., ll. 41-50. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize call routing tables as taught by Chung (U.S. Patent 6584108) to enable the network device telephones of Osterhout to efficiently route telephone calls, for example.

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'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
Claim 8	The network device of claim 1, wherein the storage medium during use further stores call routing tables (user-defined routing variables), and the instructions further cause the network device to perform call routing for telephone calls according to the call routing tables, the telephone calls using the telephone line interface.	"A user may set via the human interface 108 a minimum set of parameters including sound quality which they will accept for a SIP-based network call, which may be translated into SNR and other criteria by control module 126. Other parameters besides audio or network variables may be programmed, such as time of day, day of week, long distance or other telephone cost to take advantage of Internet-based telephony during high rate periods. User-defined routing variables, such as the routing of all 1+ numbers (long distance) using SIP or IP compliant networks but all other calls over POTS, may also be programmed." Col. 4, ll. 49-59.	To the extent that Osterhout does not explicitly teach call routing tables, Chung (U.S. Patent 6584108) teaches call routing tables. "The extra digits are passed on to the private branch exchange which will use them to connect the call to the correct extension. Call routing is supported via a static mapping table in each MAC, but the embodiment is not so limited." (Col. 16, ll. 14-18). Chung teaches the use of call routing tables in order to efficiently route telephone calls and avoid the need for call routing through the private branch exchange. Col. 16., ll. 41-50. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize call routing tables as taught by Chung (U.S. Patent 6584108) to enable the network device telephones of Osterhout to efficiently route telephone calls, for example.

APPENDIX C3

Osterhout in view of Inbar

'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (control module 126), the system management platform collecting call log data from a plurality of network devices ; and	"USB phone 102 may be connected to the host computer 106 via a wired USB connection 104. The host computer 106 is in turn connected to telecommunications and network resources for call processing. The host computer 106 may for instance be connected over communications link 110 to the public switched telephone network 114, to which in turn a recipient telephone device 118 is connected. The communications link 110 may be or include, for instance, the local loop connected to the local telephone central office in the user's area, or other resources." Col 3, ll. 49-58. "Each of communications links 110 and 112 may be, include or interface to any one or more of, for instance, the Internet, an intranet, a PAN (Personal Area Network), a LAN (Local Area Network), a WAN (Wide Area Network) or a MAN (Metropolitan Area Network), a storage area network (SAN), a frame relay connection, an Advanced Intelligent Network (AIN) connection, a synchronous optical network (SONET) connection, a digital T1, T3, E1 or E3 line, Digital Data Service (DDS) connection, DSL (Digital Subscriber Line) connection, an Ethernet connection, an ISDN (Integrated Services Digital Network) line, a dial-up port such as a V.90, V.34 or V.34bis analog modem connection, a cable modem, an ATM (Asynchronous Transfer Mode) connection, or an FDDI (Fiber Distributed Data Interface) or CDDI (Copper Distributed Data Interface) connection." Col. 3, l. 63 - col. 4, l. 10.	**Base System**—Osterhout discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, host computer 106). **Known Technique**—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Inbar*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Inbar states: "The IPCenter preferably records usage and billing information, and, as described above, reports billing information to the Master-Server, or to a separate billing unit associated with the master server. In addition to usage and billing information, the IPCenter may report Quality-of-Service (QoS) information, and in some cases connectivity monitoring information, status information of connected devices and other information as may be defined." Figure 1; Col. 8, ll. 54-62. "The system preferably further comprises a billing mechanism for accumulating a transaction log at the subscriber end and retrieving data of said log to the master server." Col. 4, ll. 16-19. **Improved System**—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Osterhout to include a system management platform, for example, to maintain these records in a centralized system and facilitate billing: "all of these services

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'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
			have to be integrated with each other, with a central control and with billing servers and other functions." Col. 1, ll. 41-43.
	distributing the plurality of network devices (host computer 106) that each include a telephone line interface (interface to USB phone 102), a computer data interface (wireless interface module 136), a broadband network interface terminating a link from the shared packet network (host computer 106 interface to Internet 116)	"The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient telephone device 120 may in turn be connected." Col 3, ll. 49-62.	
	a processor (microprocessor of host computer 106);	"The host computer 106 may include a microprocessor such as an Intel x86-based device, a Motorola 68K or PowerPC.TM. device, a MIPS, Hewlett-Packard Precision.TM., or Digital Equipment Corp. Alpha.TM. RISC processor, a microcontroller or other general or special purpose device operating under programmed control." Col. 2, ll. 55-60.	
	a machine-readable storage medium storing processor-executable instructions to control telephone calls (SIP module 122),	storage medium: The host computer 106 may furthermore include electronic memory such as RAM (random access memory) or EPROM (electronically programmable read only memory), storage. Col. 2, ll. 60-62. SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message	

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'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
		for processing the call. Col. 5, ll. 7-10.	
	the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120). and to send call log data to the system management platform (control module 126 is a platform (software framework) running at host computers 106 and may receive and store call parameters).	"Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established." Col. 5, ll. 11-16. System management platform: Control module 126 is a platform (software framework) running at host computers and may receive and store call parameters. For example, a first control module 126 running at a first host computer 106 receives and stores call parameters for a call to second control module 126 running at a second host computer 106. Control modules 126 operate as a system managment platform collecting call log data for a plurality of network devices (host computers 106). "The control module 126 may receive and store desired call parameters for the user, for instance minimum call quality parameters which will be acceptable for the user to place a network-based call. For instance, the control module 126 may monitor the communications link 112 to determine line conditions or other variables for the placement of a digital network call. These variables may include signal-to-noise ratio (SNR), packet congestion or delay, or other parameters affecting the quality, features, costs or other aspects of a call." Col. 4, ll. 39-48. "In step 412, a determination may be made whether the transmission criteria for the user may be met. The control module 126 may record different criteria for different users, and present a user login screen to apply those criteria. If the	Base System—Osterhout discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, host computer 106). Known Technique—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Inbar*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Inbar states: "The IPCenter preferably records usage and billing information, and, as described above, reports billing information to the Master-Server, or to a separate billing unit associated with the master server. In addition to usage and billing information, the IPCenter may report Quality-of-Service (QoS) information, and in some cases connectivity monitoring information, status information of connected devices and other information as may be defined." Figure 1; Col. 8, ll. 54-62. "The system preferably further comprises a billing mechanism for accumulating a transaction log at the subscriber end and retrieving data of said log to the master server." Col. 4, ll. 16-19. Improved System—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Osterhout to include a system management platform, for example, to maintain these records in a centralized

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Osterhout in view of Inbar

'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
		determination of step 412 is that the transmission criteria are not met, then call processing proceeds to step 414. In step 414 a call may be dialed using the public switched telephone network via POTS and SS7 signaling, or other telephony standards. In step 416, call teardown of the public telephony network call may be completed and processing continues to step 424." Col. 6, ll. 17-27.	system and facilitate billing: "all of these services have to be integrated with each other, with a central control and with billing servers and other functions." Col. 1, ll. 41-43.
Claim 14	The method of claim 13, wherein for each device the broadband network interface terminates a link from the shared packet network.	"The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient telephone device 120 may in turn be connected." Col. 3, ll. 49-62.	
Claim 15	The method of claim 13, wherein the routing of telephone calls includes SIP signaling.	For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Col. 5, ll. 7-16.	
Claim 16	The method of claim 13, wherein the storage medium further stores processor-executable Instructions to act as an SIP proxy server for devices using the telephone line interface and for devices using the computer data interface.	The '519 patent states that the SIP protocol stack "functions as the default SIP Proxy Server." Col. 24, ll. 27-28. SIP stack 124 of Osterhout acts as an intermediary and transmits and receives SIP commands.	
Claim 17	The method of claim 13, wherein the shared packet network uses IP protocols.	"If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based	

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Osterhout in view of Inbar

'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
		connection to a recipient telephone device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing." Col. 4, l. 65 - Col. 5 - l. 6.	
Claim 18	The method of claim 13, wherein the shared packet network uses ATM protocols.	For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established. Col. 5, ll. 7-17.	
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface (video input).	"The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5.	

APPENDIX C4

Osterhout in view of Kung

'519 Claim	Claim Limitation	Osterhout - US Patent 7,197,029	Secondary References
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (control module 126), the system management platform collecting call log data from a plurality of network devices ; and	"USB phone 102 may be connected to the host computer 106 via a wired USB connection 104. The host computer 106 is in turn connected to telecommunications and network resources for call processing. The host computer 106 may for instance be connected over communications link 110 to the public switched telephone network 114, to which in turn a recipient telephone device 118 is connected. The communications link 110 may be or include, for instance, the local loop connected to the local telephone central office in the user's area, or other resources." Col 3, ll. 49-58. "Each of communications links 110 and 112 may be, include or interface to any one or more of, for instance, the Internet, an intranet, a PAN (Personal Area Network), a LAN (Local Area Network), a WAN (Wide Area Network) or a MAN (Metropolitan Area Network), a storage area network (SAN), a frame relay connection, an Advanced Intelligent Network (AIN) connection, a synchronous optical network (SONET) connection, a digital T1, T3, E1 or E3 line, Digital Data Service (DDS) connection, DSL (Digital Subscriber Line) connection, an Ethernet connection, an ISDN (Integrated Services Digital Network) line, a dial-up port such as a V.90, V.34 or V.34bis analog modem connection, a cable modem, an ATM (Asynchronous Transfer Mode) connection, or an FDDI (Fiber Distributed Data Interface) or CDDI (Copper Distributed Data Interface) connection." Col. 3, l. 63 - col. 4, l. 10.	**Base System**—Osterhout discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, host computer 106). **Known Technique**—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Kung*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Kung teaches an IP central station 200 that stores a call log: "The present invention may include an activity log that may have user proactive bill management capability and be used in the aforementioned broadband communication system. The activity log may log, for example, incoming calls directory numbers (DNs) and outgoing call DNs in a database. The database containing the activity log may be provided at a central system location, such as the at IP Central Station 200." Col. 31, ll. 10-17. Figure 8 of Kung includes an example call log. The call log is stored at BRG 300 and/or IP central station 200. Col. 32, ll.9-10. The system subscriber's customer premises equipment (broadband residential gateway 300) records the call log data and forwards the call log data to other locations, such as to IP central station 200, for billing purposes as an example. Figure 8;

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Osterhout in view of Kung

'519 Claim	Claim Limitations	Osterhout - US Patent 7,197,029	Secondary References
			Col. 35, l. 37 - col. 36, l. 10. **Improved System**—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Osterhout to include a system management platform, for example, to collect call log data from the network devices of Osterhout.
	distributing the plurality of network devices (host computer 106) that each include a telephone line interface (interface to USB phone 102), a computer data interface (wireless interface module 136), a broadband network interface terminating a link from the shared packet network (host computer 106 interface to Internet 116)	"The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient telephone device 120 may in turn be connected." Col 3, ll. 49-62.	
	a processor (microprocessor of host computer 106);	"The host computer 106 may include a microprocessor such as an Intel x86-based device, a Motorola 68K or PowerPC.TM. device, a MIPS, Hewlett-Packard Precision.TM., or Digital Equipment Corp. Alpha.TM. RISC processor, a microcontroller or other general or special purpose device operating under programmed control." Col. 2, ll. 55-60.	
	a machine-readable storage medium storing processor-executable instructions to control telephone calls (SIP module 122),	storage medium: The host computer 106 may furthermore include electronic memory such as RAM (random access memory) or EPROM (electronically programmable read only	

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Osterhout in view of Kung

'319 Claim	Claim Limitation	Osterhout U.S. Patent 7,152,079	Secondary References
		memory), storage. Col. 2, ll. 60-62. SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Col. 5, ll. 7-10.	
	the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120). and to send call log data to the system management platform (control module 126 is a platform (software framework) running at host computers 106 and may receive and store call parameters).	"Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established." Col. 5, ll. 11-16. System management platform: Control module 126 is a platform (software framework) running at host computers and may receive and store call parameters. For example, a first control module 126 running at a first host computer 106 receives and stores call parameters for a call to second control module 126 running at a second host computer 106. Control modules 126 operate as a system managment platform collecting call log data for a plurality of network devices (host computers 106). "The control module 126 may receive and store desired call parameters for the user, for instance minimum call quality parameters which will be acceptable for the user to place a network-based call. For instance, the control module 126 may monitor the communications link 112 to determine line conditions or other variables for the placement of a digital network call. These variables may include signal-to-noise ratio (SNR), packet congestion or delay, or other parameters affecting the quality, features, costs or other aspects of a call." Col. 4, ll. 39-48.	Base System—Osterhout discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, host computer 106). Known Technique—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Kung*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Kung teaches an IP central station 200 that stores a call log: "The present invention may include an activity log that may have user proactive bill management capability and be used in the aforementioned broadband communication system. The activity log may log, for example, incoming calls directory numbers (DNs) and outgoing call DNs in a database. The database containing the activity log may be provided at a central system location, such as the at IP Central Station 200." Col. 31, ll. 10-17. Figure 8 of Kung includes an example call log. The call log is stored at BRG 300 and/or IP central station 200. Col. 32, ll.9-10.

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'319 Claim	Claim Limitation	Osterhout U.S. Patent 7,152,079	Secondary References
		"In step 412, a determination may be made whether the transmission criteria for the user may be met. The control module 126 may record different criteria for different users, and present a user login screen to apply those criteria. If the determination of step 412 is that the transmission criteria are not met, then call processing proceeds to step 414. In step 414 a call may be dialed using the public switched telephone network via POTS and SS7 signaling, or other telephony standards. In step 416, call teardown of the public telephony network call may be completed and processing continues to step 424." Col. 6, ll. 17-27.	The system subscriber's customer premises equipment (broadband residential gateway 300) records the call log data and forwards the call log data to other locations, such as to IP central station 200, for billing purposes as an example. Figure 8; Col. 35, l. 37 - col. 36, l. 10. Improved System—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Osterhout to include a system management platform, for example, to collect call log data from the network devices of Osterhout.
Claim 14	The method of claim 13, wherein for each device the broadband network interface terminates a link from the shared packet network.	"The host computer 106 may also be connected to a data network, for instance via communications link 112 to the public Internet 116, to which a recipient telephone device 120 may in turn be connected." Col. 3, ll. 49-62.	
Claim 15	The method of claim 13, wherein the routing of telephone calls includes SIP signaling.	For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Col. 5, ll. 7-16.	

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'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
Claim 16	The method of claim 13, wherein the storage medium further stores processor-executable instructions to act as an SIP proxy server for devices using the telephone line interface and for devices using the computer data interface.	The '519 patent states that the SIP protocol stack "functions as the default SIP Proxy Server." Col. 24, ll. 27-28. SIP stack 124 of Osterhout acts as an intermediary and transmits and receives SIP commands.	
Claim 17	The method of claim 13, wherein the shared packet network uses IP protocols.	"If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based connection to a recipient telephone device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call processing." Col. 4, l. 65 - Col. 5 - l. 6.	
Claim 18	The method of claim 13, wherein the shared packet network uses ATM protocols.	For instance, the SIP module 122 may transmit a Call Invite command to the recipient telephone device 120, in this instance a SIP-enabled device, to await a 200 OK or other acknowledgment message for processing the call. Once the call setup is achieved via SIP messaging, a voice or other path, such as VoIP or VOATM, may be established between the USB telephone 102 and the recipient telephone device 120. Other voice path or other protocols may be used, such as voice over UDP or fax over TCP, or others known in the art. Call processing my proceed according to known messaging according to those protocols, once established. Col. 5, ll. 7-17.	
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface (video input).	"The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages	

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Osterhout in view of Kung

'519 Claim	Claim Limitations	Osterhout U.S. Patent 7,197,029	Secondary References
		or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5.	

APPENDIX D1

Wengrovitz

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248
Claim 1	A network device (switch 50) comprising: a plurality of communication interfaces, including a telephone line interface (interface between SIP - unobservant phone 40 and switch 50), a computer data interface (interface between location server 55 and switch 50), and a broadband network interface (interface between internet 45 and switch 50);	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59. "Switching device 50 is coupled to a location server 55. Switching device 50 is also coupled to switching device 60 over the SIP-observant network 45 via one or more core switches operative on the network. Switching device 60 is in turn coupled to the SIP-observant phone 65. The SIP-observant and unobservant phones 40, 65, switching devices 50, 60, and location server 55, are interconnected via cables or other transmission media known in the art." Col. 3, ll. 60-67.
	a processor (processor implementing emulation client 50a);	"According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 18-21.
	a machine-readable storage medium (switch 50 including emulation client 50a) which during use stores	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4, ll. 11-21.
	a call processing application (emulation client 50a) and	"Switching device 50 receives the dial request and invokes its emulation client 50a to convert the request into a SIP-observant format. In doing so, the emulation client 5a preferably transmits all or a portion of the telephone number to the location server 55 to determine whether the call is to be redirected to a different number or to a particular extension. Preferably, the location server 55 returns the

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'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248
		same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.
	service profiles (user-defined call parameters stored in emulation client 50a or account information stored at location server 55),	Emulation client 50a stores user-defined call parameters received from location server 55 for call routing. "The location server 55 preferably contains rules and algorithms for redirecting calls to a location where a user of the SIP-observant phone 65 is scheduled to be. The user's location may vary based on a time and/or day of the call. Alternatively, the location server 55 contains rules and algorithms for redirecting calls made to a call center, to an appropriate extension or agent. The redirection may be based on, for instance, caller information, agent availability, account information, and the like." Col. 3, ll. 53-60.
	and which stores executable instructions to mediate communications between the plurality of communication interfaces (instructions to mediate communications with SIP - unobservant phone 40),	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4., ll. 11-21.
	the instructions causing the network device to detect network signaling events or trigger points in a telephone call (dial request received from SIP - unobservant phone 40) and	In general terms, the SIP-unobservant phone 40 initiates telephonic communication with the SIP-observant phone 65 by transmitting a PBX dial request with a particular telephone number. Col. 4, ll. 31-34.
	invoke the call processing application (emulation client 50a) in response to the detected network signaling events or trigger points,	"Switching device 50 receives the dial request and invokes its emulation client 50a to convert the request into a SIP-observant format. In doing so, the emulation client 5a preferably transmits all or a portion of the telephone number to the location server 55 to determine whether the call is to be redirected to a different number or to a particular extension. Preferably, the location server 55 returns the

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Wengrovitz

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248
		same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.
	the call processing application operating according to parameters defined in the service profiles	Emulation client 50a operates according to the user-defined call parameters received from location server 55 for call routing. "Switching device 50 receives the dial request and invokes its emulation client 50a to convert the request into a SIP-observant format. In doing so, the emulation client 5a preferably transmits all or a portion of the telephone number to the location server 55 to determine whether the call is to be redirected to a different number or to a particular extension. Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.
	wherein the network device consists of one or more customer premise equipment modules (switch 50).	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location." Col. 4, ll. 11-13.
Claim 2	The network device of claim 1, wherein the plurality of communication interfaces further includes a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.
Claim 3	The network device of claim 1, wherein the broadband network interface terminates a broadband network link that joins a customer premises to a packet carrier network.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.

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Wengrovitz

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248
Claim 4	The network device of claim 1, wherein the instructions further cause the network device to route IP data between the computer data interface and the broadband network interface.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.
Claim 5	The network device of claim 1, wherein the network device is contained in a single physical enclosure.	Switch 50 is contained in a single physical enclosure. Figure 2.
Claim 6	The network device of claim 1, wherein the instructions further cause the network device to provide a SIP user agent to represent a telephone that uses the telephone line interface.	Emulation client 50a provides a SIP user agent that represents a telephone that uses the telephone line interface. FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.
Claim 7	The network device of claim 1, wherein the storage medium during use further stores call routing tables (location server 95 returns a list of all potential routing numbers), and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface.	"the location server 95 identifies a particular number to where to route the call. Alternatively, the location server 95 returns a list of all potential routing numbers, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is engaged to retrieve redirection information if an initially dialed number does not result in a successful connection." Col. 5, ll. 35-42.
Claim 8	The network device of claim 1, wherein the storage medium during use further stores call routing tables (location server 95 returns a list of all potential routing numbers), and the instructions further cause the network device to perform call routing for telephone calls according to the call routing tables, the	"the location server 95 identifies a particular number to where to route the call. Alternatively, the location server 95 returns a list of all potential routing numbers, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is engaged to retrieve redirection

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'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248
	telephone calls using the telephone line interface.	information if an initially dialed number does not result in a successful connection." Col. 5, ll. 35-42.
Claim 9	A network device (switch 50) comprising: a broadband network interface (interface between internet 45 and switch 50); a plurality of communication interfaces, including a telephone line interface (interface between SIP - unobservant phone 40 and switch 50) and a computer data interface (interface between location server 55 and switch 50);	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21.
	a processor (processor implementing emulation client 50a);	"According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 18-21.
	a machine-readable storage medium that stores processor-a machine-readable storage medium that stores processor-executable instructions to provide SIP agents (switch 50 including emulation client 50a)	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4, ll. 11-21.
	the instructions causing the network device to provide a SIP user agent to represent a non-SIP telephone that uses the telephone line interface (SIP module 122 represents USB phone 102), and the instructions further causing the network device to implement a SIP proxy server (SIP stack 124) that mediates all SIP communications over the broadband network interface involving the non-SIP telephone.	"In general terms, the SIP-unobservant phone 40 initiates telephonic communication with the SIP-observant phone 65 by transmitting a PBX dial request with a particular telephone number." Col. 4, ll. 31-34. "Switching device 50 receives the dial request and invokes its emulation client 50a to convert the request into a SIP-observant format. In doing so, the emulation

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'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248
		client 5a preferably transmits all or a portion of the telephone number to the location server 55 to determine whether the call is to be redirected to a different number or to a particular extension. Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.
Claim 10	The network device of claim 9, wherein the computer data interface passes IP data.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.
Claim 11	The network device of claim 9, wherein the plurality of interfaces includes a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.
Claim 12	The network device of claim 9, wherein the network device is contained in a single physical enclosure.	Switch 50 is contained in a single physical enclosure. Figure 2.
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (location server 55), the system management platform collecting call log data from a plurality of network devices ; and	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21.

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
		redirected to a different number or to a particular extension. Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.	
	wherein the network device consists of one or more customer premise equipment modules (switch 50).	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location." Col. 4, ll. 11-13.	
Claim 7	The network device of claim 1, wherein the storage medium during use further stores call routing tables **(location server 95 returns a list of all potential routing numbers)**, and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface.	"the location server 95 identifies a particular number to where to route the call. Alternatively, the location server 95 returns a list of all potential routing numbers, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is engaged to retrieve redirection information if an initially dialed number does not result in a successful connection." Col. 5, ll. 35-42.	To the extent that Wengrovitz does not explicitly teach call routing tables, Chung (U.S. Patent 6584108) teaches call routing tables. "The extra digits are passed on to the private branch exchange which will use them to connect the call to the correct extension. Call routing is supported via a static mapping table in each MAC, but the embodiment is not so limited." (Col. 16, ll. 14-18). Chung teaches the use of call routing tables in order to efficiently route telephone calls and avoid the need for call routing through the private branch exchange. Col. 16., ll. 41-50. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize call routing tables as taught by

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
			Chung (U.S. Patent 6584108) to enable the network device telephones of Wengrovitz to efficiently route telephone calls, for example.
Claim 8	The network device of claim 1, wherein the storage medium during use further stores call routing tables **(location server 95 returns a list of all potential routing numbers)**, and the instructions further cause the network device to perform call routing for telephone calls according to the call routing tables, the telephone calls using the telephone line interface.	"the location server 95 identifies a particular number to where to route the call. Alternatively, the location server 95 returns a list of all potential routing numbers, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is engaged to retrieve redirection information if an initially dialed number does not result in a successful connection." Col. 5, ll. 35-42.	To the extent that Wengrovitz does not explicitly teach call routing tables, Chung (U.S. Patent 6584108) teaches call routing tables. "The extra digits are passed on to the private branch exchange which will use them to connect the call to the correct extension. Call routing is supported via a static mapping table in each MAC, but the embodiment is not so limited." (Col. 16, ll. 14-18). Chung teaches the use of call routing tables in order to efficiently route telephone calls and avoid the need for call routing through the private branch exchange. Col. 16., ll. 41-50. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize call routing tables as taught by Chung (U.S. Patent 6584108) to enable the network device telephones of Wengrovitz to efficiently route telephone calls, for example.

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Wengrovitz in view of Osterhout

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,243	Secondary References
		redirected to a different number or to a particular extension. Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.	
	wherein the network device consists of one or more customer premise equipment modules (switch 50).	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location." Col. 4, ll. 11-13.	
Claim 2	The network device of claim 1, wherein the plurality of communication interfaces further includes a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.	To the extent that Wengrovitz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other

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Wengrovitz in view of Osterhout

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,243	Secondary References
			multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Wengrovitz to provide an interface for video conferencing data, for example.
Claim 9	A network device (switch 50) comprising: a broadband network interface (interface between internet 45 and switch 50); a plurality of communication interfaces, including a telephone line interface (interface between SIP - unobservant phone 40 and switch 50) and a computer data interface (interface between location server 55 and switch 50);	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21.	
	a processor (processor implementing emulation client 50a);	"According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 18-21.	
	a machine-readable storage medium that stores processor-a machine-readable storage medium that stores processor-executable instructions to provide SIP agents (switch 50 including emulation client 50a)	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on	

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Wengrovitz in view of Osterhout

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 11	The network device of claim 9, wherein the plurality of interfaces includes a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.	To the extent that Wengrovitz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Wengrovitz to provide an interface for video conferencing data, for example.
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising:	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a	

APPENDIX D5

Wengrovitz in view of Inbar

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (location server 55), the system management platform collecting call log data from a plurality of network devices ; and	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21. Location server 55 collects call log data that is used in the routing of calls to particular locations. "The location database includes a plurality of location records 520, with each record preferably being headed and identified by a unique caller identifier (ID) 520a."	**Base System**—Wengrovitz discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, switch 50). **Known Technique**—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Inbar*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Inbar states: "The IPCenter preferably records usage and billing information, and, as described above, reports billing information to the Master-Server, or to a separate billing unit associated with the master server. In addition to usage and billing information, the IPCenter may report Quality-of-Service (QoS) information, and in some cases connectivity monitoring information, status information of connected devices and other information as may be defined." Figure 1; Col. 8, ll. 54-62. "The system preferably further comprises a billing mechanism for accumulating a transaction log at the subscriber end and retrieving data of said log to the master server." Col. 4, ll. 16-19. **Improved System**—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Wengrovitz to include a system management platform, for example, to maintain these records in a centralized system and facilitate billing: "all of these services

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
			have to be integrated with each other, with a central control and with billing servers and other functions." Col. 1, ll. 41-43.
	distributing the plurality of network devices (switch 50) that each include a telephone line interface (interface between SIP - unobservant phone 40 and switch 50), a computer data interface (interface between location server 55 and switch 50), a broadband network interface terminating a link from the shared packet network (interface between internet 45 and switch 50)	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21.	
	a processor (processor implementing emulation client 50a);	"According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 18-21.	
	a machine-readable storage medium storing processor-executable instructions to control telephone calls (switch 50 including emulation client 50a),	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4, ll. 11-21.	

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
	the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543). and to send call log data to the system management platform (location server 55).	"Switching device 50 preferably creates a SIP INVITE request with the identified telephone number and transmits the request over the SIP-observant network 45. Switching device 60 receives the INVITE request and transmits the request to the SIP-observant phone 65. The SIP-observant phone 65 preferably alerts the callee of the incoming call by emitting, for example, a ringing sound. If the call is answered, switching device 60 indicates a successful connection by returning a SIP OK response to the emulation client 50a. The emulation client 50a translates the OK response to a PBX answer event and transmits it to the SIP-observant phone. In addition, the emulation client 50a confirms the receipt of the OK response by transmitting a SIP ACK message to switching device 60. The SIP-observant and observant phones 40, 65 may then engage in communication until one of the parties terminate the call." Col. 4, ll. 48-63. "Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 40-47. System management platform: Emulation client 50a sends call log data (the telephone number to be dialed, for example) to location server 55, and location server 55 returns the same number or a different number from the call log data stored at location server 55. Although not depicted, location server 55 may serve more than one switch. Location server 55 collects call log data that is used in the routing of calls to particular locations. "The location database	Base System—Wengrovitz discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, switch 50). Known Technique—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Inbar*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Inbar states: "The IPCenter preferably records usage and billing information, and, as described above, reports billing information to the Master-Server, or to a separate billing unit associated with the master server. In addition to usage and billing information, the IPCenter may report Quality-of-Service (QoS) information, and in some cases connectivity monitoring information, status information of connected devices and other information as may be defined." Figure 1; Col. 8, ll. 54-62. "The system preferably further comprises a billing mechanism for accumulating a transaction log at the subscriber end and retrieving data of said log to the master server." Col. 4, ll. 16-19. Improved System—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Wengrovitz to include a system management platform, for example, to maintain these records in a centralized system and facilitate billing: "all of these services have to be integrated with each other, with a

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Wengrovitz in view of Inbar

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References (if any)
		includes a plurality of location records 520, with each record preferably being headed and identified by a unique caller identifier (ID) 520a." Emulation client 50a sends call log data (the telephone number to be dialed, for example) to location server 55, and location server 55 returns the same number or a different number from the call log data stored at location server 55. "Switching device 50 receives the dial request and invokes its emulation client 50a to convert the request into a SIP-observant format. In doing so, the emulation client 5a preferably transmits all or a portion of the telephone number to the location server 55 to determine whether the call is to be redirected to a different number or to a particular extension. Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.	central control and with billing servers and other functions." Col. 1, ll. 41-43.
Claim 14	The method of claim 13, wherein for each device the broadband network interface terminates a link from the shared packet network.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.	

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'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 15	The method of claim 13, wherein the routing of telephone calls includes SIP signaling.	"Switching device 50 preferably creates a SIP INVITE request with the identified telephone number and transmits the request over the SIP-observant network 45. Switching device 60 receives the INVITE request and transmits the request to the SIP-observant phone 65. The SIP-observant phone 65 preferably alerts the callee of the incoming call by emitting, for example, a ringing sound. If the call is answered, switching device 60 indicates a successful connection by returning a SIP OK response to the emulation client 50a. The emulation client 50a translates the OK response to a PBX answer event and transmits it to the SIP-observant phone. In addition, the emulation client 50a confirms the receipt of the OK response by transmitting a SIP ACK message to switching device 60. The SIP-observant and observant phones 40, 65 may then engage in communication until one of the parties terminate the call." Col. 4, ll. 48-63.	
Claim 16	The method of claim 13, wherein the storage medium further stores processor-executable Instructions to act as an SIP proxy server for devices using the telephone line interface and for devices using the computer data interface.	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4, ll. 11-21.	
Claim 17	The method of claim 13, wherein the shared packet network uses IP protocols.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-	

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Wengrovitz in view of Inbar

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
		unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.	
Claim 18	The method of claim 13, wherein the shared packet network uses ATM protocols.	SIP is transport layer independent. Therefore, SIP supports the underlying transport protocol of IP over ATM.	Further in view of Osterhout D4-claim 18
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.	Further in view of Osterhout D3-claim 19

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Wengrovitz and Inbar further in view of Osterhout

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.	To the extent that Wengrovitz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Wengrovitz to provide an interface for video conferencing data, for example.

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Wengrovitz and Inbar further in view of Osterhout

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 18	The method of claim 13, wherein the shared packet network uses ATM protocols.	SIP is transport layer independent. Therefore, SIP supports the underlying transport protocol of IP over ATM.	To the extent that Wengrovitz does not explicitly teach ATM protocols, the use of ATM protocols in network devices was well known in the art by 2001. For example, Osterhout (U.S. Patent 7,197,029) teaches ATM protocols. Col. 6, ll. 1-5. Therefore the use of ATM protocols would have been a simple design choice to one of ordinary skill in the art.

APPENDIX D6

Wengrovitz in view of Kung

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary Reference
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (location server 55), the system management platform collecting call log data from a plurality of network devices ; and	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21. Location server 55 collects call log data that is used in the routing of calls to particular locations. "The location database includes a plurality of location records 520, with each record preferably being headed and identified by a unique caller identifier (ID) 520a."	Base System—Wengrovitz discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, switch 50). Known Technique—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Kung*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Kung teaches an IP central station 200 that stores a call log: "The present invention may include an activity log that may have user proactive bill management capability and be used in the aforementioned broadband communication system. The activity log may log, for example, incoming calls directory numbers (DNs) and outgoing call DNs in a database. The database containing the activity log may be provided at a central system location, such as the at IP Central Station 200." Col. 31, ll. 10-17. Figure 8 of Kung includes an example call log. The call log is stored at BRG 300 and/or IP central station 200. Col. 32, ll.9-10. The system subscriber's customer premises equipment (broadband residential gateway 300) records the call log data and forwards the call log data to other locations, such as to IP central station 200, for billing purposes as an example. Figure 8;

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Wengrovitz in view of Kung

'319 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary Reference
			Col. 35, l. 37 - col. 36, l. 10. **Improved System**—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Wengrovitz to include a system management platform, for example, to collect call log data from the network devices of Wengrovitz.
	distributing the plurality of network devices (switch 50) that each include a telephone line interface (interface between SIP - unobservant phone 40 and switch 50), a computer data interface (interface between location server 55 and switch 50), a broadband network interface terminating a link from the shared packet network (interface between internet 45 and switch 50)	"Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 11-21.	
	a processor (processor implementing emulation client 50a);	"According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor." Col. 4, ll. 18-21.	
	a machine-readable storage medium storing processor-executable instructions to control telephone calls (switch 50 including emulation client 50a),	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a	

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Wengrovitz in view of Kung

'319 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary Reference
		UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4, ll. 11-21.	
	the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543). and to send call log data to the system management platform (location server 55).	"Switching device 50 preferably creates a SIP INVITE request with the identified telephone number and transmits the request over the SIP-observant network 45. Switching device 60 receives the INVITE request and transmits the request to the SIP-observant phone 65. The SIP-observant phone 65 preferably alerts the callee of the incoming call by emitting, for example, a ringing sound. If the call is answered, switching device 60 indicates a successful connection by returning a SIP OK response to the emulation client 50a. The emulation client 50a translates the OK response to a PBX answer event and transmits it to the SIP-observant phone. In addition, the emulation client 50a confirms the receipt of the OK response by transmitting a SIP ACK message to switching device 60. The SIP-observant and observant phones 40, 65 may then engage in communication until one of the parties terminate the call." Col. 4, ll. 48-63. "Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 40-47. **System management platform**: Emulation client 50a sends call log data (the telephone number to be dialed, for example) to location server 55, and location server 55 returns the same number or a different number from the call log data stored at	**Base System**—Wengrovitz discloses a network device for establishing a voice-over-packet network architecture (*e.g.*, switch 50). **Known Technique**—A person having ordinary skill in the art in 2001 would have been well-aware of system management platform technology. *Kung*, for example, describes a system management platform collecting call log data from a plurality of network devices. For example, Kung teaches an IP central station 200 that stores a call log: "The present invention may include an activity log that may have user proactive bill management capability and be used in the aforementioned broadband communication system. The activity log may log, for example, incoming calls directory numbers (DNs) and outgoing call DNs in a database. The database containing the activity log may be provided at a central system location, such as the at IP Central Station 200." Col. 31, ll. 10-17. Figure 8 of Kung includes an example call log. The call log is stored at BRG 300 and/or IP central station 200. Col. 32, ll.9-10. The system subscriber's customer premises equipment (broadband residential gateway 300)

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'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
		location server 55. Although not depicted, location server 55 may serve more than one switch. Location server 55 collects call log data that is used in the routing of calls to particular locations. "The location database includes a plurality of location records 520, with each record preferably being headed and identified by a unique caller identifier (ID) 520a." Emulation client 50a sends call log data (the telephone number to be dialed, for example) to location server 55, and location server 55 returns the same number or a different number from the call log data stored at location server 55. "Switching device 50 receives the dial request and invokes its emulation client 50a to convert the request into a SIP-observant format. In doing so, the emulation client 5a preferably transmits all or a portion of the telephone number to the location server 55 to determine whether the call is to be redirected to a different number or to a particular extension. Preferably, the location server 55 returns the same number or a different number if the call is to be redirected. In an alternative embodiment, the location server 55 returns a list of all potential numbers for redirecting the call, and each number is tried for a connection until a response is received. In yet another embodiment, the location server is only engaged if the initially dialed number does not result in a successful connection." Col. 4, ll. 34-47.	records the call log data and forwards the call log data to other locations, such as to IP central station 200, for billing purposes as an example. Figure 8; Col. 35, l. 37 - col. 36, l. 10. **Improved System**—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Wengrovitz to include a system management platform, for example, to collect call log data from the network devices of Wengrovitz.
Claim 14	The method of claim 13, wherein for each device the broadband network interface terminates a link from the shared packet network.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol	

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Wengrovitz in view of Kung

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
		set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.	
Claim 15	The method of claim 13, wherein the routing of telephone calls includes SIP signaling.	"Switching device 50 preferably creates a SIP INVITE request with the identified telephone number and transmits the request over the SIP-observant network 45. Switching device 60 receives the INVITE request and transmits the request to the SIP-observant phone 65. The SIP-observant phone 65 preferably alerts the callee of the incoming call by emitting, for example, a ringing sound. If the call is answered, switching device 60 indicates a successful connection by returning a SIP OK response to the emulation client 50a. The emulation client 50a translates the OK response to a PBX answer event and transmits it to the SIP-observant phone. In addition, the emulation client 50a confirms the receipt of the OK response by transmitting a SIP ACK message to switching device 60. The SIP-observant and observant phones 40, 65 may then engage in communication until one of the parties terminate the call." Col. 4, ll. 48-63.	
Claim 16	The method of claim 13, wherein the storage medium further stores processor-executable instructions to act as an SIP proxy server for devices using the telephone line interface and for devices using the computer data interface.	Switching device 50 is preferably a private branch exchange (PBX) unit managing incoming and outgoing calls for a particular location. Switching device 50 includes an emulation client 50a for converting incoming SIP messages into PBX messages and outgoing PBX messages into SIP messages. In its simplest form, the emulation client 50a takes the role of a UAC 15 in the data communication network. According to one embodiment of the invention, the emulation client 50a is implemented as a software program executing on the internal PBX processor. Col. 4, ll. 11-21.	

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'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 17	The method of claim 13, wherein the shared packet network uses IP protocols.	"FIG. 2 is a schematic block diagram of a data communication network supporting an emulation service for a SIP-unobservant phone 40 initiating telephonic communication with a SIP-observant phone 65. The SIP-unobservant phone 40 communicates over a SIP-observant network 45 that preferably supports the SIP signaling protocol set forth in RFC 2543. The SIP-observant network 45 is preferably a wide area network such as the Internet." Col. 3, ll. 52-59.	
Claim 18	The method of claim 13, wherein the shared packet network uses ATM protocols.	SIP is transport layer independent. Therefore, SIP supports the underlying transport protocol of IP over ATM.	
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.	Further in view of Osterhout D3-claim 19

APPENDIX D3

Wengrovitz and Kung further in view of Osterhout

'519 Claim	Claim Limitations	Wengrovitz U.S. Patent 7,035,248	Secondary References
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface.	"Session Initiation Protocol (SIP) is a signaling protocol for creating, modifying, and terminating multimedia sessions." Col. 1, ll. 19-21.	To the extent that Wengrovitz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Wengrovitz to provide an interface for video conferencing data, for example.

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Baratz

'519 Claim	Claim Limitation	Baratz U.S. Patent 5,541,996
Claim 1	A network device (telephony server 44 in Fig. 1) comprising: a plurality of communication interfaces, including a telephone line interface (**(a) remote subscriber interface module 172 in Fig. 4 and Fig. 1, including telephone interface 102 of Fig. 4 and/or** **(b) telephony service module 170 in Fig. 1))** a computer data interface (network interface card 43 of Fig. 1), and a broadband network interface (internet interface module 45 in Fig. 1)	System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer. Col. 5, ll. 18-30. Telephony server modules and their associated software may be installed in any host computer attached to network 37. Figure 1; Col. 5, ll. 31-33. "On the network side, telephony server 44 is coupled to network 37 via network interface cards (NIC) 43 installed in a host computer 40. On the telephone network side, telephony server 44 is coupled to one or more central office (CO) lines 48 originating from a public switched telephone network (PSTN) 12 via one or more telephony server modules (TSM) 170. It is not required that telephony server module 170 reside in telephony server 44. Telephony server module 170 may reside in any host computer 40 attached to network 37. CO lines 48 may include Plain Old Telephone Service (POTS), T1, E1, Integrated Services Digital Network (ISDN), Asynchronous Transfer Mode (ATM) or Frame Relay. In addition, telephony server 44 is coupled to one or more internet lines 50 through an internet interface module (IIM) 45." Col. 4, ll. 10-24.
	a processor (the processor of server 44, which is stated to be implemented on a host PC)	See e.g., Col. 8, ll. 29-30 ("Telephony server module 170 [on telephony server 44 in one example] communicates with the **host PC** within which it resides through PC interface 78 . . .").
	a machine-readable storage medium (memory of server 44) which during use stores	Telephony server modules and their associated software may be installed in any host computer attached to network 37. Figure 1; Col. 5, ll. 31-33.
	a call processing application (at least a portion of pbx call processing module 154 of Fig. 6, within telephony server 44 of Fig 1) and	**call processing application:** Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,541,996
		server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."
	service profiles (database of records stored on server 44, Col. 6 ll. 15-20),	**service profiles:** "To support internal and external call capability, telephony server 44 maintains a database of user records. Each record holds relevant information such as extension number, user name, class of service, password, etc. Physical extensions are treated independently of logical extension numbers." Figure 1; Col. 6, ll. 16-20.
	and which stores executable instructions to mediate communications between the plurality of communication interfaces (the portion the code within telephony server 44 that **(a) directs packets received over network 37 to either internet interface module 45 or telephone service module 170, or** **(b) processes a call),**	**instructions to mediate communications** Voice packets received over network 37 from telephony clients 41 by telephony server 44 are directed to the telephony service module 170 within telephony server 44. Telephony service module 170 then depacketizes and converts the digital data into analog voice data for transmission onto telephone ll. 48. Col. 6, ll. 10-15. Further, the same telephony clients 41 connected to telephony server by network 37 have access to the internet through internet lines 50 or 14 connected to telephony server 44 through the internet interface module 45. Col. 4, ll. 22-28; Col. 7, ll. 12-18; Figs. 1 and 2. Thus, the portion of code within telephony server 44 that receives the voice packets from network 37 and provides them to either the telephony service module 170 or the internet interface module 45 are the instructions to mediate communications. The same analysis applies to telephony client 42, which communicates with telephony server 44 over cable 47, using the remote subscriber interface module 172 of telephony server 44.
	the instructions causing the network device to detect network signaling events or trigger points in a telephone call (receipt and detection by telephony server 44 of a call, which telephony server 44 then processes) and	Network server 44, which "provides centralized common management and all necessary resources for providing PBX switching control services" detects calls and in response invokes various processes that are classified as "call processing." Col. 5, ll. 1-3. For example, a feature supplied by system 10 is call switching. During call setup, network addresses are supplied to the called and calling parties by telephony server 44 in response to server 44 detecting the call. Col. 6. ll. 48-53.
	invoke the call processing application in response to the detected network signaling events or trigger points (PBX call processing module 154 in telephony	**invoke the call processing application:** At least a portion of PBX call processing module 154 is invoked in response to receipt of packets over network

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'519 Claim	Claim Limitations	Baratz - U.S. Patent 5,742,596
	server 44, Fig. 6),	37, for example. "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44. Functions include the standard PBX capabilities described above." Col. 10, ll. 20-22. Also, "telephony server 44 provides centralized common management and all necessary resources for providing PBX switching control services." Col. 5, ll. 1-3.
	the call processing application operating according to parameters defined in the service profiles	PBX call processing module 154 operates according to parameters defined in the service profiles. "To support internal and external call capability, telephony server 44 maintains a database of user records. Each record holds relevant information such as extension number, user name, class of service, password, etc. Physical extensions are treated independently of logical extension numbers." Figure 1; Col. 6, ll. 16-20.
	wherein the network device consists of one or more customer premise equipment modules (system 10 or telephony server 44).	System 10 or telephony server 44 consist of one or more customer premise equipment modules. System 10 is a private branch exchange, which is intended for a customer premise. (Abstract)
Claim 2	~~The network device of claim 1, wherein the plurality of communication interfaces further includes a video streaming device interface.~~	Non-voice traffic, e.g., voice data processed by server 44. "Alternatively, control port 16 may be accessed through network 37. A voice port 18 includes a physical ~~port and associated software for use by external devices or systems. Such applications include ATM, Frame Relay, other network transport or switching equipment or even an audio device such as a tape recorder, radio, etc.~~" Col. 7, ll. 21-26.
Claim 3	The network device of claim 1, wherein the broadband network interface terminates a broadband network link that joins a customer premises to a packet carrier network.	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.

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'519 Claim	Claim Limitations	Baratz - U.S. Patent 5,742,596
Claim 4	The network device of claim 1, wherein the instructions further cause the network device to route IP data between the computer data interface and the broadband network interface.	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.
Claim 5	The network device of claim 1, wherein the network device is contained in a single physical enclosure.	Telephony server 44 is contained in a single physical enclosure. Figure 1.
Claim 7	~~The network device of claim 1, wherein the storage medium during use further stores call routing tables, and the instructions further cause the network device to perform call routing for telephone calls that use the telephone line interface.~~	"An automatic call distribution component 32 provides automatic call routing in accordance with one of the well-known standards such as, automatic number ~~identification (ANI) and calling line identification (CLI). Outside callers need not go through IVR system 34 to reach their party automatic call distribution component 32 utilizes call data transmitted from the CO to determine the called party's extension.~~" Col. 7, ll. 60-66.
Claim 8	~~The network device of claim 1, wherein the storage medium during use further stores call routing tables, and the instructions further cause the network device to perform call routing for telephone calls according to the call routing tables, the telephone calls using the telephone line interface.~~	"An automatic call distribution component 32 provides automatic call routing in accordance with one of the well-known standards such as, automatic number ~~identification (ANI) and calling line identification (CLI). Outside callers need not go through IVR system 34 to reach their party automatic call distribution component 32 utilizes call data transmitted from the CO to determine the called party's extension.~~" Col. 7, ll. 60-66.
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising:	**shared packet network:** network 37 carries digitized voice and control date over network transmitted by telephony servers 44 and telephony clients 41 as well as

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596
	locating a system management platform in a shared packet network (network 37), the system management platform collecting call log data from a plurality of network devices ; and	other non-voice data packets originating from other devices on network 37, such file server 46 and hub or router 48. Col. 46-49; Col. 4, ll. 49-53. **system management platform collecting call log data from a plurality of network devices:** Billing system 36, which collects call log data from PBX kernel 10, which includes a plurality of network devices (telephony servers 44). "A billing system 36 provides traditional billing capability to system 10 for tracking telephone usage, call times, call costs, etc." Col. 7, ll. 50-52. Alternatively, or in combination, system administrator 20 provides configuration and administration features, including user configuration, hardware and software additions and deletions, maintaining a database of users, defining class of service, monitoring system status, and generating reports. Col. 7, ll. 28-34.
	distributing the plurality of network devices (telephony servers 44; pbx kernel 10 includes one or more telephony servers 44) that each include a telephone line interface (telephone service module 170); a computer data interface (network interface card 43), a broadband network interface terminating a link from the shared packet network (internet interface module 45)	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.
	a processor (the processor of server 44, which is stated to be implemented on a host PC)	See e.g., Col. 8, ll. 29-30 ("Telephony server module 170 [on telephony server 44 in one example] communicates with the host PC within which it resides through PC interface 78 . . . ").
	a machine-readable storage medium storing processor-executable instructions to control telephone calls (pbx call processing module 154),	Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."
	the instructions causing each network device to route telephone calls in a peer-to-	PBX kernel 10, which includes a plurality of network devices (telephony servers

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596
	peer fashion over the shared packet network (the calls within network 37 occur in a peer to peer fashion), and to send call log data to the system management platform (call log data is sent from PBX kernel 10 to billing system 36).	44), sends call log data to billing system 36. "A billing system 36 provides traditional billing capability to system 10 for tracking telephone usage, call times, call costs, etc." Col. 7, ll. 50-52.
Claim 14	The method of claim 13, wherein for each device the broadband network interface terminates a link from the shared packet network.	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.
Claim 17	The method of claim 13, wherein the shared packet network uses IP protocols.	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.
Claim 18	The method of claim 13, wherein the shared packet network uses ATM protocols.	Non-voice traffic, e.g., voice data processed by server 44. "Alternatively, control port 16 may be accessed through network 37. A voice port 18 includes a physical port and associated software for use by external devices or systems. Such applications include ATM, Frame Relay, other network transport or switching equipment or even an audio device such as a tape recorder, radio, etc." Col. 7, ll. 21-26.

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,421,596
Claim 19	~~The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface.~~	Non-voice traffic, e.g., voice data processed by ~~server 44.~~ ~~"Alternatively,~~ control port 16 may be accessed ~~through~~ network 37. A voice port 18 includes a physical port and associated software for use by external devices or systems. Such ~~applications~~ include ATM, Frame Relay, other network transport or switching equipment or even an audio ~~device such as a tape~~ recorder, radio, etc." Col. 7, ll. 21-26.

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,421,596	Secondary References
		6, ll. 16-20.	
	~~wherein the network device consists of~~ one or more customer premise equipment modules (system 10 or telephony server 44).	System 10 or telephony server 44 consist of one or more ~~customer premise equipment modules. System 10 is a private branch exchange, which is intended for a customer premise.~~ (Abstract)	
Claim 2	The network device of claim 1, wherein the plurality of communication interfaces further includes a video streaming device interface.	Non-voice traffic, e.g., voice data processed by server 44. "Alternatively, control port 16 may be accessed through network 37. A voice port 18 includes a physical port and associated software for use by external devices or systems. Such applications include ATM, Frame Relay, other network transport or switching equipment or even an audio device such as a tape recorder, radio, etc." Col. 7, ll. 21-26.	To the extent that Baratz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Baratz to provide an interface for

'519 Claim	Claim Limitation	Baratz U.S. Patent 5,742,596	Secondary References
			video conferencing data, for example.
Claim 9	A network device (telephony server 44 in Fig. 1) comprising: a broadband network interface (internet interface module 45 in Fig. 1); a plurality of communication interfaces, including a telephone line interface ((a) remote subscriber interface module 172 in Fig. 4 and Fig. 1, including telephone interface 102 of Fig. 4 and/or (b) telephony service module 170 in Fig. 1)) and a computer data interface (network interface card 43 of Fig. 1);	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30. "On the network side, telephony server 44 is coupled to network 37 via network interface cards (NIC) 43 installed in a host computer 40. On the telephone network side, telephony server 44 is coupled to one or more central office (CO) lines 48 originating from a public switched telephone network (PSTN) 12 via one or more telephony server modules (TSM) 170. It is not required that telephony server module 170 reside in telephony server 44. Telephony server module 170 may reside in any host computer 40 attached to network 37. CO lines 48 may include Plain Old Telephone Service (POTS), T1, E1, Integrated Services Digital Network (ISDN), Asynchronous Transfer Mode (ATM) or Frame Relay. In addition, telephony server 44 is coupled to one or more internet lines 50 through an internet interface module (IIM) 45." Col. 4, ll. 10-24. Telephony server modules and their associated software may	

'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
		6, ll. 16-20.	
	wherein the network device consists of one or more customer premise equipment modules (system 10 or telephony server 44)	System 10 or telephony server 44 consist of one or more customer premise equipment modules. System 10 is a private branch exchange, which is intended for a customer premise (Abstract)	
Claim 6	The network device of claim 1, wherein the instructions further cause the network device to provide a SIP user agent to represent a telephone that uses the telephone line interface.	**SIP user agent:** Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."	**Base System**—Baratz discloses a network de for establishing a voice-over-packet netw architecture (*e.g.*, system 10 or telephony se 44). **Known Technique**— A person having ordi skill in the art in 2001 would have been w aware of SIP technology since it became Internet Engineering Task Force (IETF) stan in 1999 as RFC 2543. Osterhout teaches a user agent to represent a non-SIP telephone a SIP proxy server that mediates all communications. For example, Osterhout states: "If the criteria met, the control module 126 may set up remainder of the resources necessary to establi SIP-based connection to a recipient teleph device 120. The control module may invoke module 122 and SIP stack 124 to transmit, rec parse SIP commands, a Transfer Con Protocol/Internet Protocol (TCP/IP) client 130 Internet or other network interface, and a F Time Protocol (RTP) stack 134 to man streaming media and other information for processing." Col. 4, l. 65 - Col. 5 - l. 6.

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
			Osterhout explains the need for transparently selecting SIP-based, POTS, or other telephone service: "In a further embodiment, the telephon device itself may be both POTS and SIP enable in which case the base of the device contains b telephone (RJ-11 or other) connections plus a network connection or port for SIP, with contr logic residing in the telephone device and no computer or other host being necessary. In a ye further embodiment, the telephone device may contain control logic and connections for each POTS, USB and SIP for maximum connectivity **Improved System**—A person having ordi skill in the art in 2001 would have considere obvious to modify the base system of Barat include these well-known claimed components and apply the well-known techni taught by Osterhout, for example, to enable telephones in *Baratz* to participate in SIP-b telephony systems.
Claim 13	A method for establishing a voice-over-packet network architecture, the method comprising: locating a system management platform in a shared packet network (network 37), the system management platform collecting call log data from a plurality of network devices ; and	**shared packet network:** network 37 carries digitized voice and control date over network transmitted by telephony servers 44 and telephony clients 41 as well as other non-voice data packets originating from other devices on network 37, such file server 46 and hub or router 48. Col. 46-49; Col. 4, ll. 49-53. "On the network side, telephony server 44 is coupled to network 37 via network interface cards (NIC) 43 installed in a host computer 40. On the telephone network side, telephony	

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
Claim 9	A network device **(telephony server 44 in Fig. 1)** comprising: a broadband network interface **(internet interface module 45 in Fig. 1)**; a plurality of communication interfaces, including a telephone line interface (**(a) remote subscriber interface module 172 in Fig. 4 and Fig. 1, including telephone interface 102 of Fig. 4 and/or** **(b) telephony service module 170 in Fig. 1))** and a computer data interface **(network interface card 43 of Fig. 1)**;	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30. Telephony server modules and their associated software may be installed in any host computer attached to network 37. Figure 1; Col. 5, ll. 31-33. "On the network side, telephony server 44 is coupled to network 37 via network interface cards (NIC) 43 installed in a host computer 40. On the telephone network side, telephony server 44 is coupled to one or more central office (CO) lines 48 originating from a public switched telephone network (PSTN) 12 via one or more telephony server modules (TSM) 170. It is not required that telephony server module 170 reside in telephony server 44. Telephony server module 170 may reside in any host computer 40 attached to network 37. CO lines 48 may include Plain Old Telephone Service (POTS), T1, E1, Integrated Services Digital Network (ISDN), Asynchronous Transfer Mode (ATM) or Frame Relay. In addition, telephony server 44 is coupled to one or more internet lines 50 through an internet interface module (IIM) 45." Col. 4, ll. 10-24.	

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
	a processor (the processor of server 44, which is stated to be implemented on a host PC)	See e.g., Col. 8, ll. 29-30 ("Telephony server module 170 [on telephony server 44 in one example] communicates with the host PC within which it resides through PC interface 78 . . . ").	
	a machine-readable storage medium that stores processor-a machine-readable storage medium that stores processor-executable instructions to provide SIP agents (memory of server 44)	Telephony server modules and their associated software may be installed in any host computer attached to network 37. Figure 1; Col. 5, ll. 31-33.	
	the instructions causing the network device to provide a SIP user agent to represent a non-SIP telephone that uses the telephone line interface (at least a portion of pbx call processing module 154 of Fig. 6, within telephony server 44 of Fig 1), and the instructions further causing the network device to implement a SIP proxy server (SIP stack 124) that mediates all SIP communications over the broadband network interface involving the non-SIP telephone.	SIP user agent: Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ." SIP proxy server: Voice packets received over network 37 from telephony clients 41 by telephony server 44 are directed to the telephony service module 170 within telephony server 44. Telephony service module 170 then depacketizes and converts the digital data into analog voice data for transmission onto telephone lines 48. Col. 6, ll. 10-15. Further, the same telephony clients 41 connected to telephony server by network 37 have access to the internet through internet lines 50 or 14 connected to telephony server 44 through the internet interface module 45. Col. 4, ll. 22-28; Col. 7, ll. 12-18; Figs. 1 and 2.	Base System—Baratz discloses a network device for establishing a voice-over-packet network architecture (e.g., system 10 or telephony server 44). Known Technique— A person having ordinary skill in the art in 2001 would have been well-aware of SIP technology since it became an Internet Engineering Task Force (IETF) standard in 1999 as RFC 2543. Osterhout teaches a SIP user agent to represent a non-SIP telephone and a SIP proxy server that mediates all SIP communications. For example, Osterhout states: "If the criteria are met, the control module 126 may set up the remainder of the resources necessary to establish a SIP-based connection to a recipient telephone device 120. The control module may invoke SIP module 122 and SIP stack 124 to transmit, receive parse SIP commands, a Transfer Control Protocol/Internet Protocol (TCP/IP) client 130 for Internet or other network interface, and a Real Time Protocol (RTP) stack 134 to manage streaming media and other information for call

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
			processing." Col. 4, l. 65 - Col. 5 - l. 6. Osterhout explains the need for transparently selecting SIP-based, POTS, or other telephone service: "In a further embodiment, the telephone device itself may be both POTS and SIP enabled, in which case the base of the device contains both telephone (RJ-11 or other) connections plus a network connection or port for SIP, with control logic residing in the telephone device and no computer or other host being necessary. In a yet further embodiment, the telephone device may contain control logic and connections for each of POTS, USB and SIP for maximum connectivity." Improved System—A person having ordinary skill in the art in 2001 would have considered it obvious to modify the base system of Baratz to include these well-known claimed SIP components and apply the well-known techniques taught by Osterbout, for example, to enable the telephones in *Baratz* to participate in SIP-based telephony systems.
Claim 10	The network device of claim 9, wherein the computer data interface passes IP data.	"System 10 also supports regular telephone sets 42 that are not coupled to a host computer. In this case, referring to FIG. 1, telephone 42 is coupled directly to a remote subscriber interface module 172, installed in a host computer, via a traditional cable line 47, independent of network 37. Remote subscriber interface module 172 provides PBX services to telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed,	

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		it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.	
Claim 11	The network device of claim 9, wherein the plurality of interfaces includes a video streaming device interface.	Non-voice traffic, e.g., voice data processed by server 44. "Alternatively, control port 16 may be accessed through network 37. A voice port 18 includes a physical port and associated software for use by external devices or systems. Such applications include ATM, Frame Relay, other network transport or switching equipment or even an audio device such as a tape recorder, radio, etc." Col. 7, ll. 21-26.	To the extent that Baratz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Baratz to provide an interface for video conferencing data, for example.

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'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
Claim 12	The network device of claim 9, wherein the network device is contained in a single physical enclosure.	Telephony server 44 is contained in a single physical enclosure.	To the extent that Baratz does not explicitly teach that the network device is contained in a single physical enclosure, the use of a single physical enclosure was well known in the art by 2001. For example, Osterhout teaches providing a call processing application and communication interfaces in a single physical enclosure. Figure 1. Therefore the use of a single physical enclosure would have been a simple design choice to one of ordinary skill in the art.

'519 Claim	Claim Limitations	Baratz U.S. Patent 5,742,596	Secondary References
	module 170); a computer data interface (network interface card 43); a broadband network interface terminating a link from the shared packet network (internet interface module 45)	telephones lacking a host computer and connects them to network 37. Depending on the type of LAN cabling installed, it might be possible to piggy back line 47 onto an unused pair within the LAN cabling. For example, when using 4 pair cable to wire an Ethernet LAN, two spare pairs are available. These spare pairs may be used to connect the telephone sets that are not connected to a host computer." Col. 5, ll. 18-30.	
	a processor (the processor of server 44, which is stated to be implemented on a host PC)	See e.g., Col. 8, ll. 29-30 ("Telephony server module 170 [on telephony server 44 in one example] communicates with the host PC within which it resides through PC interface 78 . . . ").	
	a machine-readable storage medium storing processor-executable instructions to control telephone calls (pbx call processing module 154);	Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."	
	the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (the calls within network 37 occur in a peer to peer fashion). and to send call log data to the system management platform (call log data is sent from PBX kernel 10 to billing system 36).	PBX kernel 10, which includes a plurality of network devices (telephony servers 44), sends call log data to billing system 36. "A billing system 36 provides traditional billing capability to system 10 for tracking telephone usage, call times, call costs, etc." Col. 7, ll. 50-52.	
Claim 15	The method of claim 13, wherein the routing of telephone calls includes SIP signaling.	**SIP signaling:** Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."	**Base System**—Baratz discloses a network de for establishing a voice-over-packet netw architecture (*e.g.*, system 10 or telephony se 44). **Known Technique**— A person having ordi skill in the art in 2001 would have been w aware of SIP technology since it became

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			include these well-known claimed components and apply the well-known technic taught by Osterhout, for example, to enable telephones in *Baratz* to participate in SIP-b telephony systems.
Claim 16	The method of claim 13, wherein the storage medium further stores processor-executable Instructions to act as an SIP proxy server for devices using the telephone line interface and for devices using the computer data interface.	**SIP proxy server:** Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."	**Base System**—Baratz discloses a network de for establishing a voice-over-packet netw architecture (*e.g.*, system 10 or telephony se 44). **Known Technique**— A person having ordi skill in the art in 2001 would have been w aware of SIP technology since it became Internet Engineering Task Force (IETF) stanc in 1999 as RFC 2543. Osterhout teaches a user agent to represent a non-SIP telephone a SIP proxy server that mediates all communications. For example, Osterhout states: "If the criteria met, the control module 126 may set up remainder of the resources necessary to establi SIP-based connection to a recipient teleph device 120. The control module may invoke module 122 and SIP stack 124 to transmit, rec parse SIP commands, a Transfer Con Protocol/Internet Protocol (TCP/IP) client 130 Internet or other network interface, and a R Time Protocol (RTP) stack 134 to man streaming media and other information for

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	a machine-readable storage medium storing processor-executable instructions to control telephone calls (pbx call processing module 154),	Referring to Figure 6, "One level up, is a PBX call processing module which functions to control all call processes within telephone server 44." Col. 10, ll. 20-22. Figure 6 shows "the software architecture for telephony server 44 . . . ."	
	the instructions causing each network device to route telephone calls in a peer-to-peer fashion over the shared packet network (the calls within network 37 occur in a peer to peer fashion). and to send call log data to the system management platform (call log data is sent from PBX kernel 10 to billing system 36).	PBX kernel 10, which includes a plurality of network devices (telephony servers 44), sends call log data to billing system 36. "A billing system 36 provides traditional billing capability to system 10 for tracking telephone usage, call times, call costs, etc." Col. 7, ll. 50-52.	
Claim 19	The method of claim 13, wherein the plurality of network devices each further include a video streaming device interface.	Non-voice traffic, e.g., voice data processed by server 44. "Alternatively, control port 16 may be accessed through network 37. A voice port 18 includes a physical port and associated software for use by external devices or systems. Such applications include ATM, Frame Relay, other network transport or switching equipment or even an audio device such as a tape recorder, radio, etc." Col. 7, ll. 21-26.	To the extent that Baratz does not explicitly teach a video streaming device interface, Osterhout (U.S. Patent 7,197,029) teaches interfaces for a telephone that make use of audio, video, and other media. Col. 6, ll. 1-5. Osterhout explains the need for video interfaces in network devices for video conferencing: "The native media applications may likewise include an audio/visual module 134b, such as an audio management tool such as an MP3 codec, RealAudio or other package. A video management tool such as Avid, RealVideo or other packages or protocols may also be used for video teleconferencing or other applications, if the USB

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			telephone 102, host computer 106 or other resources are equipped with video input. Video or combined audio/video streams again may be output over data network or telephony links. Other multimedia applications are possible." Col. 5, l. 62 - Col. 6, l. 5. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to utilize Osterhout's video streaming device interface in Baratz to provide an interface for video conferencing data, for example.