Abstract: This invention shows a method for operating a voice communications network that comprises dynamically associating a private number with at least one public number of a circuit-switched voice communication network, authenticating a user of a private number without reliance on a static reproducible data code, receiving an incoming call to the public number and routing the incoming call from a caller to the private number. The method also shows the generation of an outgoing call from the private number and passing the outgoing call through the public number while generating calling party information to a target which preserves the privacy of the caller, and altering an associating of the private number and at least one public number. The system therefore acts as a proxy with authentication by means of dynamic code security. The caller and the user of the private number share seamless round-trip telephone communications while preserving the anonymity of the user of the private number. The system functionality is advantageously presented as a restricted option space defined by a "skin," which provides a consistent and purposeful set of functionality useful for a predetermined population of users.
SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published: with international search report

Date of publication of the international search report: 14 May 2009
A. CLASSIFICATION OF SUBJECT MATTER
IPCG(8) - H04M 1/00 (2007.10)
USPC - 379/161
According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED
Minimum documentation searched (classification system followed by classification symbols)
IPCG(8) - H04M 1/00 (2007.10)
USPC - 379/161

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Database: MicroPatent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
  "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
  "O" document referring to an oral disclosure, use, exhibition or other means
  "P" document published prior to the international filing date but later than the priority date claimed
  "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
  "&" document member of the same patent family

Date of the actual completion of the international search
04 December 2007

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201

Date of mailing of the international search report
06 FEB 2008

Authorized officer:
Blaine R. Copenhaver
PCT Helpdesk: 571-272-4200
PCT ODP: 571-272-7774
Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. [ ] Claims Nos.:
   because they relate to subject matter not required to be searched by this Authority, namely:

2. [ ] Claims Nos.:
   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. [ ] Claims Nos.:
   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

See Extra Sheet (Page 10)

1. [ ] As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. [ ] As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. [ ] As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. [x] No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: 1-14 and 16

Remark on Protest  
[ ] The additional search fees were accompanied by the applicant’s protest and, where applicable, the payment of a protest fee.

[ ] The additional search fees were accompanied by the applicant’s protest but the applicable protest fee was not paid within the time limit specified in the invitation.

[ ] No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2007)
This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I, claims 1-14 and 16, drawn to a method for operating a voice communications network.  
Group II, claim 15, drawn to a method for operating a voice communications system.  
Group III, claim 17, drawn to a method for operating a voice communications network.

The inventions listed as Groups I, II, and III do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the special technical feature of the Group I invention is generating an outgoing call from a private number and passing it through the public number while generating calling party information to a target which preserves a privacy of the caller as claimed therein, is not present in the invention of Groups II - III; the special technical feature of the Group II invention is defining a restricted opinion space within each of the first, second, third option set for controlling system behavior where at least two option sets each differently controlling the system and being selectively applied to the user as claimed therein is not present in the invention of Groups I and III; and the special technical feature of the Group III invention is statistically associating at least one public number with a published return number of a circuit switched voice communication and generating an outgoing call from a circuit corresponding to a private number and routing it through the circuit switched voice communication network to a target user through the associated public number as claimed therein is not present in the invention of Groups I and II.

Since none of the special technical features of the Group I, II, and III inventions is found in more than one of the inventions, unity of invention is lacking.