training sequence that starts (step **250**) with a subscriber turning his or her CU on in step **251**, after which the CU prompts (step **252**) for a call destination entry. The subscriber then enters (step **253**) a call destination, and a query (step **254**) is made to ascertain whether the call destination is an emergency number such as a 911 call destination. If the call destination is not an emergency number, the CU prompts (step **255**) the subscriber to speak.

As the subscriber speaks, the CU collects (step **256**) the user-specific voice sound, otherwise called a frame of speech, and then samples (step **257**) the speech to determine speech characteristic model (SCM) parameters which are stored in local CU memory in step **258** and refined and restored in local CU memory in step **259**.

A determination of whether a refinement SCM threshold is satisfied takes place in step **260**. If the refinement SCM threshold is not satisfied, steps **255–260** are repeated. If the refinement SCM threshold is satisfied, the CU stores (step **261**) the SCM parameters in local CU memory. Then the CF establishes a link to the CF and transfers the SCM parameters to the CF (step **262**). The CF then compares (step **263**) the SCM parameters with the authorized user SCM parameters in the authorized user database stored in the CF.

The CF then conducts a query (step **264**) to ascertain whether the SCM parameters are comparable with the authorized SCM parameters stored in the authorized user database. If the SCM parameters are incomparable with the authorized SCM parameters stored in the authorized user database, steps **255–264** are repeated. If the SCM parameters are still incomparable with the authorized user SCM parameters stored in the UIC after N retries (step **270**), the CU turns off (step **272**) to end the call (step **274**).

However, if in step **264** a determination is made by the CF that the SCM parameters are comparable with the authorized user SCM parameters stored in the authorized user database, the CF prompts (step **265**) the CU for a call destination to establish (step **266**) a communication link with another communication unit to end (step **267**) the authorization process.

If in step **254** a determination is made that the call destination is an emergency number such as 911, steps **265–267** are immediately carried out, bypassing steps **255–264**.

In summary, the invention provides a system and method which inhibits unauthorized access to a communication system by using user-specific voice data parameters as a user discriminator. The method and system is very secure and precludes the need for PINs or any per-call manual "passwording". Furthermore, should a subscriber wish to extend the authorized use of his or her communication unit to other subscribers, the SID can be used to initiate an authorization sequence for one or more additional subscribers. In this regard, the UIC, CIJ or CF would then maintain a complete set of a plurality of authorized SCMs for that SID, any one of which, when correlating with the SCM developed from the authorization training, discussed in combination with FIGS. **8–10**, enables the call establishment sequence to continue.

Additionally, should an unauthorized person attempt to use another subscriber's CU, the normal SCM connection training generates the subscriber's SCM which, when compared with the SCM database of authorized callers stored in the UIC, CU or CF, fails to correlate, and the call establishment procedure terminates.

Consistent with the teachings of the invention, after a communication link has been established during an authorization training sequence at steps **215**, **245** and **266** in FIGS. **8–10**, respectively, the CU and/or the CF can be employed for monitoring, either periodically or continually, the subscriber's voice and comparing the subscriber's voice with stored authorized SCM parameters during the call to verify that an authorized user is using the CU throughout the duration of the call. If an authorized user were to take the CU from the user and start speaking into the CU, the CU and/or CF would terminate the call.

Furthermore, and over time, the CU and/or the CF can also be employed for either periodically or continually monitoring one or more authorized user's voices to continually update authorized SCM parameters. In this regard, the algorithms governing the operation of the connection training sequences and authorization training sequences can be customized in accordance with specific needs of an authorized user or authorized users.

The invention has been described above with reference to a preferred embodiment. However, those skilled in the art will recognize that changes and modifications can be made in the described embodiments without departing from the nature and scope of the invention. Various changes and modifications to the embodiments herein chosen for purposes of illustration will readily occur to those skilled in the art. To the extent that such modifications and variations do not depart from the spirit of the invention, they are intended to be included within the scope thereof which is assessed only by a fair interpretation of the following claims.

Having fully described the invention in such clear and precise terms as to enable those skilled in the art to understand and practice the same, the invention claimed is:

1. A cellular telephone, comprising:

a speech input device for receiving a voice sound from a user desiring to access said cellular telephone and establish a communication link;

a user information card interface configured to receive a user identification card having a user identification number for enabling user-specific voice data of said user;

a processor coupled to said speech input device and said user information card interface, said processor configured to compare said voice sound with said user-specific voice data and deny said user access to the cellular telephone such that a communication link may not be established unless said voice sound is comparable with said user-specific voice data or a call destination is an emergency number said processor being located within said cellular telephone.

2. The cellular telephone of claim **1**, said cellular telephone further comprising a memory device configured to store said user-specific voice data.

3. The cellular telephone of claim **2**, wherein said memory device is configured to store user-specific voice data for a plurality of users.

4. The communication unit of claim **1**, and further comprising a user information card interface adapted to receive a user information card containing said user-specific voice data.

5. The communication unit of claim **1**, and further comprising a user information card interface coupled to the processor for reading the user identification number from a user information card inserted into the communication unit, for accessing the user-specific voice data stored on the user information card for the user identification number.

6. The cellular telephone of claim **1**, wherein said user-specific voice data comprises a set of speech cavity model parameters.

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