**[0005]** There are nonetheless more situations where it is desired to make use of the mobile device but our attention must be focused on something else, like when doing exercise, such as fitness training or jogging.

**[0006]** There is therefore a need for a system that allows people to make the maximum use of their mobile phones when performing focus-demanding activities without causing a hazardous situation.

**Summary of the invention**

**[0007]** The present invention provides a system that solves the abovementioned problem, by combining the current mobile device technology with the subtlety and personal touch of the human interaction.

**[0008]** In the first aspect of ~~T~~the invention, there is ~~provides~~ provided a mobile device comprising:
a memory for storing contact information of the mobile device,
a transceiver for exchanging voice and/or data signals within a telecommunications network,
the mobile device configured to:
provide the contact information to a first server in the network,
initiate, in response to a first user input, a first voice connection to ~~the~~ a second server or telephone switch; and at least one of
receive, from the first server, command data for initiating a second voice connection to a called party identified in the contact information; and
send authorization to the first server to access user credentials included in the contact information.

**[0009]** In the following description, the mobile device, which may be a mobile communication device, may also be referred to as mobile phone or only phone. However, the invention may also be applied to other types of mobile devices, provided said devices are capable of communication via a data network and setting up a voice connection with remote human operator. Examples include laptop computers and tablet computers.

**[0010]** The first and second servers may ~~be~~ form a group of connected server devices. In particular the providing of contact information may be done with a first physical server device, whereas the voice connection is made with a second physical server device (such as a telephone switch). The operator connected to the second physical server to handle the voice communication with the user has access to the contact information via a connection with the first physical server. For ease of reference, all of these server devices may be collectively identified as "server" hereafter.

**[0011]** The invention provides a mobile device that can synchronize the contact and address book information of the mobile device user, including phone numbers and addresses of the contacts, with a server accessible from within the telecommunications network where the mobile device is. Furthermore, the mobile device can also synchronize user credentials for internet-based services, such as e-mail services like Gmail or Yahoo, social media services like Facebook, Twitter, LinkedIn or Instagram, instant messaging services such as Whatsapp, or the like. The server can also be referred to as VIPconn server throughout the present description. Equivalently, the user of the mobile device can be referred to as user or caller throughout the following description.

**[0012]** When the user is driving or performing another focus-demanding activity and he wants to make use of the mobile device to make a phone call, then the user does not need to search the phone number of the person he wants to reach, but instead he needs only contact the server, and the control of the user's contact information will be taken by the server.

**[0013]** In an embodiment according the invention, the mobile device is further configured to, when the mobile device is in a standby state, receive the first user input as a single button push action or a single screen tap action .This allows a user to quickly and safely (e.g. while driving) establish the voice connection.

**[0014]** In an embodiment according the invention, the mobile device is further configured to send the authorization to the server to access the user credentials after receiving a second user input. This allows for a secure mechanism for the server to have access to the user information, since the user credentials for the internet-based services can only be accessible after the user has sent his

required identification codes for interacting with the API or web server of a network service such as an email server, VoIP platform, Twitter, Facebook, Instagram, Whatsapp, etc.

**[0019]** In an embodiment according the invention, the mobile device is further configured to stop providing the server with contact information when the voice connection is completed.

**[0020]** In an embodiment according the invention, the mobile device is further configured to store information about the time of use of the voice connection.

**[0021]** In an embodiment according the invention, the voice connection with the server is a voice connection with a human operator connected to the server. The human operator can consult the contact information provided to the server. The human operator can then make the server issue the required command data.

**[0022]** In an embodiment according the invention, the provided contact information comprises encrypted information, and upon setup of the connection with the server, the mobile device sends a key for decrypting the encrypted information. This makes sure that personal data (the contact information) provided to the server remain unreadable for others until the moment the mobile device sends a decryption key.

**[0023]** In a second aspect of ~~The~~ the invention, there is further ~~provides~~ provided a server, the server comprising:
a transceiver for exchanging data signals within a telecommunications network,
a memory for storing contact information;
the server configured to:
receive contact information from a mobile device in the network,
~~receive a first voice connection from the mobile device;~~ and performing a service, said service including at least one of

sending command data from the server to the mobile device for initiating, by the mobile device, a second voice connection to a called party identified in the contact information; and

receiving from the mobile device authorization to access user credentials based on the contact information and accessing an internet-based server using the user credentials.

human operator can request further instructions from the user of the mobile device, such as retry or leave a voicemail.

**[0029]** In an embodiment according the invention, the server is configured to terminate the voice connection when the service is completed. The user can, however, at any time terminate the communication with the server, closing the access to the authorized user credentials. In an embodiment, the communication can be terminated by the same user interaction that started the setup of the first voice communication. This makes for an easy to remember user interface.

**[0030]** In an embodiment according the invention, the server is further configured to store information about the time of use of the service.

**[0031]** In an embodiment of the invention, the mobile device is further configured to store information about the time of use and type of the service. In order for the user to be able to keep track of the connections, the mobile device stores information about the time a conversation lasted, the time an Internet connection service lasted, and the type of service provided, such as reply to a Facebook private message, or post a message on Twitter.

**[0032]** In another embodiment according the invention, the server, when configured to receive from the mobile device authorization to access user credentials, eliminates said authorization when the service is completed. This allows for a secure service, wherein the user credentials are only accessible by the server while the communication is established.

**[0033]** In another embodiment according the invention, if contact information is not accessible from the mobile device, the server is further configured to provide the mobile device with the lastly received contact information. This allows for the mobile device to restore its contact information in case of loss due to for example a system format, and it also allows for the user to have his contact information updated in a new mobile device in case of a mobile device loss.

**[0034]** According to a third aspect of ~~The~~ the invention, there is further ~~provides~~ provided a computer program product comprising computer instructions which, when executed on a processor of a mobile device,

cause said mobile device to function as described above. The invention further provides a computer program product comprising computer instructions which, when executed on a processor of a server, cause said server to function as described above.

**[0035]** The invention thus provides a mobile device wherein the connection with the server is a voice connection with a human operator that operates the server. When the connection between the mobile device and the server is established, the server connects the user of the mobile device with the operator. From that point, the operator takes control of the information that the mobile device has synchronized with the server, and that way the user can tell the operator the service that he wants: to make a call, to answer an e-mail or a message on a social network, or the like. The operator performs the required services, and when they are completed, the connection between the server and the mobile device is ended. The human operator, also referred to as operator, may be further identified as personal assistant, or PA.

**[0036]** According to a fourth aspect of ~~The~~ the invention, there is further ~~provides~~ provided a car system, the car system comprising a user interface, and a connection unit configured to be connected to the mobile device; wherein the connection between the connection unit and the mobile device is established in response to a user input to the user interface.

**Brief description of the drawings**

**[0037]** On the attached drawing sheets,

- Fig. 1 illustrates a system for voice exchange according to an embodiment of the present invention.
- Fig. 2a shows a process performed by a mobile device according to an embodiment of the present invention.
- Fig. 2b shows a service provision process performed by a mobile device according to an embodiment of the present invention.
- Fig. 2c shows a service provision process performed by a mobile device according to an embodiment of the present invention.
- Fig. 3 shows a process performed by a server according to an embodiment of the present invention.

**CLAIMS**

1. A mobile device (101) comprising:
- a memory for storing contact information of the mobile device,
- a transceiver for exchanging voice and/or data signals within a telecommunications network,
wherein the mobile is device configured to:
- provide (501, 513) the contact information to a first server in the network,
- initiate (202), in response to a first user input, a first voice connection to a ~~the~~ second server or telephone switch; and
- at least one of
- receive (2051), from the first server, command data for initiating (2052) a second voice connection to a called party identified in the contact information; and
- send (2054) authorization to the first server to access user credentials included in the contact information.

2. The mobile device of claim 1, wherein the first and second server form a group of connected server devices.

~~3~~2. The mobile device of any one of claims 1 or 2, wherein the mobile device is further configured to, when the mobile device is in a standby state, receive (201) the first ~~-~~user input as a single ~~-~~button push action or a single screen tap action.

~~4~~3. The mobile device of any one of the previous claims ~~1 or 2~~, wherein the mobile device is further configured to send the authorization to the first server to access the user credentials after receiving (2053) a second user input.

~~5~~4. The mobile device of any one of the previous claims, wherein the mobile device is configured to periodically perform the providing (501, 513) of the contact information to the ~~a~~ first server in the network.

~~6~~5. The mobile device of any one of the previous claims, wherein the provision of contact information to the first server is done whenever the mobile device has access to the Internet (501).

~~7~~6. The mobile device of any one of the previous claims, wherein the mobile device is configured to perform the providing (501, 513) of the contact information to the first ~~a~~ server in the network when the request of the user is received.

87. The mobile device of any one of the previous claims, wherein the contact information includes one or more of contact details including names and telephone numbers, address book information, e-mail messages, instant messaging information, and social networking information.

98. The mobile device of any of the previous claims, wherein the mobile device is further configured to stop providing the first server with contact information when the first voice connection is completed.

109. The mobile device of any of the previous claims, wherein the mobile device is further configured to terminate the connection with the first and second servers at any time upon a third user input.

110. The mobile device of any of the previous claims, wherein the mobile device is further configured to store information about the time of use of the first voice connection.

121. The mobile device of any of the previous claims, wherein the first voice connection with the second server is a voice connection with a human operator connected to the server.

132. The mobile device of claim 1, wherein the provided contact information comprises encrypted information, and upon setup of the connection with the first server, the mobile device sends (504) a key for decrypting the encrypted information.

143. A server (102), the server comprising:
a transceiver for exchanging data signals within a telecommunications network,
a memory for storing contact information;
the server configured to:
receive contact information from a mobile device in the network,
~~receive a first voice connection from the mobile device;~~ and
~~perform~~ing a service, said service including at least one of

sending command data from the server to the mobile device for initiating, by the mobile device, a second voice connection to a called party identified in the contact information; and

receiving from the mobile device authorization to access user credentials based on the contact information and accessing an internet-based server using the user credentials.

~~14. The server of claim 13, wherein, when the service cannot be performed, the server re-establishes the first voice connection.~~

15. The server of claim 1~~4~~3, wherein the server forms part a group of connected server devices and is further configured to receive a first voice connection from the mobile device, and to terminate the first voice connection when the service is completed.

16. The server of any one of the previous claims 1~~4~~3-15, wherein the server is further configured to store information about the time of use of the service.

17. The server of any one of the previous claims 1~~4~~3-16, wherein when configured to receive from the mobile device authorization to access user credentials, eliminates said authorization when the service is completed.

18. The server of any of the previous claims 1~~4~~3-17, wherein if contact information is not accessible from the mobile device, the server is further configured to provide the mobile device with the lastly received contact information.

19. Computer program product comprising computer instructions which, when executed on a processor of a mobile device, cause said mobile device to function according to any one of claims 1-1~~3~~2.

20. Computer program product comprising computer instructions which, when executed on a processor of a mobile device, cause said server to function according to any one of claims 1~~4~~3-18.

21. A car system, the car system comprising:

a user interface element, such as a push button, and

a connection unit configured to be connected to a mobile device according to any one of claims 1-132;

wherein, when the connection between the connection unit and the mobile device is established, the user interface element is configured to provide the user input for setting up a first voice connection to the server.