

USING AN ASCII DIAL STRING FROM A MOBILE PHONE AND ASSOCIATED SPECIAL CALL COMPLETION INSTRUCTIONS FROM ON- LINE DATABASES TO MAKE MOBILE PHONE VOICE CALLS

DEFINITIONS

For simplicity references to keyboard mean mobile phone keyboard. For simplicity the **Dial Name Network** can be referred to as the **Network** and **ASCII Dial String** will be referred to in this document as a **Dial Name** and mobile phone will be referred to as phone.

Mobile Phone Network includes the phone companies mobile phone network plus the servers, databases and search engines required to complete a Dial Name to Dial Number translation.

Caller is the mobile phone user making a voice call using an ASCII Dial String.

Caller Personal Database is the caller's personal online Dial Name database with associated Dial Numbers and generally the first database that the Network Search Engine searches and is managed by a web portal unique to the Caller.

Service Provider is a telephone company or any organization capable of receiving calling instructions in any format and capable of completing a voice phone call from the instructions.

ASCII Dial String refers to a text string made up of ASCII characters or any text characters in any language, unlimited in format which is associated with a PSTN telephone number (TN) or e-number resident in a database.

Dial Name Number is a PSTN telephone number (TN) or e-number resident in a database with an associated Dial Name.

Dial Name Menu is a phone menu associated with the Dial Name phone calling function which can include "Free" which is a special call linked to advertising.

Home State the screen format and mobile phone expected state when the user first turns on the phone and the Home State icons and process are loaded or the state where the users press a home key on a smart phone or press the hang-up button or end button on a standard mobile phone.

Dial State is the state a mobile phone is in when the user is preparing to enter a telephone number to make a phone call in the normal and standard method of operation of a mobile telephone.

Dial Name State is the state a mobile phone is in when the user is ready to accept a Dial Name to make a Dial Name phone call.

Dial Name Key is the key, or Soft-Key or voice command issued to implement the dial function after the Dial Name has been entered.

Dial Key is the mobile phone key the caller normally depresses to complete a normal dial by number call.

Display Profile is the look and feel and arrangement of icons and menus that the mobile phone displays.

Dial Name Display Profile is the look and feel and arrangement of icons and menus that the mobile phone displays in the Dial Name State.

Home State Display Profile is the display profile expected while the phone is in the dial state.

Home State and **Dial State** are the same.

Dial Name Toggle Button is a mobile phone keyboard button or Soft-Key or can be a spoken command with a specific function of activating the Dial Name Session function or routine on the mobile device by pressing the button or tapping a Soft-Key



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or issuing a command the user can toggle data entry from numbers to alpha characters to symbols used in creating the Dial Name required for the call Dial Name Session.

Dial Name Icon is a mobile phone display icon that reflects the current state of the mobile phone keyboard entry from numeric, to ASCII characters to symbols so the user is aware of the current state of keyboard data entry and can toggle between states and have visual representation of the current Dial Name Keyboard State.

Dial Name Search Engine is a search method or algorithm designed to search Dial Name Databases and open databases and web pages for associated numbers for Dial Names.

Dial Name Databases are any database storing a Dial Name with an associated Telephone number or E-Number that can be searched such that a Dial Name can be translated into a Dial Number.

Dial Number is a standard PSTN telephone number or an E-Number.

Dial Name Message is the data packet sent from the phone to the network and includes but is not limited to the SIM number optionally the Machine ID and the Dial Name.

Dial Name Conference is initiated when a group of Dial Names are entered together which when recognized by the Dial Name Network the multiple Dial Names are used to set up a Dial Name Conference Call.

Dial Name State is a new mobile phone state not presently found in mobile phones where the display profile is the same as the dial display profile but the phone state is altered so that the user can enter names or numbers by toggling the Dial Name State Button and an icon will display the state of the keyboard from number entry to ASCII alpha characters whereby a tap on the keyboard key will result in either a number, alpha character being displayed allowing the user to create a complex Dial Name string.

Dial Name Call Session is a call between one or more parties where the call is created by sending a Call Name to the Network server connected to the internet by any known method for transporting data to the server from the mobile device such as TCP/IP using GPRS or 3G or whatever mobile internet standard, USSD, SMS, MMS or whatever the state-of-the-art for text messaging from mobile phones, e-mail, or next generation internet data transmission protocols and the Caller and called party information is used by the Network to create a Call Session where the Caller and called parties are called by the Network and bridged together as is known in the art form of call processing.

Dial Name Call Routine is a routine that to the user looks like a mobile phone call is processing in the normal manner but in reality the call is a Dial Name Call and the setup for the call is by sending a data packet including the Dial Name and possibly a Dial Name Number or just the Dial Name to an internet connected server which locates the Dial Name Associated Number, performs various Dial Name back office functions then instructs the Dial Name Network to connect to the Dial Name Initiator Device and the other called parties.

Dial Name Network or Network comprises a server or servers connected to the Internet and databases and a switch or series of interconnected switches part of the PSTN, VoIP network, Mobile switching network or a combination of thereof with a special designed process called the Dial Name Call Session

Dial Name Number is the number associated with a Dial Name and required by the Service Provider to process the call and can be a PSTN telephone number or an e-number.

Dial Name Initiating Device is generally a Mobile Phone of any protocol but can also be a landline or any device capable of creating a Dial Name and sending the Dial Name to a searchable database to initiate the Dial Name Call Session and the originating Dial Name device may not necessarily be the part of the Dial Name Call Session.

Dial Name Data Packet is a special format of data packet which will include data required to complete a Dial Name call Session and can include the Dial Name, Dial Name Number, Client ID, Credit information and any information in any order required by the Dial Name Call Session.

Dial Name Registration is the process of a member of a social networking organization, an individual or a company entering a name into a Dial Name and associated Dial Name Number into a searchable database.

Dial Name Database is a database that the Network uses to return the Dial Name Number complete the Dial Name Call and there are multiple types of databases that may be used including but not limited to, Dial Name Personal Database, Dial Name Corporate Database, Dial Name Social Networking Database, Dial Name Open Database, Non-Dial Name Open Databases by cross referencing the unique Dial Name Identification Number supplied by the Dial Name Data Packet can be any form of data packet that the mobile phone can send to the Dial Name Network to Telco network to effect a Dial Name call.

Dial Name Personal Database is a personal database used by individuals to store their private Dial Name Numbers.

Substitute Device is a device capable of receiving phone calls in the normal manner identified by a Telephone number or e-number that has been nominated by the originating mobile device by changing a data field called "Substitute Number" field in the Key to act as a stand-in and take the originating call and Dial Name Caller Identification Number is a number that the Dial Name Network uses to query the mobile phone operators correct database to cross reference The Dial Name Number with the correct associated TN or e-num and return that number or numbers to the Dial Name Call Network to complete the call(s).

Telephone Name is the telephone name used to connect a voice call from a caller to a called party that has an associated Telephone Number (PSTN) and a Telephone Name

Dial Name Advertising Database is a database associated with a Dial Name that has a list of advertising messages linked to the Dial Name such that when they Dial Name I used to make a call associated audio advertisers in the same product space can play to the caller an audio file an a downloaded MMS file and or a popup or internet connection such that if a caller for example uses the Dial Name American Airlines to connect associated messages text, voice audio and image can play to the user and for listening for a predetermined time the call can be free or earn points.

TECHNICAL FIELD

This invention relates to the modification of the mobile phone home state such that the mobile phone can input to the phone and send to the network a full range of ASCII characters in the dial mode and send to the network a string of any ASCII characters by pressing the dial button in the normal manner to represent the called party and a method for the network to interpret the string of ascii characters to process the requested Mobile phone call.

BACKGROUND OF THE INVENTION

There are thousands of companies that are household names and these companies have main listed numbers for voice calling that consumers must lookup by various methods for the number which generally represents a port number on a PSTN switch owned by a phone company to create a voice connection to that household name company while an internet connection is much simpler as a consumer may intuitively guess the web page of the household name company by entering a name using a known standard protocol www.householdname.com and access the company web page and if the name is incorrect often a search engine will offer alternatives that the consumer can select from. For voice calling no world wide intuitive connection method is available so that mobile phone users for example can enter a name such as IBM or Dell or United Airline and simply press a dial button and connect to the company world wide main listed number because the mobile phone in the dial state cannot accept names only numbers, the mobile phone network cannot accept names just numbers on the RF channel in the call setup state.

The Internet grew substantially when connectivity changed for e-mail and websites from numbers to names and connection through intuition became the norm. Voice phone users struggle with phone directories resident on the device itself so that when the device changes and they often do the phonebook is lost, lost phones mean lost contacts, newly purchased phones means struggle to port numbers to the new phones and dialing from overseas often means the dial string in the contact manager of the voice phone book is often incorrect from outside the home country. There is a need to simplify the process of voice connectivity. It is known that we can remember hundreds of names but just a few numbers. Voice interconnectivity by having a naming group for friends and families would allow much simpler connectivity and if the underlying number associated with the name can be managed by the owner of the voice name then changing a number would not be an issue just as with the Internet the URL underlying IP number can be re registered and changed and it is not necessary for the person wishing to make connection to worry about such a change. The disassociation with the name to the number eliminates the need for complex number portability and the possibility of lifelong numbers that we call Dial Names in this document.

With an ability for organizations to register intuitive Dial Names, consumers will have the benefit of connecting to household names by dialing the names themselves and companies can manage the underlying numbers associated with the Dial Names and therefore provide world wide intuitive voice connectivity and at the same time change office locations, call centers without worry of having to inform consumers of the change in location and associated numbers. Simpler company reorganizations and

better access for people to organizations for voice call will result in using Dial Names instead of numbers for voice connections.

With the use of Dial Names as the trigger for voice call connections not numbers directly, databases will have to be deployed so that networks can search for the underlying numbers associated with the names for call completions which then further allows for more complex calling instructions associated with the names such as connections schedules, special Dial Names used in conjunction with other Dial Names such as "Urgent" which have special call completion instructions to bypass IVR for example and go directly to live persons for call completion and such words may have special charges which create a new income possibility and market segmentation for people willing to pay a little extra for the call completion changing call centres from cost centres to profit centres, and other special connection instructions such as quality of connection such as low cost, free calls associated with advertising messages and so on. The possibilities are limitless and many of them are described within the claims document.

One of the calling special instructions can be to complete the call by lower cost calling methods well known in the art of voice call completion and the savings incurred can be substantial, and taken across the full scope of corporate call completion can result in millions of dollars of saving per year yet providing consumers the perception of great value through simple intuitive connectivity by using a Dial Name instead of a number for voice call completion from mobile phones and any device capable of sending a Dial Name.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide voice calling subscribers a specialized mobile phone or down loadable application which allows their mobile phone to enter complex ASCII strings or names called Dial Names from their phones and dials in the normal manner and create a voice call connection.

It is a further object of this invention to provide a database whereby Dial Names can be stored and searched for associated numbers to then pass to the Network Service Providers to create the call connection.

It is a further object of the invention to provide the network Service Provider a database search method where by Dial Name Numbers can be retrieved and to provide complex calling instructions associated with the Dial Name designed to improve communications by reducing the cost or improving the quality or eliminating tedious connectivity to IVR allowing paying customers to bypass or doing so for emergency services.

It is another object of the invention to link advertisers to Dial Names in such a way that callers could avail themselves a free call associated with audio messages or MMS messages from advertisers who pay for the privilege of advertising to callers who are connecting to Dial Names associated with advertisers industries. For example, a caller who uses a Dial Name beginning with the word AIR could select a free call option and in this case, paid advertisers in the airline business could play airline advertisement to the caller before the caller is connected.

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BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be explained by way of example only and with reference to the following drawings, wherein:

Figure 1. is a schematic diagram illustrating a preferred arrangement of the new features of the mobile phone in accordance with the invention;

Figure 2 is a flow chart showing a simplified overview of the principal steps involved in the process of making a call by name

Figure 3a, 3b, 3c, 3d, 3e are a flow chart showing the principal steps involved in establishing a voice call using the method and apparatus in accordance with the invention;

Figure 4 shows a database of potential advertisements that could accompany the voice call;

Figure 5 shows a database of special calling instructions

DETAILED DESCRIPTION OF THE PREFERRED EMBODYMENT

Figure 1 is a schematic block diagram of a preferred arrangement of new features for a mobile phone in accordance with the invention for establishing voice calls using dial by name from a mobile phone.

One of the key value propositions of the invention is the Mobile user ability to enter names directly from the mobile phone keypad 30. The mobile phone will be modified in such a way that the user need no select the feature, rather the mobile phone after being turned on, powers up in such a way that they Home dial State is such that the keyboard can enter a complete set of ASCII characters and in an ideal configuration the mobile phone is equipped with a dedicated set of number keys 14 so that the user need not toggle between alpha and numeric character entry from the key pad with a toggle button 17. In a less than ideal world with a constrained space requirement on the phone the user will not have a special set of dial keys but the user can directly begin to enter a Dial Name and when a number is required the user can deploy the toggle button 17 and by depressing the toggle button change the dial state of the phone as indicated to the user by the icon 12 that can appear to show the user the current dial state of the keyboard. If the user wants the user can opt out of the Dial Name dial state and an icon 11 will display the current state of the keyboard with reference to accepting only numbers as is the current norm or accepting a full set of ASCII characters in the Home State. Before dialing the user may optionally in a setup menu select the type of call the user prefers to make 15 selecting regular or premium quality calls or free calls which will be accompanied by advertising relative to the dial name selected such that a dial name Air India may evoke advertising audio messages just before call completion selling their latest rates to India. The special Dial Name is made of a Dial Name describing the name of the person the caller wishes to reach and this name can be universally unique or specific database unique or unique to a golden gateway number or destination IP address. In its simplest form the user enters the Dial Name by spoken word, or softkey or phone keyboard and then press dial in the normal manner and the Dial Name must be matched to a Dial Number database for name to number translation for call processing. It is highly possible that the number may be resident on the phone itself and the Dial Name Application will search the mobile device memory locations 26 first looking for a match, failing which a process of search begin as outline in the overview of the invention Figure 2. After the Dial Name

is entered 33 and the dial button pressed 34 the string is sent to an IP address by various data transmission methods well known in the art form of sending data back and forth between mobile phones and servers. In step 36 when the Dial Name String arrives at the database by way of an internet address the database looks up the associated Dial Name 38 and then sends the telephone number of the sender identified by the SIM card number or the Substitute Number for the SIM card and with the Callers number and the destination number and any special dialing instructions 44 the package of information is forwarded to a Service Provider who process the calling such a manner is well known in the art form of processing calls from instructions from a service as is common place today in telecommunications. The call is completed between the caller and the called party and on hanging up the call session is terminated ending the process. The invention relates to the special nature of the mobile phone device modified in a manner that the device is most suitable for dialing at the home state using the full QWERTY keyboard to enter a string of alpha and numeric ASCII characters in a string which together forms a Dial Name identifying the intended called party. The mobile phone user is able to make many calls in an intuitive manner by dialing recognized Dial Name names from friends and family, business acquaintances to well recognized corporate names. Since a database is deployed in its fullest sense this provides an opportunity to provide a special calling instructions, a brief advertising message associated with the Dial Name and many other possibilities not available when a number is used and the call directly process through the Telco network in the normal fashion. A more detailed view of the process of Dial Name calling is provided by Figure 3a where turning on the phone results in the Dial Name application being run and in the startup phase as indicated in figure 3b the Telco itself could process the entire Dial Name call completion in a most simple and probably the most elegant fashion whereby the mobile device is programmed to send the entered Dial Name Dial String to the Telco switching center by way of the RFCH or Radio Frequency Control Channel or whatever the data control method or channel used by the Telco may be. Once the Telco switching center receives the Dial Name and SIM number the Telco Network will attempt to match the Dial Name with a Telco provided Telephone Number or Dial Number by searching either a private Dial Name database that the Telco provide for the subscriber 78 or searches the Telco well defined white or Yellow Pages 82 or any other databases they may chose to search for a match 86, failing to match a number results in three possibilities, one presenting the closest numbers and letting the Mobile subscriber choose, two sending a failed message and termination the process or three getting a match and processing the call. Any one of these methods the Telco may send an SMS message or USSD or IM or other back to the mobile subscriber with additional information. Currently the Telco does not provide a Dial Name Call Process and as a result the most likely scenario is that of a non Telco Service provider making available a downloadable application or specialty phone that is capable of allowing the mobile subscriber to enter a Dial Name instead of a number at the home state and by pressing the send button forward the Dial Name and special dialing instructions to the service provider who will find a match or not for the Dial Name and process the call request. In getting the data package to the service provider without the Telco support requires some modifications of the mobile phone dialing process as well. If the Dial Name is to be sent to a Service Provider, the mobile phone must select a gateway 96 to receive the Dial Name. The Dial Name can be sent by SMS, IM, And other known data formats from a mobile phone but preferably by way of a data packet to an IP address using TCP/IP. In step 112 the Dial Name has not been returned from the mobile phone

internal memory locations and so the search begins on-line by the Network under the instructions of a search algorithm to perform the most efficient search. In Step 116 the Network looks for a name number match in the user's Personal Dial Name Database 116. This database is managed by the subscriber by uploading their phone directories or simply going to their Dial Name Web Portal and enters their most used Dial Names and associated numbers. Many kinds of databases can be used and search greatly simplifying the process of dialing. For example, 117 could be a corporate database where hundreds of thousands of well known corporate names are stored along with their main listed numbers so that users need only dial a well known Dial Name such as IBM, no need to search and by matching the SIM country code a match between origination number and corporate destination call centre can be made. Many databases can be utilized, some open to the public 126, some chargeable, some owned by the Telco's 120, some owned by social networking companies 124, some comprising numbers gathered from web page contact information. In order to promote efficiency it is proposed that if the users enter a Dial Name and the Dial Name and associated number is not in their personal directory it will be automatically added if the subscriber chooses the function and if the call is successful. It is also proposed the personal database be built automatically if the subscriber enter both a Dial Name followed by a number, a search is not necessary, but the key word will be automatically added to the Dial Name personal database 116 in effect being indexed for faster searches. Once the Dial Name number has been returned it will be passed to the Service Provider in 112 for process but before that step there are a number of new calling processes which can be implemented by dipping special calling databases. For example Figure 5 has special dialing instructions for example if a number is designated as a call centre number, the call center may input from a set of special instructions such as complete leg B first and when the agent then answers complete Leg a but before answering and on connection to the call queue but before the agent answers send an SMS message to the subscriber saying that the "call is in queue and as soon as the first agent is available you will be connected". Another Dial Name could be tagged as an emergency number with special connectivity options known to the Service provider or as in Figure 1 step 16 the word Visa followed by Urgent in this case means bypass the Visa main listed number, use the special Visa Urgent number and process assuring the caller does not go to IVR but a live person and charge the caller \$10 as indicated in the bank Visa arrangement for use of an Urgent Dial Name. Once the special dialing instructions are assembled by combining step 135,136 and 141 calling instructions into a special calling instruction package and protocol as agreed upon with the service provider tasked to complete such calls, the calls message is sent 146 and the call processed. If the call has special advertising associated with the call for example when the subscriber as in figure 1 step 15 selected a free call, it is known by the subscriber that they will have to listen to a certain agreed upon time frame of advertising which is context sensitive to the Dial Name . If the subscriber then selects free and enters an airline name, they will have to listen to the bank of messages from the sponsor paying for the call, such as alternative airlines listing off their specials of the week before the caller gets to talk to their intended airline. As well free could also result in earning points for listening to messages by selecting a key that extends the advertising listening time. The call is terminated by hanging up in the normal manner and the mobile device resets back to the Dial Name home state waiting for the next Dial Name call. If the Dial Name caller enters only a number in the Dial Name calling state the call will progress in the normal manner over the service provider of choice which may well be the local Telco.

I Claim

1. A modification of the mobile phone enabling the mobile phone to accept a full range of ASCII characters called a Dial Name for making phone calls, as an alternative to the current mobile phone standard of entering only a telephone number and a Network improvement such that after pressing the Dial Key in the normal manner the Dial Name is sent over the Internet to a Network capable of receiving the Dial Name and a Dial Name Search Engine capable of retrieving the Dial Name Number from the Dial Name Databases and a Dial Name Call Process that manages the call completion process when using a Dial Name from a mobile phone for the purpose of completing a mobile phone voice call comprising:
 - a. the Caller evoking the Dial Name State of the phone by toggling a Dial Name Key enters a Dial Name from the keyboard then press the Dial Key on the phone which sends the Dial Name to the Network;
 - b. the Dial Name is a text string made up of ASCII characters or any text characters in any language, unlimited in format;
 - c. the phone is automatically put in a state which automatically answers the incoming call from the Network with or without indication of incoming call completion
 - d. the Dial Name is sent to the Network in any data format supported by the phone including but not limited to SMS, GPRS, IM, TCP/IP, MMS
 - e. the Network interface is the Internet and the Dial Name if sent in formats other than TCP/IP to the Network IP address will be sent first to a gateway or service provider capable of receiving the data format and opening the data packet, extracting the Caller identity information and creating a Network message which includes the Callers SIM number and optionally the phone machine number and the Dial Name and any other information required by the Network to complete the phone call;
 - f. the Network after receiving the Dial Name Message requests the Dial Name Search Engine return the Dial Name Number to the Network for call processing;
 - g. the Network sends instruction to a service provider and the service provider can be part of the Network
 - h. the Service Provider calls the Caller and the Called party and bridges them together.
2. The method as claimed in 1. further including a phone ICON display to show the current Dial State of the phone device and the key data entry format and related ICON display will change where and multiple taps of the Dial Name Toggle Button will rotate between formats of number, alpha data entry to be toggled by depressing the Dial Name Toggle Button
3. The method claimed in 1. Further including a phone display modification such that the phone display indicates to the caller that the call is proceeding in the normal manner of a dial number call
4. The method as claimed in 1. where powering on the phone results in the phone automatically entering into the Dial Name States such that;
 - a. If the Caller enters only a number and press the dial key, the phone sends the number to the Dial Name server which then does not do a search but forwards the Caller number and called number to the Network for call processing
 - b. The Called enters the Dial Name directly and press the dial key to effect the dial name call
5. The method in 1. where the Dial Name Search Engine also searches a special dialing instruction database.

- a. the method as claimed in 5. where the special instruction can include connecting the Caller then the Called party after the Caller answers the call
- b. the method as claimed in 5. where the special instruction can include connecting the Called party then the Caller after the Called party answers the call and optionally sending an SMS message or IM or any phone message to the Caller informing them the call is in progress or whatever message is called for.
- c. the method as claimed in 5. where the special instruction can include connecting the Caller and the Called party at the same time.
- d. the method as claimed in 5. where the special instruction can include a schedule of call completion.
6. The method as claimed in 5. where the special instruction can include a schedule of call completion which can be modified by the Caller by entering a secure Web Portal and selecting the appropriate menu such as schedule and modifying the schedule by entering telephone numbers and dates and times indicating to the Dial Name Search Engine when calls to the called party are to be completed and to which called numbers and at which time.
7. The method as claimed in claim 1. where the phone has a field to enter a substitute telephone number so that when the Caller completes a Dial Name call the substitute number is included in the Dial Name Message and the Network causes the call to be completed back to the substitute number not the SIM number of the Caller.
8. The method as claimed in claim 1. where the phone is any device capable of completing a voice phone call.
9. The method as claimed in claim 1. where the database can be specialized databases for corporate names where companies can have their own gateways with their own gateway numbers such as Golden numbers and these gateways can be populated by Dial Names and Dial Numbers specific to the company and designed for intercompany use or their clients where companies enter employee names as Dial Names in formats designed to facilitate employee to employee voice connection using Dial Names.
10. The method as claimed in 9. where databases for companies include department names or product names as Dial Names with dial Numbers facilitating clients connecting to companies intuitively by entering well known Dial Names from their Dial Name provisioned phones.
11. The method as claimed in claim 1. where the Dial Name Number may reside in the phone device local memory locations such as SIM card local memory or extended memory.
12. The method as claimed in claim 1. where the routine is an embedded application or function of the device.
13. The method as claimed in claim 1. where on-line internet accessible databases can be a private on-line database that self populate when a Caller enters a Dial Name including a Dial Number;
 - a. which signifies to the Network no need to search a databases for a Dial Number when a valid number is included in the Dial Name
 - b. to complete the call using the provided Dial Number
 - c. on successful completion of a call automatically enter the Dial Name and Dial Number into the Caller Personal Database
14. The method as claimed in 1. where the Dial Name number format indicates the Dial Name is most likely a contact number from a web page and there is a searching algorithm and extraction method to retrieve web page contact numbers based on associated Dial Name Names.

15. When the Dial Name Database is a corporate database, and the corporate database is managed by an on-line portal where corporations can manage their own name number associations for call completions, and this database can be chargeable for name registrations and preceded by special memorable gateway number such as G0800.
16. When the Dial Name Database is an open online database and anyone can register and modify the numbers and a user name and passcode is not required.
17. When the Dial Name Database is an open online database and anyone can register and modify the numbers and a user name and passcode is required.
18. When the Dial Name is associated with a group of Dial Name Numbers under this circumstance a conference call will be launched connecting all Dial Name Numbers together in a conference call.
19. When the Dial Name has special inherent instructions comprising;
 - a. special words such as Urgent or Emergency or Operator
 - b. where the special words have special inherent processing functions such as bypassing IVR or ACD and connecting to live people
 - c. where the resulting call connection can be chargeable
 - d. where the charges for the completed call may include points deductions
 - e. where the charges can include money service charges for the service
20. when a Dial Name application resides on a social networking web page or portal comprising;
 - a. an Dial Name application which can be evoke from the social networking portal or web page by a subscriber of the social networking service
 - b. where the subscriber can enter their Dial Name and associated Dial Number
 - c. where the subscriber can indicated which friends or members can use the subscribers Dial name to connect to the subscriber
 - d. where the subscriber may pay for the voice Dial Name voice call
 - e. where the called party may pay for calling the subscriber by Dial Name
 - f. where the subscriber can evoke a block list for other subscribers who are not allowed to connect to the subscriber by the subscribers Dial Name
21. Has a related "Golden Number" used for processing the Dial Name Data Message only associated with the golden number.
22. The method as claimed in claim 1. where use of certain SMS gateways and IP address used can signal to the Network to process the Dial Name Call with grades of service associated with the gateways or IP address such as;
 - a. a free, premium, regular and low cost.
23. Where the method as claimed in 1. Where Dial Name Database fields can have flags associated with grades of service fixed quality until portal access and Dial Name field changed.
24. A modification of the mobile phone enabling the mobile phone to accept a full range of ASCII characters called a Dial Name for making phone calls, as an alternative to the current mobile phone standard of entering only a telephone number and a Network improvement such that after pressing the Dial Key in the normal manner the Dial Name is sent over the Internet to a Telephone Operator capable of receiving the Dial Name over a data channel, radio frequency channel or a radio frequency data control channel and Dial Name Search Engine capable of retrieving the Dial Name Number from the Telephone company Dial Name Databases, or on-line white pages or on-line yellow pages or telephone company telephone number directory database and retuning the Dian Name Number to the telephone mobile switching center to be

processed in the normal manner understood in the art of processing mobile phone call requests comprising:

- a. the Caller evoking the Dial Name State of the phone by toggling a Dial Name Key enters a Dial Name from the keyboard then press the Dial Key on the phone which sends the Dial Name to the Network;
 - b. the Dial Name is a text string made up of ASCII characters or any text characters in any language, unlimited in format;
 - c. the phone is automatically put in a state which automatically answers the incoming call from the Network with or without indication of incoming call completion
 - d. the Dial Name is sent to the Telephone company Mobile Switching Center in the data format supported by the MSC
 - e. the Network interface is the RFCH or Radio Frequency Channel or whatever RF channel is used to connect the phone to the mobile phone network and the Dial Name is sent in formats supportable by the RFCH the Network after receiving the Dial Name Message requests the Dial Name Search Engine return the Dial Name Number to the Network for call processing;
 - f. the Network sends instruction to a service provider and the service provider can be part of the Network
 - g. the Service Provider calls the Caller and the Called party and bridges them together
25. The method as claimed in claim 1. or claim 27. where a Universal Database for Dial Names and Dial Numbers can be searched and used by the Network such that;
- a. any person can enter any Dial name and Dial Number
 - b. users are made aware that the entries are made on a basis of trust
 - c. the Dial Names and Numbers are open to the public for use by all
 - d. the connections may result in failed connections based on malicious entries or modifications
26. Where the Caller has selected from a Dial Name Menu of call types such as premium, regular or free and free has been selected as the call type such that;
- a. the Caller will not pay for the call marked as free
 - b. the Caller will enter a Dial Name associated with free calling
 - c. the Dial Name has an associated Dial Number
 - d. the Dial Name has an associated list of audio messages that will play to the Caller before the Dial Name call is completed
 - e. the audio messages play list may be weighted by the advertiser that pays the most for the audio advertising or by the popularity of the audio message or a combination of both
 - f. the audio messages can be associated with a related Dial Name industry sector such as an air line Dial Name can result in a series of airline messages being selected and played to the Caller
 - g. where the Caller having listened to the required audio advertising will then be connected to the requested Dial Name free of charge or where the call will earn points or the Caller will have points deducted from a related service such as a an Airline Mileage Card
 - h. where the required advertising message is not an audio file but a visual file sent the phone such as a MMS or Internet connection or an advertising POP Up message sent to the phone
27. A method of data mining where advertisers can solicit users to dial by name to connect to a supplier for advertising promotions and advertisers can collect SIM card numbers from the resulting Dial Name calls and use the SIM numbers for follow up SMS advertising or MMS advertising to mobile phones.