

Sponsored Services and Infrastructure

Sponsored services™ is a communications-based approach to provide services, infrastructure and goods to those with little or no means to pay for them through sponsors that may have a financial motivation to provide them. These are especially helpful in providing health care and services in general in the event of a disaster. For example, though an indigent grandmother may not be considered a candidate for phone service let alone broadband services, the organization responsible to provide her with medical services might find that it can provide superior service at lower costs if telemedicine applications could be used. If a health care service provider can save \$100's per month on health care that they are required to provide, it would be in their benefit to provide the \$50 per month cost of providing the broadband services that would make the larger savings possible. The same is true for communities impacted by a disaster. Those communities will have organizations and families that need services, infrastructure and goods but will suffer unnecessarily if those needs are not funded. By organizing those who might wish to sponsor or pay for those services on their behalf, whether they are insurers or donor organizations, those needing the services or those providing the services can ask for and receive the needed funding sooner. Also, by working through the details required to securely authenticate the participants and transactions in advance, the steps necessary to efficiently meet needs can be developed and practiced before the need arises.

The communications methods and procedures covering funding and provisioning of infrastructure, services and security are the subject matter of four issued patents to Charles Manto, namely, US patents 6285749, 6584183, 6788771 and 7406307.

For example, US Patent # 6584183 claims 14-17 describe a “method for provisioning data services to customers” and “authorization to charge said fee “. US Patent # 6788771 claim 14, describes “services or products, the quality of services or products, the duration of services or products, the bandwidth, and/or the availability of applications.”

The full patents are available from www.uspto.gov under using their patent search page using their quick search feature. Some of the claims are listed in the exhibit below for illustration purposes. The following abstract and summary of the second patent in the series further illustrates the intent of the sponsored services concept:

United States Patent
Manto

6,788,771
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System and method for providing sponsored or universal telecommunications service and third party payer services

Abstract

A method of operating a telecommunications device wherein the telecommunications device is used to detect an outgoing call from a calling party to a called number. The calling number is used to determine whether or not the calling party is a universal service user. If it is determined that the called number is among a class of numbers exempt from charges, the call is connected. A determination on the sufficiency of funds in a pre-paid account is made. If it is determined that there are insufficient funds in a pre-paid account to cover charges associated with the outgoing call, a message is generated and sent to the calling party or a third party requesting authorization to charge an additional fee for connecting the calling party with the called party and providing related information or application services. User input is received from the calling party, indicating the calling party's authorization of such charge. The connection between the calling party and the called party is made. In an alternative embodiment, costs for providing data communications and related application services between an initiating party and a universal service user are calculated, in response to a request by the initiating party, in accordance with the network elements required for a requested quality of service.

Inventors: **Manto; Charles L.** (Annapolis, MD)

Assignee: **FreeTech, L.L.C.** (Annapolis, MD)

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SUMMARY OF THE INVENTION

In a preferred embodiment, the invention provides a novel and substantial solution to the problem of providing phone service for those without proven means to pay or enables sponsors wishing to pay on behalf of others, by providing, voice, data, and multi-media services. The invention provides an apparatus and a related method for controlling public network switching activity or private or virtual private networks in a manner which makes it possible to provide universal service, of telephone, data, multimedia line or services, whether land, satellite, mobile or phone card based and, accompanying applications to a party without charge, and providing metered billing to persons wishing to contact the party. This method effectively provides universal service for telecommunications voice and/or multimedia applications, without tax or market subsidies. For the purposes of the present invention, the universal service user is also defined as an "exempt" user or "sponsored" user, and the services are alternately referred to as "universal service," "exempt service," or "sponsored service." "Call" is used either as a voice, data, or multimedia contact.

EXHIBIT Partial Claims from Sponsored Services Patents to Charles Manto

From patent 6584183:

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A method for operating a central office switching system, comprising the steps of: detecting an incoming call from a calling party to a called party; using a called number to determine whether said called party is a universal service user for whom service is provided at no charge or substantially no charge; generating and sending a message to said calling party requesting authorization to charge said calling party an additional fee for connecting said calling party to said called party; receiving user input from said calling party indicating said calling party's authorization of said additional charge; and, connecting said calling party to said called party.
2. A method of operating a telecommunications device, comprising the steps of: using said telecommunications device to detect an incoming call from a calling party to a called party; using a called number to determine whether said called party is a user for whom service is provided at no charge or substantially no charge; generating and sending a message to said calling party requesting authorization to charge said calling party or a third party an additional fee for connecting said calling party to said called party; receiving user input from said calling party indicating said calling party's authorization of said additional charge or authorization of a third party funding source designated by either the calling party or by the called party on an interactive or pre-provisioned basis; and, connecting said calling party to said called party.
3. The method in accordance with claim 2, further including the step of: determining whether sufficient funds exist in a pre-paid account, of the calling party, the called party or a third party, to cover charges associated with said call.
4. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using a central office switch.
5. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using an intelligent peripheral connected to a central office switch.
6. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using a PBX.
7. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using a network device for wireline local loop service.

8. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using a network device for wireless local loop service.
9. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using a network device for wireline long distance service.
10. The method in accordance with claim 2, wherein said step of using a telecommunications device comprises the step of using a network device for wireless long distance service.
11. The method in accordance with claim 2, wherein said incoming call is a voice call.
12. The method in accordance with claim 2, wherein said incoming call is a data call.
13. The method in accordance with claim 12, wherein said data call contains multimedia content.
14. A method for provisioning data services to customers, comprising the steps of: receiving a request from an initiating party to conduct data communications with a receiving party at a specified time; determining whether said receiving party is a universal or sponsored service user for whom service is provided at no charge or substantially no charge; calculating a cost for provisioning a quality of service necessary to support said requested data communications at said specified time, generating and sending a message to said initiating party requesting authorization to charge a fee for connecting said calling party to said called party; receiving user input from said initiating party indicating said initiating party's authorization to charge said fee; and, provisioning data services to support said requested data communications at said specified time.
15. The method in accordance with claim 14, wherein said step of calculating a cost for provisioning a quality of service comprises a step of assessing the network elements and quality of service necessary to support said requested data communications.
16. The method in accordance with claim 15, wherein said step of calculating a cost for provisioning a quality of service further comprises a step of assessing a market demand on said network elements at said specified time.
17. The method in accordance with claim 1, wherein said step of determining whether said called party is a universal service user comprises the step of using a secure identifier.
18. The method in accordance with claim 17, wherein said secure identifier comprises a PIN code, digital signature, pseudo-random number generator, biometric or video transmission.
19. The method in accordance with claim 2, wherein said step of determining whether said called party is a universal service user comprises the step of using a secure identifier.

20. The method in accordance with claim 19, wherein said secure identifier comprises a PIN code, digital signature, pseudo-random number generator, biometric or video transmission.

21. The method in accordance with claim 14, wherein said step of determining whether said receiving party is a universal or sponsored service user comprises the step of using a secure identifier.

22. The method in accordance with claim 21, wherein said secure identifier comprises a PIN code, digital signature, pseudo-random number generator, biometric or video transmission.

These principles are further applied to services and goods in patent #6788771 as follows:

1. A method of operating a telecommunications device, comprising the steps of: detecting an incoming call or data message from a calling party to a called party; using a called number or identifier to determine whether said called party is a universal service user for whom service is provided at no charge or substantially no charge; and using a called number or identifier to determine the quality level of connecting to a flow-based steering and cost modeling system approved for a user.

2. The method of claim 1, further comprising the step of generating and sending a message to the calling party offering participation as a sponsor for the current and subsequent calls of this type for the sponsored party.

3. The method of claim 1, further comprising the step of using the calling number or identifier to determine the quality level of sponsored service approved for that sponsored party.

4. The method of claim 1, further comprising the step of generating and sending a message to a sponsor offering participation as a sponsor for subsequent calls and communications.

5. The method of claim 1, further comprising the step of using codes and speed dial numbers for allowed calling parties access only to those called parties allowed by a sponsor to be contacted and only using those services provided to users by the sponsor or sponsors.

6. The method of claim 1, further comprising the step of using a calling number to determine, as necessary, the location of the calling party needing services and/or additional funding so that a request for additional services and/or funds can be made.

7. The method of claim 1, further comprising the step of generating and sending a message to the calling party requesting authorization to charge said calling party an additional fee for connecting an additional party.

8. The method of claim 1, further comprising the step of using calling number or identifier, to provide free security applications including free digital signatures, PKI, biometrics, or encryption services.

9. The method of claim 1, further comprising the step of using an individual identifier, PIN number, biometric, digital signature or secure means of identification, to determine whether the calling party is a universal service for whom service is provided at no charge.

10. The method of claim 1, wherein the step of using a telecommunications device comprises the step of using an intelligent peripheral connected to a central office switching system.

11. The method of claim 1, wherein the step of using a telecommunications device comprises using a tandem switch, a central office switch, a cable television network, a satellite system, an intelligent user device comprising a phone, computer, or monitoring device with either routing or switching capabilities built into it, a private network switch, a PBX, a wireless PBX, a virtual PBX, a virtual private network, an intelligent peripheral connected to an identification verification service, a network device for wireline local loop service or private network connections, a network device for wireless local loop service and attendant automatic location information, a network device for wireline long distance service whether over public or private networks, or an account selected from the group consisting of a telecommunications account, phone card account or virtual phone card account, which allows the sponsored user to be identified separately from or in addition to a specific telecommunications device.

12. The method of claim 1, further comprising the step of allowing a third party to restrict the communicating parties that are available to the sponsored user by entering the phone numbers, e-mail addresses, or websites of the allowed communicating parties into a database, directory or repository.

13. The method of claim 1, further comprising the step of determining whether the called party is a universal service user using a secure identifier, wherein the secure identifier comprises a PIN code, digital signature, pseudo-random number generator, biometric or video transmission.

14. The method of claim 1, further comprising the step of restricting by a sponsor through the use of codes the availability of services or products, the quality of services or products, the duration of services or products, the bandwidth, and/or the availability of applications.