

PATROLL Winning Submission

U.S. Patent RE43,113

U.S. Patent RE43,113 ("*Videolabs*" or the "patent-at-issue") was filed on November 19, 2009 and claims the benefit of U.S. Provisional Pat. App. Nos. 60/393,024, 60/392,383, 60/393,041, and 60/392,999, each of which was filed on June 28, 2002. Claim 1 of the patent-atissue is generally directed to a method of providing access to digital products for use in wireless communication devices. The method comprises operating a server system to store domain data defining a plurality of domains, each corresponding to a different subset including more than one of a plurality of wireless services subscribers. Each of the domains further corresponds to a particular billing relationship between a business entity and the corresponding subset of the plurality of wireless services subscribers and assigned thereto to a particular set of digital products designed for use in wireless communication devices that are accessible to the wireless services subscribers in that domain. The server system is operated to enable a plurality of digital products suppliers to publish on the server system such digital products via a computer network. The server system is further operated to enable wireless services subscribers in each of the plurality of domains to acquire the digital products via at least one wireless network and to use the acquired digital products on associated wireless communication devices.

The primary reference, U.S. Patent ,248,855 ("*Upaid Systems*"), was filed on March 14, 2002 and claims the benefit of U.S. Provisional Pat. App. Nos. 60/100,440 and 60/100,470, both filed September 15, 1998. The patent generally relates to a rule set used to determine at least one rule for authorizing a transaction debiting an account of an authorized user. Subsequently, the account is debited, according to the at least one rule, in real time if the transaction is authorized. The real time debit is settled with transaction providers in accordance with at least one settlement rule. If it is determined that the authorized user does not have sufficient funds in an authorized user account to debit for the transaction, the authorized user account to transfer funds from and authorizing the transfer by at least one of referring to a pre-authorized transfer and requesting authorization from the authorized user. The transaction may be requested and the transaction providers may be connected via heterogeneous networks.

A sample claim chart comparing claim 1 of *Videolabs* to *Upaid Systems* is provided below.



| USRE43113 ("Videolabs") | A. US7248855 ("Upaid Systems") |
|--|---|
| 1.pre. A method of providing access to digital products for use in wireless communication devices, the method comprising: | A. US7248855 "In this exemplary system, a customer wishing to engage in mobile commerce can quickly and efficiently receive the services/goods he desires. For example, if a customer wishes to buy an MP3 file from an electronic music vendor, the transaction can work as follows." Upaid Systems at col. 14:12-16 |
| | "The customer, operating the customer input 10, attempts to connect to the music vendor via the vendor's service device 50. The customer input 10 can be connected to any one of the IP device 21, the wireless device 23 or the telephone system access device 25. The IP device 21 can be a network card, a WAP connection device, an SMS messaging device, or any other now known or later devised device for connecting to an internet protocol network." <i>Upaid Systems</i> at col. 14:17-24 |
| | "Wireless device 23 can be a mobile phone, a cellular phone, or any other device that uses radio waves or electromagnetic energy to communicate with the wireless network 24. The telephone system access device 25 can be a modem, a router, a cable modem, or any other device that can connect to the publicly switched telephone network 26." Upaid Systems at col. 14:25-30 |
| | "If the customer input 10 was a wireless device 23 and connects through the wireless network 24 to the vendor's service device 50, the vendor service device 50 can be a Morse or numeric recognition system such that the customer input 10 can adequately specify a request to purchase the MP3 from the vendor service device 50." Upaid Systems at col. 14:42-47 |
| | "The vendor service device 50 can be any combination of a web server, a voice server, an SMS messaging server, or Wireless Access Protocol (WAP) server capable of conducting mobile commerce and deliver or confirm delivery of services or goods to customer input 10. The vendor service device 50 receives the customer request for an MP3 file and generates a request for payment 52. The request for payment 52 is sent to the convergent communications platform 100." Upaid Systems at col. 14:48- |



| (cont.) | 55 |
|--|--|
| 1.pre. A method of providing access to digital products for use in wireless | "The vendor's service device 50 can then generate the |
| communication devices, the method comprising: | services or goods, in this case an MP3 file, and sends the MP3 file by any of the internet 22, wireless network 24, publicly switched telephone network 26, or any other shipping network to the customer network or customer input 10. Other exemplary embodiments can generate a shipping order, a subscription, an authorization to access or a production order." Upaid Systems at col. 14:65-67 through col. 15:1-5 |
| | "In a fully automated environment, the customer input 10 may be an MP3 player connected with a wireless device 23 to a wireless network 24, which automatically sends both authorization and routing data to the vendor service device 50. Thus, all a user has to do is open the device and select that they would like to purchase a new MP3 file. The device then automatically connects to the MP3 vendor, and displays a list of songs for the user to purchase. The user can then simply select the song he wishes to purchase, and then begin downloading the song as all other individual tasks happen in the background." <i>Upaid Systems</i> at col. 15:8-18 |
| 1.a. operating a server system to store domain data defining a plurality of domains, | A. US7248855 "Aspects of the invention as described above further can be attained by a convergent communications system employing a rule set, having a determiner that determines, for an authorized user, at least one rule," Upaid Systems at col. 10:56-59 |
| | "The data relating to the recharge account agreement, rules, and procedures preferably will be stored in the account and/or service manager of the convergent communications platform." Upaid Systems at col. 18:27-30 |
| | "FIG. 1 is an exemplary embodiment of a convergent communications system and method utilizing a mobile commerce server;" Upaid Systems at col. 11:21-23 |
| | "As described herein, the exemplary embodiments of the invention are applicable to a system, method and platform for use with heterogeneous networks and for converged (or convergent) communications, converged commerce and converged services." <i>Upaid Systems</i> at col. 11:66-67 through |



(cont.) 1.a. operating a server system to store domain data defining a plurality of domains,

col. 12:1-3

"Examples of heterogeneous networks are networks having dissimilar or diverse technology components or constituents combined. For example, a heterogeneous network can have: ... different server hardware, like IBM and Compaq; "Upaid Systems at col. 12:6-18



FIG. 17

"FIG. 17 shows an exemplary rules repository for implementing a sophisticated rule set within a convergent communications system. The exemplary rules repository contains several tables. The tables can be named rules master 1700, subscriber 1710, service provider 1720 and service 1730. Each table can contain several fields which hold data related to implementing various rule sets." Upaid Systems at col. 35:25-31

"The rules master 1700 table, for example, can have rule identifier, time based, day based, date based, volume based,



| (cont.) 1.a. operating a server system to store domain data defining a plurality of domains, | percentage, location based, subscriber attribute based, service provider attribute based, service based, last transaction based and foreclosure contract based fields. The rule identifier field may be linked to the subscriber 1710 table, and the service provider 1720 table." Upaid Systems at col. 35:32-38 |
|--|--|
| 1.b. each domain corresponding to a different subset of a plurality of wireless services subscribers, each said subset of the plurality of wireless services subscribers including more than one wireless services subscriber, | A. US7248855 "In a fully automated environment, the customer input 10 may be an MP3 player connected with a wireless device 23 to a wireless network 24, which automatically sends both authorization and routing data to the vendor service device 50." Upaid Systems at col. 15:8-12 |
| | CUSTOMER 1 TELEPHONE SERVICE SWITCHA MANAGERA CUSTOMER 2 CUSTOMER 2 CUSTOMER 2 CUSTOMER 3 CUSTOMER 4 CUSTOMER 4 CUSTOMER 4 CUSTOMER 6 CUSTOMER 5 CUSTOMER 5 CUSTOMER 5 CUSTOMER 5 CUSTOMER 5 CUSTOMER 6 CUSTOMER 6 CUSTO |
| | FIG. 3 |
| | "In FIG. 3, area 310 has customer 1, customer 2, telephone switch A, service manager A and account manager A in it. Account manager A includes the customer accounts for customer 1, customer 2 and customer 3. Area 320 has |



1.b. each domain corresponding to a different subset of a plurality of wireless services subscribers, each said subset of the plurality of wireless services subscribers including more than one wireless services subscriber, customer 3, customer 4, telephone switch B, service manager B and account manager B in it. Account manager B includes the customer accounts for customer 4, customer 5 and customer 6. Area 330 has customer 5, customer 6, telephone switch C, service manager C and account manager C in it. Area 310, area 320 and area 330 are connected by a publicly switched telephone network 300 and a wide area network (WAN) 350." Upaid Systems at col. 16:20-31

"The use of the wide area network 350 has a secure passage for account information to enable roaming. Thus, if all customers 1-6 are customers with accounts in either area 310 or area 320, the exemplary embodiment enables them to use their accounts regardless of the area they are in." *Upaid Systems* at col. 16:32-36

"As embodied herein, the system can also have learning capabilities that allow decision making based on various past events of a set of customers (eg., all teachers, all teenagers, all women above 55 years who live in Dallas, etc)." Upaid Systems at col. 23:55-59

"FIG. 17 shows an exemplary rules repository for implementing a sophisticated rule set within a convergent communications system. The exemplary rules repository contains several tables. The tables can be named rules master 1700, subscriber 1710, service provider 1720 and service 1730. Each table can contain several fields which hold data related to implementing various rule sets." Upaid Systems at col. 35:25-31

"The rules master 1700 table, for example, can have rule identifier, time based, day based, date based, volume based, percentage, location based, subscriber attribute based, service provider attribute based, service based, last transaction based and foreclosure contract based fields. The rule identifier field may be linked to the subscriber 1710 table, and the service provider 1720 table." Upaid Systems at col. 35:32-38

"The subscriber 1710 **table can have subscriber identifier, service identifier, service provider identifier, balance credit, usage amount and list of rules fields**. The service identifier field may be linked to the service 1730 table. The service provider identifier field may be linked to the service



| (cont.) | provider 1720 table. The list of rules field may be linked to | | |
|---------------------------------------|--|--|--|
| 1.b. each domain corresponding to a | the rules master 1700 table." Upaid Systems at col. 35:39-45 | | |
| different subset of a plurality of | | | |
| wireless services subscribers, each | 1710 1720 | | |
| said subset of the plurality of | SUBSCRIBER (SUB) SERVICE PROVIDER (SP) | | |
| wireless services subscribers | | | |
| including more than one wireless | SER IDENTIFIER | | |
| services subscriber, | BALANCE CREDIT PAYABLE USAGE AMOUNT RECEIVABLE | | |
| | | | |
| | 1730 | | |
| | | | |
| | | | |
| | | | |
| | 1700 | | |
| | RULES MASTER | | |
| | | | |
| | TIME BASED | | |
| | DAY BASED DATE BASED | | |
| | VOLUME BASED | | |
| | LOCATION BASED | | |
| | SUBSCRIBER ATTRIBUTE BASED | | |
| | SERVICE BASED | | |
| | LAST TRANSACTION BASED FORECLOSURE CONTRACT BASED | | |
| | | | |
| | FIG. 17 | | |
| 1.c. each of the domains further | A. US7248855 | | |
| corresponding to a particular billing | "In this exemplary system, a customer wishing to engage in | | |
| relationship between a business | mobile commerce can quickly and efficiently receive the | | |
| entity and the corresponding subset | services/goods he desires. For example, if a customer | | |
| of the plurality of wireless services | wisnes to buy an WIP3 life from an electronic music vendor, the transaction can work as follows " <i>Unaid</i> Systems at col | | |
| subscribers, | 14:12-16 | | |
| | "The yonder service device 50 can be any combination of a | | |
| | web server, a voice server an SMS messaging server or | | |
| | Wireless Access Protocol (WAP) server canable of | | |
| | conducting mobile commerce and deliver or confirm | | |
| | delivery of services or goods to customer input 10. The | | |
| | vendor service device 50 receives the customer request for | | |
| | an MP3 file and generates a request for payment 52. The | | |
| | request for payment 52 is sent to the convergent | | |



1.c. each of the domains further corresponding to a particular billing relationship between a business entity and the corresponding subset of the plurality of wireless services subscribers, **communications platform** 100." *Upaid Systems* at col. 14:48-55

"In a fully automated environment, the customer input 10 may be an MP3 player connected with a wireless device 23 to a wireless network 24, which automatically sends both authorization and routing data to the vendor service device 50." Upaid Systems at col. 15:8-12



FIG. 3

"In FIG. 3, area 310 has customer 1, customer 2, telephone switch A, service manager A and account manager A in it. Account manager A includes the customer accounts for customer 1, customer 2 and customer 3. Area 320 has customer 3, customer 4, telephone switch B, service manager B and account manager B in it. Account manager B includes the customer accounts for customer 4, customer 5 and customer 6. Area 330 has customer 5, customer 6, telephone switch C, service manager C and account



1.c. each of the domains further corresponding to a particular billing relationship between a business entity and the corresponding subset of the plurality of wireless services subscribers, manager C in it. Area 310, area 320 and area 330 are connected by a publicly switched telephone network 300 and a wide area network (WAN) 350." *Upaid Systems* at col. 16:20-31

"The use of the wide area network 350 has a secure passage for account information to enable roaming. Thus, if all customers 1-6 are customers with accounts in either area 310 or area 320, the exemplary embodiment enables them to use their accounts regardless of the area they are in." *Upaid Systems* at col. 16:32-36

"As embodied herein, the system can also have learning capabilities that allow decision making based on various past events of a set of customers (eg., all teachers, all teenagers, all women above 55 years who live in Dallas, etc)." Upaid Systems at col. 23:55-59





1.c. each of the domains further corresponding to a particular billing relationship between a business entity and the corresponding subset of the plurality of wireless services subscribers, implementing a sophisticated rule set within a convergent communications system. The exemplary rules repository contains several tables. The tables can be named rules master 1700, subscriber 1710, service provider 1720 and service 1730. Each table can contain several fields which hold data related to implementing various rule sets." Upaid Systems at col. 35:25-31

"The rules master 1700 table, for example, can have rule identifier, time based, day based, date based, volume based, percentage, location based, subscriber attribute based, service provider attribute based, service based, last transaction based and foreclosure contract based fields. The rule identifier field may be linked to the subscriber 1710 table, and the service provider 1720 table." Upaid Systems at col. 35:32-38

"The subscriber 1710 table can have subscriber identifier, service identifier, service provider identifier, balance credit, usage amount and list of rules fields. The service identifier field may be linked to the service 1730 table. The service provider identifier field may be linked to the service provider 1720 table. The list of rules field may be linked to the rules master 1700 table." Upaid Systems at col. 35:39-45

"The service provider 1720 **table can have service provider identifier, service identifier, visiting service provider, payable, receivable and list of rules fields. The service provider field may be linked to** the visiting service provider field and **the subscriber** 1710 **table**. The service identifier field may be linked to the service 1730 table. **The list of rules field may be linked to the rules master** 1700 **table**." *Upaid Systems* at col. 35:46-52

"1. A convergent communications method employing a rule set, comprising:

determining, for an authorized user, at least one payment rule applicable at that time for authorizing a transaction and resultant settling of an account of the authorized user in response to an instruction received via at least one communication network;

applying the at least one payment rule for authorizing the transaction;

charging the account, according to the at least one payment rule, in real time if the transaction is authorized; and settling charges to the account by one of a plurality of



1.c. each of the domains further corresponding to a particular billing relationship between a business entity and the corresponding subset of the plurality of wireless services subscribers, transaction providers in accordance with at least one settlement rule, said charging and settling performed utilizing at least one financial network, separate from the at least one communication network." Upaid Systems at claim 1

"Thus, the rules may be based on rules according to the service provider, rules according to the customer's needs (probably seldom used), rules according to a mix of service providers, rules according to the "owner" of the customer, rules according to the "major" provider of services, (i.e., if a merchant sold a CD to the customer for \$20 and overnight shipping was \$22, then the overnight shipper could dictate when/how the debiting would occur.), rules that change according to the financial institutions' conditions, processes, procedures, rules according to different legislative regulations, rules according to the customer's history, spending limits, monthly average account balance and rules according to predefined agreements between any of the service providers." Upaid Systems at col. 28:9-22

"Further, not all transactions for value will necessarily include a transfer of money. While value may be exchanged, the various transactions may be: free, a benefit of a previously purchased item (like frequent flyer miles), a part of a monthly subscription service or the exchange of value, goods or services that does not include currency (like a merchandizing credit). For example, a free item may be offered for the agreement to purchase additional items within a specified period of time. Other exchanges may include donating an MP3 file for access to another MP3 file. Or a consumer may get access to a mapping program as long as they bank with a certain bank. <u>The exemplary system allows for these types of exchanges within the exemplary structures shown in FIG. 17</u>." *Upaid Systems* at col. 28:32-45

"The following settlement transactions take place using embodiments of the system and method of the invention:



| (cont.) | | | | | |
|---------------------------------------|--|---------------------------|------------------------|----------------------|---------------------------|
| 1.c. each of the domains further | Partner | Trans Type | Payee | Timing | Amount |
| corresponding to a particular billing | Telco (home network | All-you-can- | From Jim | Monthly in | \$50 per month |
| relationship between a business | North Carolina | use monthly service | via bank account | advance | |
| entity and the corresponding subset | MobileTel Telco (home network | Roaming | From Jim | Real-time | \$1 per call |
| of the plurality of wireless services | service provider): | 8 | | | + - F |
| subscribers, | MobileTel | | | | |
| | Telco (visitor network service provider): | Minutes for roaming on | From home network | Real-time | \$.02 per minute |
| | Orange MusicStreamer | network | E | Destations | © 02 |
| | service provider): | Service | rom nome network | Keal-time | s.03 per minute |
| | Orange MusicStreamer Merchant: Amazoom | Charge Fixed | From Jim | \$50 now | \$100 |
| | Merenant. 7 Inazooni | amount | Tiom | \$50 after | \$100 |
| | Shipper/courier | Fixed | From Jim | delivery \$5 upon | \$5 |
| | company: Fed Extra | amount | From Iim | shipping | \$0.50 (25% |
| | InsurUs | rerecht | TION | shipping | of purchase |
| | Telco Partner 1 | Flat rate for | From | Real-time | price) \$.02 per click |
| | (developer and manager of mobile web | ad click-thru | Orange Voice | | thru on an ad |
| | site): Aether Systems | | Stream | D . 1 | 25.04 6 |
| | (developer and | product | From Orange | Batch process, | .25 % of purchase |
| | manager of mobile web site): Aether Systems | sales price | | monthly payment | price |
| | Telco Partner 2 (music | Percent | From | Batch | \$.005 per |
| | service - virgin) | | Orange | monthly | minute |
| | Telco Partner 2 service | Percent | From | payment Batch | \$ 001 per |
| | provider (musician's | reroom | Orange thru | processing | minute |
| | commission clearing center) | | service | payment | |
| | Advertiser on Telco Partner web site: | Flat rate | From Sony to Telco | Monthly | \$.05 per click |
| | Sonny | click thru | partner | batch | unu |
| | | | | processing | », |
| | Upaid Systems at | col. 30:65 | -67 throu | gh col. 31: | 1-39 |
| | | | | 0 | |
| 1.d. each of the domains having | A. US/248855 | | | • • • | |
| assigned thereto to a particular set | In this exemplar | y system, | a custom | er wisning | to engage in |
| in wireless communication devices | mobile commerc | e can qui docinos | CKIY ANG (For avom | enicientiy | receive the |
| that are accessible to the wireless | wishes to huy an | MP3 filo | from an | alactronic | music vendor |
| services subscribers in that domain | the transaction ca | n work as | follows " | Unaid Sys | tems at col |
| services subscribers in that domain, | 14·12-16 | II WOIK do | 10110 w 5. | Opulu Syst | |
| | 11.12 10 | | | | |
| | "The vendor's se | rvice devi | ice 50 car | n then gene | erate the |
| | services or goods | s, in this c | ase <mark>an M</mark> | P3 file, an | d sends the |
| | MP3 file by any of the internet 22, wireless network 24, | | | | |
| | publicly switched telephone network 26, or any other | | | | |
| | shipping networ | k to the cu | istomer r | network or | · customer |
| | input 10. Other of | exemplary | embodi | ments can | generate <mark>a</mark> |
| | shipping order, a | a subscrip | tion, an a | uthorizati | ion to access |



1.d. each of the domains having assigned thereto to a particular set of digital products designed for use in wireless communication devices that are accessible to the wireless services subscribers in that domain; **or a production order**." *Upaid Systems* at col. 14:65-67 through col. 15:1-5

"In a fully automated environment, the customer input 10 may be an MP3 player connected with a wireless device 23 to a wireless network 24, which automatically sends both authorization and routing data to the vendor service device 50. Thus, all a user has to do is open the device and select that they would like to purchase a new MP3 file. The device then automatically connects to the MP3 vendor, and displays a list of songs for the user to purchase. The user can then simply select the song he wishes to purchase, and then begin downloading the song as all other individual tasks happen in the background." *Upaid Systems* at col. 15:8-18





1.d. each of the domains having assigned thereto to a particular set of digital products designed for use in wireless communication devices that are accessible to the wireless services subscribers in that domain; Account manager A includes the customer accounts for customer 1, customer 2 and customer 3. Area 320 has customer 3, customer 4, telephone switch B, service manager B and account manager B in it. Account manager B includes the customer accounts for customer 4, customer 5 and customer 6. Area 330 has customer 5, customer 6, telephone switch C, service manager C and account manager C in it. Area 310, area 320 and area 330 are connected by a publicly switched telephone network 300 and a wide area network (WAN) 350." Upaid Systems at col. 16:20-31

"The use of the wide area network 350 has a secure passage for account information to enable roaming. Thus, if all customers 1-6 are customers with accounts in either area 310 or area 320, the exemplary embodiment enables them to use their accounts regardless of the area they are in." *Upaid Systems* at col. 16:32-36

"As embodied herein, the system can also have learning capabilities that allow decision making based on various past events of a set of customers (eg., all teachers, all teenagers, all women above 55 years who live in Dallas, etc)." Upaid Systems at col. 23:55-59

"FIG. 17 shows an exemplary rules repository for implementing a sophisticated rule set within a convergent communications system. The exemplary rules repository contains several tables. The tables can be named rules master 1700, subscriber 1710, service provider 1720 and service 1730. Each table can contain several fields which hold data related to implementing various rule sets." Upaid Systems at col. 35:25-31

"The rules master 1700 table, for example, can have rule identifier, time based, day based, date based, volume based, percentage, location based, subscriber attribute based, service provider attribute based, service based, last transaction based and foreclosure contract based fields. The rule identifier field may be linked to the subscriber 1710 table, and the service provider 1720 table." Upaid Systems at col. 35:32-38

"The subscriber 1710 table can have subscriber identifier, service identifier, service provider identifier, balance credit, usage amount and list of rules fields. The service



1.d. each of the domains having assigned thereto to a particular set of digital products designed for use in wireless communication devices that are accessible to the wireless services subscribers in that domain; **identifier field may be linked to the service** 1730 **table**. The service provider identifier field may be linked to the service provider 1720 table. The list of rules field may be linked to the rules master 1700 table." *Upaid Systems* at col. 35:39-45



FIG. 17

"The service 1730 **table can have service identifier, type of service and tariff fields. The service identifier field may be linked to the subscriber** 1710 **and service provider** 1720 **fields.**" *Upaid Systems* at col. 35:53-56

"Thus, the rules may be based on rules according to the service provider, rules according to the customer's needs (probably seldom used), rules according to a mix of service providers, rules according to the "owner" of the customer, rules according to the "major" provider of services, (i.e., if a merchant sold a CD to the customer for \$20 and overnight shipping was \$22, then the overnight shipper could dictate when/how the debiting would occur.), rules that change according to the financial institutions'



| (cont.) 1.d. each of the domains having assigned thereto to a particular set of digital products designed for use in wireless communication devices that are accessible to the wireless services subscribers in that domain; | conditions, processes, procedures, rules according to different legislative regulations, rules according to the customer's history, spending limits, monthly average account balance and rules according to predefined agreements between any of the service providers." Upaid Systems at col. 28:9-22 "Further, not all transactions for value will necessarily include a transfer of money. While value may be exchanged, the various transactions may be: free, a benefit of a previously purchased item (like frequent flyer miles), a part of a monthly subscription service or the exchange of value, goods or services that does not include currency (like a merchandizing credit). For example, a free item may be offered for the agreement to purchase additional items within a specified period of time. Other exchanges may include donating an MP3 file for access to another MP3 file. Or a consumer may get access to a mapping program as long as they bank with a certain bank. The exemplary system allows for these types of exchanges within the exemplary structures shown in FIG. 17." Upaid Systems at col. 28:32-45 |
|--|---|
| 1.e. operating the server system to enable a plurality of digital products suppliers to publish on the server system digital products designed for use in wireless communication devices via a computer network such that the digital products are accessible to the plurality of wireless services subscribers; and | A. US7248855 "Aspects of the invention as described above further can be attained by a convergent communications system employing a rule set, having a determiner that determines, for an authorized user, at least one rule," Upaid Systems at col. 10:56-59 "FIG. 1 is an exemplary embodiment of a convergent communications system and method utilizing a mobile commerce server;" Upaid Systems at col. 11:21-23 "As described herein, the exemplary embodiments of the invention are applicable to a system, method and platform for use with heterogeneous networks and for converged (or convergent) communications, converged commerce and converged services." Upaid Systems at col. 11:66-67 through col. 12:1-3 "Examples of heterogeneous networks are networks having dissimilar or diverse technology components or constituents combined. For example, a heterogeneous network can have: different server hardware, like IBM and Compaq;" Upaid Systems at col. 12:6-18 |



1.e. operating the server system to enable a plurality of digital products suppliers to publish on the server system digital products designed for use in wireless communication devices via a computer network such that the digital products are accessible to the plurality of wireless services subscribers; and "In this exemplary system, a customer wishing to engage in mobile commerce can quickly and efficiently receive the services/goods he desires. For example, if a customer wishes to buy an MP3 file from an electronic music vendor, the transaction can work as follows." *Upaid Systems* at col. 14:12-16

"The vendor service device 50 can be any combination of a web server, a voice server, an SMS messaging server, or Wireless Access Protocol (WAP) server capable of conducting mobile commerce and deliver or confirm delivery of services or goods to customer input 10. The vendor service device 50 receives the customer request for an MP3 file and generates a request for payment 52. The request for payment 52 is sent to the convergent communications platform 100." *Upaid Systems* at col. 14:48-55

"The vendor's service device 50 can then generate the services or goods, in this case an MP3 file, and sends the MP3 file by any of the internet 22, wireless network 24, publicly switched telephone network 26, or any other shipping network to the customer network or customer input 10. Other exemplary embodiments can generate a shipping order, a subscription, an authorization to access or a production order." Upaid Systems at col. 14:65-67 through col. 15:1-5

"In a fully automated environment, the customer input 10 may be an MP3 player connected with a wireless device 23 to a wireless network 24, which automatically sends both authorization and routing data to the vendor service device 50. Thus, all a user has to do is open the device and select that they would like to purchase a new MP3 file. The device then automatically connects to the MP3 vendor, and displays a list of songs for the user to purchase. The user can then simply select the song he wishes to purchase, and then begin downloading the song as all other individual tasks happen in the background." *Upaid Systems* at col. 15:8-18

"The use of the wide area network 350 has a secure passage for account information to enable roaming. Thus, if all customers 1-6 are customers with accounts in either area 310 or area 320, the exemplary embodiment enables them



1.e. operating the server system to enable a plurality of digital products suppliers to publish on the server system digital products designed for use in wireless communication devices via a computer network such that the digital products are accessible to the plurality of wireless services subscribers; and to use their accounts regardless of the area they are in." *Upaid Systems* at col. 16:32-36

"As embodied herein, the system can also have learning capabilities that allow decision making based on various past events of a set of customers (eg., all teachers, all teenagers, all women above 55 years who live in Dallas, etc)." Upaid Systems at col. 23:55-59

"FIG. 17 shows an exemplary rules repository for implementing a sophisticated rule set within a convergent communications system. The exemplary rules repository contains several tables. The tables can be named rules master 1700, subscriber 1710, service provider 1720 and service 1730. Each table can contain several fields which hold data related to implementing various rule sets." Upaid Systems at col. 35:25-31





| (cont.) 1.e. operating the server system to enable a plurality of digital products suppliers to publish on the server system digital products designed for use in wireless communication devices via a computer network such that the digital products are | identifier, time based, day based, date based, volume based, percentage, location based, subscriber attribute based, service provider attribute based, service based, last transaction based and foreclosure contract based fields. The rule identifier field may be linked to the subscriber 1710 table, and the service provider 1720 table." Upaid Systems at col. 35:32-38 |
|---|--|
| accessible to the plurality of wireless services subscribers; and | "The subscriber 1710 table can have subscriber identifier, service identifier, service provider identifier, balance credit, usage amount and list of rules fields. The service identifier field may be linked to the service 1730 table. The service provider identifier field may be linked to the service provider 1720 table. The list of rules field may be linked to the rules master 1700 table." <i>Upaid Systems</i> at col. 35:39-45 |
| | "The service provider 1720 table can have service provider identifier, service identifier, visiting service provider, payable, receivable and list of rules fields. The service provider field may be linked to the visiting service provider field and the subscriber 1710 table. The service identifier field may be linked to the service 1730 table. The list of rules field may be linked to the rules master 1700 table." <i>Upaid Systems</i> at col. 35:46-52 |
| | "The service 1730 table can have service identifier, type of service and tariff fields. The service identifier field may be linked to the subscriber 1710 and service provider 1720 fields ." <i>Upaid Systems</i> at col. 35:53-56 |
| 1.f. operating the server system to enable wireless services subscribers in each of the plurality of domains to acquire the digital products via at least one wireless network and to use the acquired digital products on associated wireless communication | A. US7248855 "Aspects of the invention as described above further can be attained by a convergent communications system employing a rule set, having a determiner that determines, for an authorized user, at least one rule," Upaid Systems at col. 10:56-59 |
| devices. | "FIG. 1 is an exemplary embodiment of a convergent communications system and method utilizing a mobile commerce server;" Upaid Systems at col. 11:21-23 |
| | "As described herein, the exemplary embodiments of the invention are applicable to a system, method and platform for use with heterogeneous networks and for converged (or convergent) communications, converged commerce and converged services." Upaid Systems at col. 11:66-67 through |



1.f. operating the server system to enable wireless services subscribers in each of the plurality of domains to acquire the digital products via at least one wireless network and to use the acquired digital products on associated wireless communication devices.

col. 12:1-3

"Examples of heterogeneous networks are networks having dissimilar or diverse technology components or constituents combined. For example, a heterogeneous network can have: . . . different server hardware, like IBM and Compaq;" Upaid Systems at col. 12:6-18

"In this exemplary system, a customer wishing to engage in mobile commerce can quickly and efficiently receive the services/goods he desires. For example, if a customer wishes to buy an MP3 file from an electronic music vendor, the transaction can work as follows." *Upaid Systems* at col. 14:12-16

"The vendor service device 50 can be any combination of a web server, a voice server, an SMS messaging server, or Wireless Access Protocol (WAP) server capable of conducting mobile commerce and deliver or confirm delivery of services or goods to customer input 10. The vendor service device 50 receives the customer request for an MP3 file and generates a request for payment 52. The request for payment 52 is sent to the convergent communications platform 100." *Upaid Systems* at col. 14:48-55

"The vendor's service device 50 can then generate the services or goods, in this case an MP3 file, and sends the MP3 file by any of the internet 22, wireless network 24, publicly switched telephone network 26, or any other shipping network to the customer network or customer input 10. Other exemplary embodiments can generate a shipping order, a subscription, an authorization to access or a production order." Upaid Systems at col. 14:65-67 through col. 15:1-5

"In a fully automated environment, the customer input 10 may be an MP3 player connected with a wireless device 23 to a wireless network 24, which automatically sends both authorization and routing data to the vendor service device 50. Thus, all a user has to do is open the device and select that they would like to purchase a new MP3 file. The device then automatically connects to the MP3 vendor, and displays a list of songs for the user to purchase. The user can then simply select the song he wishes to purchase, and then begin downloading the song as all other individual



1.f. operating the server system to enable wireless services subscribers in each of the plurality of domains to acquire the digital products via at least one wireless network and to use the acquired digital products on associated wireless communication devices. **tasks happen in the background**." *Upaid Systems* at col. 15:8-18

"In FIG. 3, area 310 has customer 1, customer 2, telephone switch A, service manager A and account manager A in it. Account manager A includes the customer accounts for customer 1, customer 2 and customer 3. Area 320 has customer 3, customer 4, telephone switch B, service manager B and account manager B in it. Account manager B includes the customer accounts for customer 4, customer 5 and customer 6. Area 330 has customer 5, customer 6, telephone switch C, service manager C and account manager C in it. Area 310, area 320 and area 330 are connected by a publicly switched telephone network 300 and a wide area network (WAN) 350." Upaid Systems at col. 16:20-31





1.f. operating the server system to enable wireless services subscribers in each of the plurality of domains to acquire the digital products via at least one wireless network and to use the acquired digital products on associated wireless communication devices. for account information to enable roaming. Thus, if all customers 1-6 are customers with accounts in either area 310 or area 320, the exemplary embodiment enables them to use their accounts regardless of the area they are in." *Upaid Systems* at col. 16:32-36

"As embodied herein, the system can also have learning capabilities that allow decision making based on various past events of a set of customers (eg., all teachers, all teenagers, all women above 55 years who live in Dallas, etc)." Upaid Systems at col. 23:55-59



"FIG. 17 shows an exemplary rules repository for implementing a sophisticated rule set within a convergent communications system. The exemplary rules repository contains several tables. The tables can be named rules master 1700, subscriber 1710, service provider 1720 and service 1730. Each table can contain several fields which hold data related to implementing various rule sets." Upaid



| (cont.) | <i>Systems</i> at col. 35:25-31 |
|--|--|
| 1.f. operating the server system to | |
| enable wireless services subscribers | "The rules master 1700 table, for example, can have rule |
| in each of the plurality of domains to | identifier, time based, day based, date based, volume based, |
| acquire the digital products via at | nercentage, location based, subscriber attribute based. |
| least one wireless network and to use | service provider attribute based, service based, last |
| the acquired digital products on | transaction based and foreclosure contract based fields |
| associated wireless communication | The rule identifier field may be linked to the subscriber |
| doviços | 1710 table and the service provider 1720 table "Ungid |
| uevices. | Sustaine at col 25:22.29 |
| | <i>Systems</i> at col. 55:52-58 |
| | "The subscriber 1710 table can have subscriber identifier |
| | The subscriber 1710 table can have subscriber identifier, |
| | service identifier, service provider identifier, balance |
| | credit, usage amount and list of rules fields. The service |
| | identifier field may be linked to the service 1730 table. The |
| | service provider identifier field may be linked to the service |
| | provider 1720 table. The list of rules field may be linked to |
| | the rules master 1700 table." Upaid Systems at col. 35:39-45 |
| | |
| | "The service 1730 table can have service identifier, type of |
| | service and tariff fields. The service identifier field may be |
| | linked to the subscriber 1710 and service provider 1720 |
| | fields." Upaid Systems at col. 35:53-56 |
| | credit, usage amount and list of rules fields. The service identifier field may be linked to the service 1730 table. The service provider identifier field may be linked to the service provider 1720 table. The list of rules field may be linked to the rules master 1700 table." Upaid Systems at col. 35:39-45 "The service 1730 table can have service identifier, type of service and tariff fields. The service identifier field may be linked to the subscriber 1710 and service provider 1720 fields." Upaid Systems at col. 35:53-56 |