Gallagher's system and method discloses that wireless mobile device 62 establishes communication with the wireless communication device 44 and reads the stored payment facilitating information (pg.3, ¶ [0037]), any subsequent steps done by the wireless mobile device 62 are under the control of the restaurant application (¶ [0038]) where the line item details of the guest check can be programmed into the data storage of the wireless communication device 44 in step 100 in which case such data will be read by the wireless mobile device 62 (¶ [0040]).

Applicant's argument seems to contradict the claim language as the claims clearly state that the mobile device captures the data stored on the tag and the captured data is extracted in the mobile device.

Examiner notes, the Applicant Specifications ¶ [0032] state:

The customer uses his mobile device to read the contactless card at 126. As described above, the mobile device is assumed to have been installed with a corresponding smart bill application. Upon detecting the contactless card in the near field, the smart bill application is executed and reads off data pertaining to the electronic bill from the contactless card at 128 and subsequently displays the electronic bill on a screen of the mobile device for the consumer to verify.

Applicant argues: *"The Applicant respectfully contests the combination of Gallagher and Brendell as it is believed that there is no motivation to combine these two references in the manner proposed by the Examiner"*

Examiner respectfully disagrees. Gallagher and Brendell both teach a system and method in which an invoice is presented electronically to a user via a guest presenter. Both references are within the same field of endeavor and both a focused on contactless payment within the restaurant industry.

Further, motivation was provided in all present and previous combinations of references. Although a specific motivation may not have been explicitly stated within one of the references, the motivation was not improper, and provided in accordance with the Teaching-Suggestion-Motivation

Test (TSM). As such, Examiner's use of these facts as a motivation statement is in compliance with the

requirements of the TSM test, since the Teaching-Suggestion-Motivation (TSM) test should be flexibly

applied and the teaching, suggestion, or motivation need not be written within the reference.

Applicant argues: *"The payment notification from the merchant system 202 to a POS terminal*

is not equivalent to a payment notification from the payment gateway to a merchant as the merchant

system 202 still needs a payment gateway to settle a payment. Nevertheless, the modification of

Gallagher with Brendell would not cure the deficiencies in Gallagher as discussed above".

Examiner respectfully disagrees. Examiner has met all requirements establishing a prima facie

case: all factual findings required by Graham were supplied in the previous and present Actions; the

references are related art, and Applicant has supplied no evidence that there is no reasonable

expectation of success; all claim limitations were met in the previous and present Actions, and Applicant

has merely made the allegation that the limitations are not met or to how the identified elements are

otherwise distinguishable from the claimed limitations. Neither has Applicant supplied any evidence or

argument addressing any failure of Examiner's application of the TSM test, pursuant to current

governing law.

Applicant's arguments are not directed toward the cited portion of the Brendell. For example,

Gallagher already discloses the steps of settling a payment transaction between a customer and

merchant and explicitly states where an approval message is sent to the restaurant POS *See* pg.4, ¶

[0042] and ¶ [0043].

The cited portion of Brendell (pg.3, ¶ [0033]) teaches the consumer can provide the information

to a personal bank, where the bank receives the amount due and the merchant information, along with

a consumer identifier. Once the consumer is identified and verified, the bank may approve the

transaction and submit payment of the amount due to the merchant of record as indicated by the

merchant information.

In other words, Brendell teaches where the personal bank, of the customer acts as the payment

gateway that controls the transaction between the customer and merchant and sends the approval to

the merchant. Therefore meeting the claimed limitation of independent claims 1, 12 and 18.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a

prior Office action.

Claims 1, 2, 4, 5, 12 and 17-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being

unpatentable over Gallagher U.S. Patent Application Publication 2011/0173060 in view of Brendell et

al. U.S. Patent Application Publication 2013/0048717.

As per Claim 1, Gallagher discloses a method for mobile payment, the method comprising:

causing a mobile device to capture data directly from a tag physically presented thereto (pg.3, ¶ [0037]

discusses the guest recognizes the logo 46, highlighted by the magnifying window 48, as indicating a

wireless payment capability and brings his wireless mobile device 62 near the logo. In step 106, the

wireless mobile device 62 establishes communication with the wireless communication device 44 and

reads the stored payment facilitating information),

wherein the tag receives the data directly from a POS device and allows the mobile device to

capture the data therefrom (pg.3, ¶ [0034] discusses the restaurant management module running in the

restaurant POS system 52 displays the guest check for the correct table where the guest is sitting. In

step 100, when the waiter brings a check presenter near the wireless reader/writer 54, the restaurant

management module writes several payment facilitating information to the memory of the wireless

communication device 44 attached to the check presenter2 through the wireless reader/writer 54)

the data embedded in the tag including an electronic invoice and settlement information with a merchant associated with the POS device (pg.3, ¶ [0034] discusses the restaurant management module writes several payment facilitating information to the memory of the wireless communication device 44 attached to the check presenter2 through the wireless reader/writer 54….the payment facilitating information includes the following information: 1) restaurant identifier, 2) unique identifier of the wireless communication device 44, if not present already, 3) identifier of the table where the guest is sitting, 4) identifier of the guest check, 5) location information of the restaurant interface system 56 such as the URL (Uniform Resource Locator) and 6) identifier of a restaurant application which is to be run by the wireless mobile device 62 of the guest when the device is brought near the wireless communication device 44);

extracting the electronic invoice from the captured data in the mobile device (pg.3, ¶ [0040] discusses the line item details of the guest check can be programmed into the data storage of the wireless communication device 44 in step 100 in which case such data will be read by the wireless mobile device 62);

displaying the electronic invoice on a display of the mobile device to show an amount to be paid by a user of the mobile device (pg.3, ¶ [0041] discusses the guest review the guest check information either on the wireless mobile device or the physical check),

wherein the mobile device is configured to execute an installed application therein to capture the data from the tag (pg.3, ¶ [0038] discusses the wireless mobile device 62 will attempt to download it through the restaurant interface system 56 using the URL provided by the wireless communication device 44. If the wireless mobile device 62 does locate the application within the device itself, it will load and execute the program. Thus, any subsequent steps done by the wireless mobile device 62 are under the control of the restaurant application);

receiving an entry by the mobile device, the entry including an additional amount from the user

(pg.3, ¶ [0041] discusses the guest review the guest check information either on the wireless mobile

device or the physical check and adds any gratuity to the total);

calculating a total amount by adding the additional amount to the amount in the electronic

invoice (pg.3, ¶ [0041] discusses the guest reviews the guest check information either on the wireless

mobile device 62 or the physical check and adds any gratuity to the total);

generating a payment request in the mobile device in response to the electronic invoice after

the user has chosen a paying instrument (pg.4, ¶ [0041] discusses upon selection of a financial

instrument to use for payment by the guest, the wireless mobile device 62 retrieves the selected

financial instrument information from a secure memory area of the mobile device),

wherein the payment request includes the total amount and the settlement information (pg.4, ¶

[0042] discusses the wireless mobile device 62 transmits the payment facilitating information, the

retrieved financial instrument information and the total amount including the gratuity to the restaurant

interface system 56 for processing the payment);

displaying the electronic invoice on the display of the mobile device for the user to verify the

payment request along with the chosen paying instrument (pg.4, ¶ [0041] discusses upon selection of a

financial instrument to use for payment ¶ [0042] discusses upon approval by the guest);

sending the payment request from the mobile device to a payment gateway (pg.4, ¶ [0043]

discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved

financial instrument information and the total amount directly to the payment processing system 58 for

processing the payment),

recording a confirmation in the mobile device that the monetary transaction per the payment

request has been successfully completed with respect to the electronic invoice (pg.4, ¶ [0042] discusses

the payment processing system 58 transmits the received approval message to the wireless mobile

device 62 as receipt and to the restaurant POS system 52 to indicate to the restaurant management

software that the guest check has been paid).

Gallagher teaches the payment processing system 58 processes the payment authorization in a

known manner and returns an approval message to the restaurant interface system 56 and Figure 4,

Step 118 Payment Approval Message is transmitted to Restaurant POS System (pg.4, ¶ [0042]), thereby

transferring funds from the customer to the merchant and providing a notification of such transfer to

the POS system.

However, Gallagher fails to explicitly state wherein the payment gateway sends a message

directly to the POS device that a monetary transaction per the payment request sent from the mobile

device has been successfully completed in the payment gateway with the POS device when an amount

equivalent to the total amount is deducted from an account associated with the user.

Brendell teaches wherein the payment gateway sends a message directly to the POS device that

a monetary transaction per the payment request sent from the mobile device has been successfully

completed in the payment gateway with the POS device when an amount equivalent to the total

amount is deducted from an account associated with the user (pg.3, ¶ [0023] discusses the consumer

can provide the information to a personal bank, where the bank receives the amount due and the

merchant information, along with a consumer identifier. Once the consumer is identified and verified,

the bank may approve the transaction and submit payment of the amount due to the merchant of

record as indicated by the merchant information. Such a transaction has additional security in that the

consumer's account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to deduct the total

bill amount from a customer's bank account and send the merchant an indication of the transaction as

taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a

restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated

with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill,

transmitting the total bill and associated unique identifier to a consumer accessible payment network,

and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 2, Gallagher discloses the method as recited in claim 1, wherein said causing a

mobile device to capture data directly from <u>tag physically presented thereto</u> includes placing the <u>mobile</u>

<u>device</u> near the tag (Figure 4, Step 104, Guest brings mobile device near the guest check presenter).

As per Claim 4, Gallagher discloses the method as recited in claim 1, wherein said displaying the

electronic invoice on a display of the mobile device comprises:

allowing the user to verify the amount in the electronic invoice and make a change to the

amount when needed (Figure 4, Step 110, Guest Reviews Bill and Adds Gratuity); and

paying the total amount with the chosen paying instrument (Figure 4, Step 112, Mobile Device

Retrieves Financial Instrument Information From Mobile Device),

wherein the chosen paying instrument is selected from a traditional credit or debit card, and an

electronic transfer (pg.4, ¶ [0041] discusses the wireless mobile device 62 retrieves the selected

financial instrument information from a secure memory area of the mobile device. The financial

instrument information can include an account number, name of the account holder, expiration date

and CVV (card verification value) and the like).

However, Gallagher is silent regarding group consisting of an electronic wallet already created in

the mobile device,

Brendell teaches group consisting of an electronic wallet already created in the mobile device

(pg.3, ¶ [0022] discusses the contactless-enabled device 120 may store multiple accounts which the

consumer may select from to make the payment, Incorporated Reference 13/215,111 pg. 3, ¶ [0027]

discusses virtual wallet program).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include a virtual wallet within the mobile device as taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 5, Gallagher discloses the method as recited in claim 1 further comprising:

causing the mobile device to execute an installed module upon detecting the POS device in a near field of the mobile device (pg.3, ¶ [0034] discusses and identifier of a restaurant application which is to be run by the wireless mobile device 62 of the guest when the device is brought near the wireless communication device 44)

wherein the installed module is executed to receive the data <u>directly</u> from the <u>tag</u> carrying the electronic invoice and the settlement information (pg.3, [0038] discusses Based on the restaurant application identifier, the wireless mobile device 62 attempts to locate the application in its data storage… If the wireless mobile device 62 does locate the application within the device itself, it will load and execute the program. Thus, any subsequent steps done by the wireless mobile device 62 are under the control of the restaurant application, ¶ [0040] discusses the line item details of the guest check can be programmed into the data storage of the wireless communication device 44 in step 100 in which case such data will be read by the wireless mobile device 62 in step 106).

As per Claim 12, Gallagher discloses a method for mobile payment, the method comprising:

generating a set of data in a point of sale device, the data including an electronic invoice and settlement information with a merchant associated with the POS device (pg.3, ¶ [0034] discusses upon

instruction by the waiter, the restaurant management module running in the restaurant POS system 52

displays the guest check for the correct table where the guest is sitting. In step 100, when the waiter

brings a check presenter near the wireless reader/writer 54, the restaurant management module writes

several payment facilitating information to the memory of the wireless communication device 44

attached to the check presenter2 through the wireless reader/writer 54… the payment facilitating

information includes the following information: 1) restaurant identifier, 2) unique identifier of the

wireless communication device 44, if not present already, 3) identifier of the table where the guest is

sitting, 4) identifier of the guest check, 5) location information of the restaurant interface system 56

such as the URL (Uniform Resource Locator) and 6) identifier of a restaurant application which is to be

run by the wireless mobile device 62 of the guest when the device is brought near the wireless

communication device 44),

embedding the data direct to a tag; (pg.3, ¶ [0034] discusses the restaurant management

module writes several payment facilitating information to the memory of the wireless communication

device 44 attached to the check presenter2 through the wireless reader/writer 54)

presenting the tag to the mobile device (pg.3, ¶ [0036] discusses the waiter brings the

programmed guest check presenter 2 to the guest)

causing the mobile device to capture the data from the tag (pg.3, ¶ [0037] the wireless mobile

device 62 establishes communication with the wireless communication device 44 and reads the stored

payment facilitating information),

wherein the mobile device executes an installed application therein to retrieve an amount in the

electronic invoice from the data and generate a payment request in response to the captured data, the

payment request being sent to a payment gateway includes a total amount combining an additional

amount added by a user of the mobile device and an amount expressed in the electronic invoice (pg.3, ¶

[0037] discusses the wireless mobile device 62 establishes communication with the wireless

communication device 44 and reads the stored payment facilitating information…¶ [0038] discusses

Based on the restaurant application identifier, the wireless mobile device 62 attempts to locate the

application in its data storage… If the wireless mobile device 62 does locate the application within the

device itself, it will load and execute the program. Thus, any subsequent steps done by the wireless

mobile device 62 are under the control of the restaurant application…¶[0040] discusses the line item

details of the guest check can be programmed into the data storage of the wireless communication

device 44 in step 100 in which case such data will be read by the wireless mobile device and pg.4, ¶

[0042] discusses the wireless mobile device 62 transmits the payment facilitating information, the

retrieved financial instrument information and the total amount including the gratuity to the restaurant

interface system 56 for processing the payment); and

receiving a message in the POS device directly from the payment gateway that the electronic

invoice has been settled but for the total amount more than the amount expressed in the electronic

invoice (pg.4, ¶ [0042] discusses the payment processing system 58 transmits the received approval

message to the wireless mobile device 62 as receipt and to the restaurant POS system 52 to indicate to

the restaurant management software that the guest check has been paid),

Gallagher teaches the payment processing system 58 processes the payment authorization in a

known manner and returns an approval message to the restaurant interface system 56 and Figure 4,

Step 118 Payment Approval Message is transmitted to Restaurant POS System (pg.4, ¶ [0042]), thereby

transferring funds from the customer to the merchant and providing a notification of such transfer to

the POS system.

However, Gallagher fails to explicitly state wherein the payment gateway is configured to send

the message directly to the POS device when an amount equivalent to the total amount is deducted

from an account associated with the user of the mobile devices.

Brendell teaches wherein the payment gateway is configured to send the message directly to

the POS device when an amount equivalent to the total amount is deducted from an account associated

with the user of the mobile devices (pg.3, ¶ [0023] discusses the consumer can provide the information

to a personal bank, where the bank receives the amount due and the merchant information, along with

a consumer identifier. Once the consumer is identified and verified, the bank may approve the

transaction and submit payment of the amount due to the merchant of record as indicated by the

merchant information. Such a transaction has additional security in that the consumer's account number

is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to deduct the total

bill amount from a customer's bank account and send the merchant an indication of the transaction as

taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a

restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated

with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill,

transmitting the total bill and associated unique identifier to a consumer accessible payment network,

and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 13, Gallagher discloses the method as recited in claim 12, wherein the <u>tag is</u>

<u>presented </u>near the mobile device to allow the user to use the mobile device to capture the data (Figure

4, Step 104, Guest brings mobile device near the guest check presenter, Step 106, Mobile Device Reads

Stored Information from Guest Check Presenter).

As per Claim 17, Gallagher discloses the method recited in claim 12, wherein data exchange

between the mobile device and payment gateway is conducted in channel established between the

mobile device and payment gateway (pg.4, ¶ [0043] discusses the wireless mobile device 62 can

transmit the payment facilitating information, the retrieved financial instrument information and the

total amount directly to the payment processing system 58 for processing the payment…pg.3, ¶ [0030]

discusses VISA™ interchange system).

However, Gallagher fails to explicit state a secured channel.

Brendell teaches a secured channel (pg.8, ¶ [0074] discusses a web client may implement

security protocols such as Secure Sockets Layer (SSL) and Transport Layer Security (TLS). A web client

may implement several application layer protocols including http, https, ftp, and sftp).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to include the ability

to communicate via known security protocols as taught by Brendell to provide a contactless payment

system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment

system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag

or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer

accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 18, Gallagher discloses a system for mobile payment, the system comprising:

a point of sale (POS) device provided to generate a set of <u>data</u> including an electronic invoice

upon receiving an entry (Figure 4, Step 100, Restaurant POS Module writes facilitating information to

guest check presenter),

wherein the data including the electronic invoice and settlement information is transferred to a

tag (pg.3, ¶ [0034] discusses the payment facilitating information includes the following information: 1)

restaurant identifier, 2) unique identifier of the wireless communication device 44, if not present

already, 3) identifier of the table where the guest is sitting, 4) identifier of the guest check, 5) location

information of the restaurant interface system 56 such as the URL (Uniform Resource Locator) and 6)

identifier of a restaurant application which is to be run by the wireless mobile device 62 of the guest

when the device is brought near the wireless communication device 44),

a mobile device is executing a module configured to capture the data directly from the tag

physically presented thereto (Figure 4, Step 102, Waiter bring programmed guest check presenter to

guest, Step 106 Mobile Device Reads stored information from the guest check presenter and pg.3, ¶

[0038] discusses any subsequent steps done by the wireless mobile device 62 are under the control of

the restaurant application);

extract an amount expressed in the electronic invoice and display the amount in the mobile

device (pg.3, ¶ [0040] discusses the line item details of the guest check can be programmed into the

data storage of the wireless communication device 44 in step 100 in which case such data will be read

by the wireless mobile device 62…¶ [0041] discusses the guest reviews the guest check information

either on the wireless mobile device 62 or physical check)

wherein the POS device receives an electronic notification directly from a payment gateway that

the electronic invoice has been settled for a total amount including an additional amount and the

amount expressed in the electronic invoice (pg.4, ¶ [0042] discusses the payment processing system 58

transmits the received approval message to the wireless mobile device 62 as receipt and to the

restaurant POS system 52 to indicate to the restaurant management software that the guest check has

been paid and ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating

information, the retrieved financial instrument information and the total amount directly to the

payment processing system 58 for processing the payment),

the additional amount is added by the user, after the user of the mobile devices verifies the

electronic invoice displayed on the mobile device (Figure 4, Step 110 Guest Reviews Bill and Adds

Gratuity) and

authorizes a payment to the electronic invoice (pg.4, ¶ [0042] discusses approval by the guest),

the mobile device is configured to generate a payment request to be sent to the payment gateway to

proceed with a payment according to the payment request (pg.4, ¶ [0042] discusses the wireless mobile

device 62 transmits the payment facilitating information, the retrieved financial instrument information

and the total amount including the gratuity to the restaurant interface system 56 for processing the

payment…¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating

information, the retrieved financial instrument information and the total amount directly to the

payment processing system 58 for processing the payment).

Brendell teaches wherein the POS device receives an electronic notification directly from a

payment gateway that the electronic invoice has been settled for a total amount including an additional

amount and the amount expressed in the electronic invoice (pg.3, ¶ [0023] discusses the consumer can

provide the information to a personal bank, where the bank receives the amount due and the merchant

information, along with a consumer identifier. Once the consumer is identified and verified, the bank

may approve the transaction and submit payment of the amount due to the merchant of record as

indicated by the merchant information. Such a transaction has additional security in that the consumer's

account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to deduct the total

bill amount from a customer's bank account and send the merchant an indication of the transaction as

taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a

restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated

with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill,

transmitting the total bill and associated unique identifier to a consumer accessible payment network,

and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 19, Gallagher discloses the system as recited in claim 18. However, Gallagher is silent regarding wherein the data from the POS device includes an account and bank information of the merchant of the POS device.

Brendell teaches wherein the data from the POS device includes an account and bank information of the merchant of the POS device (pg.3, ¶ [0023] discusses the transaction information, for example, may include the amount due and merchant information…. the consumer can provide the information to a personal bank, where the bank receives the amount due and the merchant information, along with a consumer identifier. Once the consumer is identified and verified, the bank may approve the transaction and submit payment of the amount due to the merchant of record as indicated by the merchant information[1]).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include a virtual wallet within the mobile device as taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 20, Gallagher discloses the system of the claimed invention. However, Gallagher is silent regarding wherein the payment gateway acts to deduct an amount equivalent to the total amount from an account associated with the user of the mobile devices and generates the electronic notification for the POS device.

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[1] The cited portion of Brendell teaches that the merchant information includes an account and bank information of a merchant because the bank needs such information to finalize a transaction.

Brendell teaches wherein the payment gateway acts to deduct an amount equivalent to the

total amount from an account associated with the user of the mobile devices and generates the

electronic notification for the POS device (pg.3, ¶ [0023] discusses the consumer can provide the

information to a personal bank, where the bank receives the amount due and the merchant

information, along with a consumer identifier. Once the consumer is identified and verified, the bank

may approve the transaction and submit payment of the amount due to the merchant of record as

indicated by the merchant information. Such a transaction has additional security in that the consumer's

account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to deduct the total

bill amount from a customer's bank account and send the merchant an indication of the transaction as

taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a

restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated

with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill,

transmitting the total bill and associated unique identifier to a consumer accessible payment network,

and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

Claims 3, 6-11, 14-15 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher U.S. Patent Application Publication 2011/0173060 in view of Brendell US 2013/0054412 further in view of Florek et al. 2011/0112968.

As per Claims 3 and 14, Gallagher discloses the method as recited in the claimed invention, wherein the POS device generate the electronic bill and transfer the data to the tag (pg.3, ¶ [0034] discusses the restaurant management module running in the restaurant POS system 52 displays the guest check for the correct table where the guest is sitting. In step 100, when the waiter brings a check presenter near the wireless reader/writer 54, the restaurant management module writes several payment facilitating information to the memory of the wireless communication device 44 attached to the check presenter 2 through the wireless reader/writer 54).

However, Gallagher and Brendell are silent regarding POS device provides security and authentication.

Florek et al. teaches wherein POS device provides security and authentication (pg.6, ¶ [0045] discusses Sales Device will be very small and simple. It can be in the form of a small box with a display and keyboard through which the merchant will enter the required payment amount. The identification data can be stored directly in the corresponding element on the printed circuit of Sales Device, or they can be stored on the ICC (integrated circuit card) card or on other carriers as e.g. up until now known SAM (Security Authentication Module) cards with cryptographic key).

Therefore it would have been obvious to one of ordinary skill in the art of mobile commerce at the time of the invention to modify the system of Gallagher and Dryer et al. to include the ability to provide a merchant sales device with a security authentication module to conduct mobile transactions as taught by Florek et al. to provide a method of direct debit payment using a contactless transmission link and describes a configuration, in which a temporary payment terminal, with simplified structure that is intended above all for small business premises, can be created using a mobile communication

device. The solution refers to increase in security and comfort in paying over the mobile communication

device with removable memory card for example in the form of a micro SD card (pg.1, ¶ [0001]).

As per Claims 6 and 15, Gallagher discloses the claimed invention, wherein the data further

includes security information about the merchant associated with the POS device (pg.3, ¶ [0034]

discusses the payment facilitating information includes the following information: 1) restaurant

identifier, 2)unique identifier of the wireless communication device 44, if not present already, 3)

identifier of the table where the guest is sitting, 4) identifier of the guest check, 5) location information

of the restaurant interface system 56 such as the URL (Uniform Resource Locator) and 6) identifier of a

restaurant application),

an identifier of the tag or the POS device (pg.3, ¶ [0034] discusses the payment facilitating

information includes the following information: 2) unique identifier of the wireless communication

device 44, if not present already.

However, Gallagher is silent regarding the security information includes an account and bank

information of the registered merchant.

Brendell teaches wherein the security information includes an account and bank information of

the registered merchant (pg.3, ¶ [0023] discusses the transaction information, for example, may include

the amount due and merchant information…. the consumer can provide the information to a personal

bank, where the bank receives the amount due and the merchant information, along with a consumer

identifier. Once the consumer is identified and verified, the bank may approve the transaction and

submit payment of the amount due to the merchant of record as indicated by the merchant

information[2]).

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[2] The cited portion of Brendell teaches that the merchant information includes an account and bank information of
a merchant because the bank needs such information to finalize a transaction.

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include a virtual wallet within the mobile device as taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 7, Gallagher discloses the claimed invention, wherein said sending the payment request from the mobile device to a payment gateway comprises:

transporting the payment request over a secured channel to the payment gateway (pg.3, ¶ [0030] discusses forwarding request to appropriate interchange system such as VISA™[3],

wherein the payment gateway is configured to perform the monetary transaction per the payment request by deducting an amount from an account owned by the user (pgs,2-3, ¶ [0030]-[0031] discusses when the payment processing system 58 receives a credit card payment authorization request from the restaurant interface system 56, it routes the request to the merchant's acquiring bank which then forwards the request to the appropriate interchange system such as VISA™ which then routes the request to the issuing bank of the credit card. The process is reversed for a payment authorization. The authorization message from the issuing bank is routed to the interchange system and then to the acquirer which routes it to the payment processing system 58 and

generates an electronic notification for sending to the POS device (Figure 4, Step 118, Payment Approval message transmitted to Mobile Device and to Restaurant POS system).

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[3] Examiner notes, it is old and well known to one having ordinary skill at the time of the invention that in order to communicate financial data with VISA™ one must use a secure channel.

As per Claim 8, Gallagher discloses the method as recited in claim 7, wherein said displaying the electronic invoice on the display of the mobile device comprises:

allowing the user to modify the amount in the electronic invoice when needed (Figure 4, Step 110, Guest Reviews Bill and Adds Gratuity),

paying the total amount with an electronic payment provided by an installed module in the mobile device (pg.4, ¶ [0042] discusses upon approval by the guest, the wireless mobile device 62 transmits the payment facilitating information, the retrieved financial instrument information and the total amount including the gratuity to the restaurant interface system 56 for processing the payment),

wherein the installed module in the mobile device is configured to generate the payment request including the data pertaining to the electronic invoice to the payment gateway for processing (pg.3, ¶ [0038] discusses any subsequent steps done by the wireless mobile device 62 are under the control of the restaurant application...pg.4, ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved financial instrument information and the total amount directly to the payment processing system 58 for processing the payment).

As per Claim 9, Gallagher discloses the method recited in claim 8, wherein data exchange between the mobile device and the payment gateway is conducted in a secured channel established there between (pg.4, ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved financial instrument information and the total amount directly to the payment processing system 58 for processing the payment...pg.3, ¶ [0030] discusses VISA™ interchange system).

However, Gallagher fails to explicit state a secure channel.

Brendell teaches (pg.8, ¶ [0074] discusses a web client may implement security protocols such as Secure Sockets Layer (SSL) and Transport Layer Security (TLS). A web client may implement several application layer protocols including http, https, ftp, and sftp).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include the ability to communicate via known security protocols as taught by Brendell to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 10, Gallagher discloses the method as recited in claim 9, wherein the mobile device includes a secure element providing security and confidentiality required to support secure data communication between the mobile device and the payment gateway (pg.4, ¶ [0041] discusses retrieves the selected financial instrument information from a secure memory area of the mobile device).

However, Gallagher and Brendell fail to explicitly state wherein the mobile device includes a secure element.

Florek et al. teaches (pg.6, ¶ [0049] discusses several units of independent payment cards can be stored on the removable memory card and that either on the physical separate secure elements or on independent domains of one secure element. In this configuration the payment terminal application can run directly on the removable memory card and the data on the customer's payment card are not sent over external readers and neither into internet area, a fact that has positive impact on the security of the payment operation).

Therefore it would have been obvious to one of ordinary skill in the art of mobile commerce at the time of the invention to modify the system of Gallagher and Brendell. to include a secure element to store virtual cards of a customer on a mobile device as taught by Florek et al. to provide a method of direct debit payment using a contactless transmission link and describes a configuration, in which a

temporary payment terminal, with simplified structure that is intended above all for small business

premises, can be created using a mobile communication device. The solution refers to increase in

security and comfort in paying over the mobile communication device with removable memory card for

example in the form of a micro SD card (pg.1, ¶ [0001]).

As per Claim 11, Gallagher discloses the method as recited in claim 9, wherein said notifying the

user in the mobile device that then monetary transaction per the payment request has been successfully

completed with the POS device comprising:

sending a notification of successful payment to the merchant of the POS device (pg.4, ¶ [0042]

discusses the payment processing system 58 transmits the received approval message to the wireless

mobile device 62 as receipt and to the restaurant POS system 52 to indicate to the restaurant

management software that the guest check has been paid).

Claim 16 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher U.S. Patent Application Publication 2011/0173060 in view of Brendell US 2013/0054412 in view of Florek et al. 2011/0112968 further in view of Shank et al. U.S. Patent Application Publication 2011/0066550.

As per Claim 16, Gallagher, Brendell and Florek disclose the method as recited in claim 15. However, Gallagher, Brendell and Florek are silent regarding wherein the message received in the POS device shows how much has been received from the user of the mobile device.

Shank teaches wherein the message received in the POS device shows how much has been received from the user of the mobile device (pg.6, ¶ [0062] discusses the result may be communicated to the user via email, text message, or any suitable type of notification. An example of a result 94 received by the billing device 12b is illustrated in FIG. 4F).

Therefore it would have been obvious to one of ordinary skill in the art of mobile commerce at the time of the invention to modify the system of Gallagher, Brendell and Florek to include the ability to provide a merchant with notification regarding the completion of payment transaction as taught by Shank et al. to provide a system and method where a gateway uses an authorization code to authorize a transaction and to determine an account for each device. The gateway then instructs an account manager to withdraw the payment amount from the account of the first device and to deposit it into the account of the second device (Abstract).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure.

Kaminski et al. U.S. Patent Application Publication US 2009/0248579 discusses Method and

System for Accepting and Processing Financial Transactions over a Mobile Computing Device.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to ASHFORD S HAYLES whose telephone number is (571)270-5106. The examiner can

normally be reached on M-F 6AM-4PM with Flex.

Examiner interviews are available via telephone, in-person, and video conferencing using a

USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use

the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Fahd Obeid can be reached on 5712703324. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained

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direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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CANADA) or 571-272-1000.

/ASHFORD S HAYLES/
Primary Examiner, Art Unit 3687

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Index of Claims	14/728,349	Xie et al.
	Examiner	**Art Unit**
	ASHFORD S HAYLES	3687

✓	**Rejected**	-	**Cancelled**	**N**	**Non-Elected**	**A**	**Appeal**
=	**Allowed**	÷	**Restricted**	**I**	**Interference**	**O**	**Objected**

CLAIMS									
☐ Claims renumbered in the same order as presented by applicant				☐ CPA		☐ T.D.		☐ R.1.47	

CLAIM		DATE								
Final	Original	09/21/2017	04/06/2018	09/11/2018	03/19/2019	08/22/2019				
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	3	✓	✓	✓	✓	✓				
	4	✓	✓	✓	✓	✓				
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CPC - Searched*

Symbol	Date	Examiner

CPC Combination Sets - Searched*

Symbol	Date	Examiner

US Classification - Searched*

Class	Subclass	Date	Examiner
705	21	09/21/2017	ASH

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Search Notes

Search Notes	Date	Examiner
EAST (SEE ATTACHMENTS)	09/21/2017	ASH
UPDATED EAST (SEE ATTACHMENTS)	04/06/2018	ASH
COMMON CITATION (http://ccd.fiveipoffices.org) (SEE ATTACHMENTS)	04/06/2018	ASH
UPDATED EAST (SEE ATTACHMENTS)	09/11/2018	ASH
UPDATED EAST (SEE ATTACHED)	03/19/2019	ASH
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Interference Search

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	758	(electronic near (purse or wallet)) and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:44
S2	138	S1 and emulat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S3	137	S2 and (app or application or applet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S4	86	S3 and PIN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S5	43	S4 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S6	3	(("20130124351") or ("20080011833") or ("20130132219")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/04/22 17:49
S7	156	(mobile or portable or wireless) near (POS) and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 16:54
S8	34	(mobile or portable or wireless) near (POS) with NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/04/23 16:54

			DERWENT; IBM_TDB			
S9	0	(smartcard) near (POS) with NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:00
S10	2	(smartcard) near (POS) and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:00
S11	0	(smartcard) near ("transaction terminal") and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:05
S12	76	(smartcard) near NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:05
S13	40	S12 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:06
S14	98	("smart card" or "chip card" or EMV) near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:11
S15	38	(contactless) near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:17
S16	217	(contactless) near (POS or payment or transaction) and (electronic or digital) near (receipt or bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:18
S17	217	((contactless) near (POS or payment or transaction)) and (electronic or digital) near (receipt or bill or invoice)	US-PGPUB; USPAT; USOCR;	OR	ON	2014/04/24 10:18

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S18	165	S17 and (provision$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:18
S19	124	S18 and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:18
S20	58	S17 and (restaurant)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:30
S21	139	((contactless or NFC) near (POS or payment or transaction)) and (send$4 or transmit$4) near (receipt or bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:46
S22	59	S21 and (restaurant)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:46
S23	64	(wireless or mobile) near POS and (contactless near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 21:46
S24	4	POS near (contactless near (card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 22:10
S25	1838	POS near ((card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 22:11
S26	100	S25 and (contactless near (transaction	US-PGPUB;	OR	ON	2014/04/25

		or payment))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			22:11
S27	16	(portable) near POS and ((nfc or contactless) near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 20:39
S28	17	folio and nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:33
S29	0	(restaurant near folio) and nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:37
S30	273	(restaurant or table) and (nfc near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:38
S31	165	S30 and provision$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:38
S32	55	S31 and emulat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:39
S33	32	proximity near mobile near payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:46
S34	403	(mobile near (transaction or payment)) and (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/04/26 21:58

			IBM_TDB				
S35	29	(mobile near (transaction or payment)) with (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:59
S36	0	(smartcard-smartcard) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:14
S37	9	(mobile near phone) with (smartcard)near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:14
S38	2	(mobile near phone) near (transaction or payment) and (smartcard)near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:27
S39	0	(mobile near phone) near (transaction or payment) and (smartcard)near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:28
S40	9	(mobile near phone) and (smartcard)near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:29
S41	67	(person-person) or (peer-peer) and (smartcard near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:35
S42	4	(smartcard or chipcard) and (POS near emulat$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:48
S43	9	(nfc) and (POS near emulat$4)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2014/04/26 22:49

			EPO; JPO; DERWENT; IBM_TDB			
S44	0	proximity near smartcard near payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:59
S45	3	"20130124351"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:04
S46	54	(portable or mobile or slim or wireless) near (POS or "transaction terminal") and (nfc or emv or smartcard) near (reader)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:14
S47	67	(portable or mobile or slim or wireless) near (nfc or emv or smartcard) near (POS or "transaction terminal" or reader)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:17
S48	123	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (POS or "transaction terminal" or reader)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:25
S49	0	(portable or mobile or slim or wireless) near (rfid) near (POS or "transaction terminal")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 07:22
S50	99	(rfid) near (POS or "transaction terminal")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:18
S51	598	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) and (mobile or wireless or cellular) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:19
S52	104	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or	US-PGPUB; USPAT;	OR	ON	2014/04/29 09:21

		contactless) near (device or terminal) and (mobile or wireless or cellular) near (payment or transaction)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S53	11	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (device or terminal) and (digital or electronic) near (bill or invoice or check)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:28
S54	6	(portable or mobile or wireless) near (contactless) near (transaction or payment) near (device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:32
S55	0	S51 and (person-person or peer-peer) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:42
S56	5	(person-person or peer-peer) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:42
S57	0	("peer to peer") near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:42
S58	1128	(peer) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:43
S59	133	S58 and (nfc or emv or smartcard or contactless) near (device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:43
S60	10	S59 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:49

S61	550	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (device or terminal or scanner)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 10:05
S62	1	S61 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 10:05
S63	0	("2013/0221092").URPN.	USPAT	OR	ON	2014/04/29 11:16
S64	229	(mobile or cellular near phone) and (smartcard)near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:27
S65	180	((mobile or cellular) near phone) and (smartcard)near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:27
S66	1	S65 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:28
S67	46	S65 and emulat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:29
S68	1776	(electronic near (transaction or payment) near card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:32
S69	397	S68 and (nfc or emv or smartcard or contactless)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:32
S70	49	S69 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR;	OR	ON	2014/04/29 11:32

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S71	3	"20130024383"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 07:06
S72	3	"20130132219"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:14
S73	258	TSM with (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:32
S74	161	S73 and (nfc or emv or smartcard or chipcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:32
S75	14	S74 and SAM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:33
S76	147	S74 and "secure element"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:33
S77	2	"20130218766"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 11:58
S78	41	(TSM or "trusted service") and (transaction or payment) near sett$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 13:56
S79	3	13/245498	US-PGPUB;	OR	ON	2014/05/02

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:59
S80	531	provision$4 near (POS or merchant or vendor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 14:07
S81	3	S80 and (TSM or "trusted service") and (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 14:08
S82	2	12/563444	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 18:16
S83	27	(TSM or "trusted service") and (transaction or payment) near settl$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 18:45
S84	5	(TSM or "trusted service") and (purchase) near settl$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 19:55
S85	88	(TSM or "trusted service") and (verif$4 or confirm$4) near (purchase or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 19:56
S86	34	S85 and "secure element"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 19:58
S87	393	(TSM or "trusted service") and (purchase or transaction) near (process$4 or settl$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/05/04 12:17

			IBM_TDB			
S88	152	S87 and (smartcard or chipcard or nfc)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:19
S89	131	S88 and (secure near element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:19
S90	58	S89 and (electronic near (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:20
S91	19	S89 and (SAM)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:20
S92	2230	(electronic near (purse or wallet)) and (payment or transaction) near (settl$4 or process$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 14:42
S93	41	S92 and (TSM)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 14:43
S94	59	(mobile near nfc near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/10 17:20
S95	415	(smartcard or chipcard) and (mobile near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/11 15:04
S96	54	S95 and (secure near element)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2014/05/11 15:05

			EPO; JPO; DERWENT; IBM_TDB			
S97	53	S96 and (provisioning or personal$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/11 15:24
S98	25	S96 and (provisioning or personaliz$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/11 15:24
S99	78	(smartcard or chipcard) and (nfc near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 15:16
S100	42	S99 and (payment near process$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 15:16
S101	248	(nfc with (invoic$4 or bill$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:13
S102	78	S101 and (mobile near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:14
S103	25	(nfc with mobile near (invoic$4 or bill$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:49
S104	0	(secure near element) and (mobile near (billing or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:52
S105	549	(secure near element) and ((billing or invoic$4))	US-PGPUB; USPAT;	OR	ON	2014/05/13 22:52

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S106	83	S105 and (mobile near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:53
S107	41	(smartcard or chipcard) and ((storing or saving) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:07
S108	0	(nfc near (transaction or payment)) and ((storing or saving) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:08
S109	175	(nfc near (transaction or payment)) and ((bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:08
S110	0	(secure adj element) and ((storing or saving) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:09
S111	107	(secure adj element) and ((transmit$4 or receiv$4) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:09
S112	2	S111 and (nfc near (transaction or payment)) and ((bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10
S113	2	S111 and (nfc near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10

S114	106	(nfc near (transaction or payment)) and ((bill or invoice) near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10
S115	15	S114 and TSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10
S116	589	(smartcard or chipcard or emv) and ((bill or invoice) near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S117	0	S116 and TSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S118	246	S116 and trusted	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S119	27	S116 and trusted near service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S120	55	(smartcard or chipcard or emv) with ((bill or invoice) near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:14
S121	15	"security authentication module" and (electronic or virtual) near (purse or wallet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/15 14:36
S122	10	"security authentication module" and (mobile near (purchase or payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/05/15 14:47

			DERWENT; IBM_TDB			
S123	66	(personal$4) near (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/02 14:59
S124	21	S123 and (identif$4 near issuer)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/02 15:00
S125	2	"20120290376"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/02 16:15
S126	1	((identif$4 or match$4 or locat$4) near issuer) same ((match$4 or compar$4) near (device or element) near (ID or identif$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:16
S127	0	((identif$4 or match$4 or locat$4) near issuer) same ((match$4 or compar$4) near (secure adj element) near (ID or identif$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:17
S128	4	((identif$4 or match$4 or locat$4) near issuer) same ((secure adj element) near (ID or identif$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:18
S129	1	(mobile-mobile) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:40
S130	30	(mobile adj mobile) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:40
S131	1	S130 and (secure adj element)	US-PGPUB; USPAT; USOCR;	OR	ON	2014/10/03 14:41

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S132	1102	(smartcard or chipcard) and (fund adj transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S133	1	S132 and (personal$4 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S134	97	S132 and (personal$6near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S135	1	S132 and (personal$6 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S136	11	(Fund adj transfer) and (personal$6 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:56
S137	137	("20010011250" | "20010021927" | "20010027441" | "20010039657" | "20020004783" | "20020042776" | "20020068554" | "20020194138" | "20030023954" | "20030074579" | "20030140176" | "20040029569" | "20040030601" | "20040123152" | "20040128259" | "20040140351" | "20050001711" | "20050071418" | "20050091659" | "20050102679" | "20050149926" | "20050184163" | "20050184164" | "20050184165" | "20050188360" | "20050193218" | "20050222961" | "20060036570" | "20060041507" | "20060126831" | "20060165060" | "20060219774" | "20070067325" | "20070090195" | "20070135164" | "20070169043" | "20070226786" | "20080056501" | "20080073426" | "20080130902" | "20080162834" | "20080167988" | "20080208681" | "20080208762" | "20080270253" | "20090158028" |	US-PGPUB; USPAT; USOCR	OR	ON	2014/10/09 15:57

		"20090239512" | "20090261172" | "20090307142" | "20090312011" | "20100012732" | "20100042824" | "20100050271" | "20100058463" | "20100063893" | "20100088237" | "20100114731" | "20100131413" | "20100138518" | "20100203870" | "20100205432" | "20100207742" | "20100211507" | "20100250956" | "20100291896" | "20100291904" | "20100306076" | "20100306107" | "20100306531" | "20100323681" | "20100330958" | "20110016275" | "20110029671" | "20110072425" | "20110078081" | "20110087610" | "20110113473" | "20110131421" | "20120009873" | "20120129452" | "4851653" | "5221838" | "5991399" | "6005942" | "6092201" | "6101477" | "6141752" | "6151657" | "6230267" | "6233683" | "6402028" | "6434238" | "6484174" | "6601761" | "6609113" | "6633984" | "6647260" | "6792536").PN. OR ("6823520" | "6907608" | "6922835" | "6963270" | "7093122" | "7140549" | "7152782" | "7159180" | "7165727" | "7191288" | "7206769" | "7232073" | "7243853" | "7275685" | "7346170" | "7349885" | "7353396" | "7360691" | "7374099" | "7382762" | "7395535" | "7469151" | "7478389" | "7502946" | "7607175" | "7631346" | "7631810" | "7708198" | "7712658" | "7739731" | "7860486" | "7967215" | "8120460" | "8126806" | "8150767" | "8171137").PN. OR ("8429409").URPN.				
S138	0	contactless near (Fund adj transfer) and ((secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:59
S139	0	contactless near (Fund adj transfer$4) and ((secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:59
S140	11	(Fund adj transfer$4) and (personal$6 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:00
S141	9	S132 and (updat$4 or modify$4 or edit$4 or chang$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/10/09 16:02

			DERWENT; IBM_TDB			
S142	8	(contactless near (transaction or payment)) and (updat$4 or modify$4 or edit$4 or chang$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:03
S143	580	(contactless near (transaction or payment)) and (fund$1 near transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:04
S144	9	mobile adj (contactless near (transaction or payment)) and (fund$1 near transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:04
S145	5	(contactless) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:06
S146	1	(contactless near (transaction or payment)) and (virtual near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:08
S147	0	(contactless near (transaction or payment)) and (digital near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:09
S148	0	(EMV near (transaction or payment)) and (digital near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:12
S149	1	(EMV near (transaction or payment)) and ((digital or electronic or mobile or wireless)near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:13
S150	41	(EMV near (transaction or payment)) and ((bill or invoice))	US-PGPUB; USPAT; USOCR;	OR	ON	2014/10/09 16:13

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S151	56	((EMV or chipcard or smartcard) near (transaction or payment)) and ((digital or electronic or mobile or wireless)near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:13
S152	64	((contactless) near (transaction or payment)) and ((digital or electronic or mobile or wireless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:17
S153	62	((contactless) near (transaction or payment)) and ((digital or electronic or paperless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:53
S154	6410	((digital or electronic or paperless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:54
S155	2	"20130151400"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:03
S156	0	((mobile or wireless or cellular) adj (contactless) near (purchase or transaction or payment)) and ((digital or electronic or mobile or wireless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S157	73	((mobile or wireless or cellular) adj (contactless) near (purchase or transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S158	0	S157 and ((digital or electronic or mobile or wireless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S159	0	S157 and ((digital or electronic or	US-PGPUB;	OR	ON	2014/10/09

		paperless) near (bill or invoice))	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			17:05
S181	215	(contactless or NFC or wireless or proximity) adj (billing or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 15:36
S182	8	S181 and (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 15:39
S183	52	(contactless or NFC or wireless or proximity) adj (payment or transaction or purchase) and (electronic adj (invoic$4 or billing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 15:41
S184	886	(contactless or NFC or wireless or proximity) adj (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 18:00
S185	32	S184 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:01
S186	648	POS adj card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:29
S187	7	S186 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:29
S188	1	cashless adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/09/18 18:31

			IBM_TDB			
S189	2	cashless near POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:32
S190	283	cashless same POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:32
S191	2	S190 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:35
S192	17804	(SIM) same (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:12
S193	564	(SIM adj card) same (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:12
S194	9	(SIM adj card) near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:12
S195	11	("20010056398" | "20020097715" | "20020120537" | "20030060246" | "20070295803" | "20100030634" | "20100161478" | "6598028" | "7540408" | "7603312" | "8281991").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/09/18 20:15
S196	2	(card-to-card) near payment	US-PGPUB; USPAT; USOCR	OR	OFF	2017/09/18 20:17
S197	48	POS and generat$4 near (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:18
S198	3936	(mobile or m) adj POS	US-PGPUB;	OR	ON	2017/09/18

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			20:49
S199	4	S198 and generat$4 near (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:49
S200	16	S198 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:49
S201	114	S198 and (contactless or NFC or wireless or proximity) adj (payment or transaction or purchase)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 20:54
S202	109	S198 and (SIM adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:55
S203	114	S198 and ((nfc or contactless or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:55
S204	8	S203 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:56
S205	234	merchant adj wallet	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:58
S206	51	merchant adj (mobile adj wallet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/09/18 20:58

			IBM_TDB			
S207	222	((mobile or m) adj POS) and ((contactless or smart or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:05
S208	69	((mobile or m) adj POS) same ((contactless or smart or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:05
S209	1545	((payment or transaction) adj terminal) same ((contactless or smart or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:16
S210	0	S209 and generat$4 near (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:16
S211	21	S209 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:16
S212	91	((peer-to-peer) adj (payment or transaction)) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 21:20
S213	58	S212 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:21
S214	0	((peer-to-peer) adj (POS)) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 21:22
S215	1	((peer-to-peer) adj (POS))	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2017/09/18 21:22

			EPO; JPO; DERWENT; IBM_TDB			
S216	4	("20070233554" | "20100227553" | "20120092137" | "8229354").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/09/18 21:23
S217	1	(POS near emulat$4) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 21:24
S218	56	(POS near application) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:08
S219	11745	POS and SOC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:09
S220	2680	POS and (system near chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:10
S221	366	POS and (system-on-chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:10
S222	12	POS same (system-on-chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:10
S223	47	((touch or tap) adj (payment or transaction)) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:13
S224	8566	(contactless or NFC or wireless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/09/19 09:21

			IBM_TDB				
S225	174	S224 and (electronic or digital) adj (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:22
S227	11	S224 and (e-bill)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:23
S228	8566	(contactless or NFC or wireless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:15
S229	5	S228 and (electronic or digital) adj (statement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:15
S230	887	(contactless or NFC or wireless or proximity) adj (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:17
S231	31	S230 and (electronic or digital) adj (bill$4 or invoic$4 or statement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:18
S232	3518	(POS) and ((digital or electronic or e) adj (wallet or purse))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:23
S233	282	S232 and (electronic or digital) adj (bill$4 or invoic$4 or statement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:23
S234	92	S233 and (contactless or NFC or wireless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2017/09/19 12:23

			EPO; JPO; DERWENT; IBM_TDB			
S235	25	(POS) near ((digital or electronic or e) adj (wallet or purse))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:25
S236	189	(merchant) near ((digital or electronic or e) adj (wallet or purse))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:53
S237	4	"20070131780"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/19 16:42
S238	15	("2007/0131780").URPN.	USPAT	OR	OFF	2017/09/19 16:43
S239	184	(nfc or emv or smartcard or contactless or proxmity or chip) near (payment or purchase or transaction) and ((electronic or e or digital) adj (bill$4 or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/19 17:33
S240	59	(nfc or emv or smartcard or contactless or proxmity or chip) near (payment or purchase or transaction) same ((electronic or e or digital) adj (bill$4 or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/19 17:34
S241	4	("2003023080").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 18:17
S242	2	("20040127256").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 18:20
S243	1	(mobile or portable) adj POS and ((contactless or nfc or proximity) adj (adapter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 18:21

S244	294	("2004/0127256").URPN.	USPAT	OR	OFF	2017/09/19 18:22
S245	0	(10/625823).APP.	USPAT; USOCR	OR	OFF	2017/09/19 18:25
S246	95	POS near (purse or wallet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 07:00
S247	2	"20120290472"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 08:39
S248	1145	POS same (contactless or proximity or RFID) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:05
S249	44	S248 and (fund adj transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:23
S250	76	S248 and ((merchant or vendor) near (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:26
S251	67	S248 and ((merchant or vendor) adj (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:26
S252	256	virtual adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:06
S253	14	S252 and (contactless or proximity or RFID) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:06

S254	7	S252 and (emv) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:37
S255	3	emv adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:38
S256	0	"201000274677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 13:04
S257	3	"20100274677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 13:04
S258	203	(contactless or proximity or RFID) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S259	0	(NFC) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S260	7	S258 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S261	16	(NFC) near (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S262	0	(smartcard) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2017/09/25 17:10

			DERWENT; IBM_TDB			
S263	0	S258 and (transaction or payment) adj terminal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:12
S264	6563	((customer or client) adj side) and ((payment or transaction) adj process$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:07
S265	87	S264 and (electronic near (purse or wallet)) and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:07
S266	34	(merchant-to-person)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:17
S267	3	(person-to-merchant) and (contactless or proximity or RFID) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:19
S268	0	(person-to-merchant) and (nfc) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:19
S269	23	(person-to-merchant) and (nfc)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:19
S270	618	(contactless or proximity or RFID) adj (payment or transaction) same (wallet or purse)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:22
S271	1	S270 and (security adj element)	US-PGPUB; USPAT; USOCR;	OR	OFF	2017/09/25 21:22

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S272	243	S270 and (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:22
S273	4	S272 and (electronic or digital or e) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:23
S274	0	S272 and (wireless or paperless or nfc) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:24
S275	5	(contactless or proximity or RFID or nfc) adj (payment or transaction) and (wireless or paperless or nfc) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:24
S276	78	(contactless or proximity or RFID or nfc) adj (payment or transaction) near request	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:25
S277	11	(person-to-merchant) and ((smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S278	12	(person-to-merchant) and ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S279	930	(person-to-person) and ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S280	443	S279 and POS	US-PGPUB;	OR	OFF	2017/09/25

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			21:27
S281	121	S280 and (transmit$4 or send$4) adj (payment or transaction) near request	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:28
S282	15	(person-to-person) same ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:28
S283	82	S281 and (electronic near (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:28
S284	41	S281 and mobile adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:28
S285	72	business-to-consumer and mobile adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:32
S286	12	S285 and ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:32
S287	5	card-to-card and (nfc or contactless or RFID or proximity or wireless) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:34
S288	7	card-to-card and (nfc or contactless or RFID or proximity or wireless) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/09/25 21:34

			IBM_TDB			
S289	203	(contactless or proximity or RFID or nfc) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 22:06
S290	0	(card-to-card) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 22:06
S291	45	(card-to-card) same (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 22:06
S292	0	S289 and mobile adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 22:09
S293	148	(client-side) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S294	1	S293 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S295	0	S293 and (nfc adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S296	212	(client adj side) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S297	6	S296 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2017/10/04 23:36

			EPO; JPO; DERWENT; IBM_TDB			
S298	2	S296 and (nfc adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:36
S299	358	(closed-loop adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:37
S300	1	S299 and (nfc adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:37
S301	0	S300 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:37
S302	6	"20100114773"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 08:56
S303	459	(proximity or contactless or smartcard) adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 10:06
S304	91	S303 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 10:07
S305	535	(mobile or virtual) adj (wallet or purse) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:54
S306	339	S305 and POS	US-PGPUB; USPAT;	OR	OFF	2017/10/05 12:55

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S307	179	S306 and (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:57
S308	83	S307 and (smart adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:57
S309	4	"20140187153"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 13:12
S310	271	(smartcard) and (electronic or digital) adj (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:37
S311	53	(smartcard) with (electronic or digital) adj (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:38
S312	182	S310 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:38
S313	51	S311 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:39
S314	1265	(electronic or digital) adj (bill or invoice) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:40

S315	1267	(electronic or digital or virtual) adj (bill or invoice) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:40
S316	99209	nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:41
S317	66	S315 and nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:41
S318	90	S315 and (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 21:04
S319	1372	(electronic or virtual or digital) adj (bill or invoice) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:06
S320	50	S319 and (wireless or contactless or nfc or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:12
S321	376	(electronic or virtual or digital) adj (check) and (nfc or wireless or contactless or proximity) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S322	376	(electronic or virtual or digital) adj (check) and ((nfc or wireless or contactless or proximity) adj (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S323	207	S322 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2017/10/06 06:16

			DERWENT; IBM_TDB			
S324	79	S323 and (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S325	6	"20140143104"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/09 07:10
S326	3	"20100274677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 08:38
S327	4	(("20090170559") or ("20120191612")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:46
S328	0	5748737/pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:48
S329	4	"5748737".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:48
S330	13595	(electronic or digital or virtual) adj (wallet or purse)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:49
S331	1082	S330 and (nfc or contactless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:49
S332	732	S331 and POS	US-PGPUB; USPAT; USOCR;	OR	OFF	2017/10/09 11:50

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S333	87	S332 and (electronic or digital or virtual) adj (bill or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:50
S334	25	(electronic or digital or virtual) adj (bill or invoic$4) adj (payment) and (nfc or contactless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:54
S335	0	(nfc or contactless or proximity) adj (bill or invoic$4) adj (payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/10 06:09
S336	139452	restaurant brands.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/10 13:01
S337	0	restaurantbrands.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/10 13:01
S338	7	"20140006205"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 08:50
S339	6	"20130138517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 08:52
S340	18375	(electronic or digital) near (bill$4 or invoic$4 or check)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:19
S341	5793	POS near (payment or transaction)	US-PGPUB;	OR	OFF	2018/04/06

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			09:20
S342	533	S340 and S341	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:20
S343	405	S342 and 705/$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:20
S344	5	"20110066550"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:39
S345	6	(("20070253187") or ("20090309748") or ("20120323676")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:37
S346	17	nfc near (invoice or bill)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:40
S347	3	"20080167017"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:43
S348	4	"20120078701"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:45
S349	98	(bar or QR or 2D) adj (invoice or bill)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/09/11 14:49

				IBM_TDB				
S350	61	("2013/0339253").URPN.	USPAT	OR	OFF	2018/09/11 14:55
S351	8	(("7152230") or ("6367011") or ("20130159710")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 17:34
S352	0	(13/594914).APP.	USPAT; USOCR	OR	OFF	2018/09/12 05:53
S353	0	"20120290472"	USPAT; USOCR	OR	OFF	2018/09/12 11:36
S354	2	"20120290472"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/12 11:36
S355	119582	(rfid or NFC) adj tag	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/02/28 08:54
S356	963	S355 same (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/02/28 08:54
S357	138	(rfid or NFC) adj (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/02/28 08:55
S358	9	(("20090248579") or ("20110258120") or ("20130138518") or ("20120253974")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 17:16
S359	0	(13/215,111).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:14
S360	8	13/215111	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2019/03/19 20:14

			EPO; JPO; DERWENT; IBM_TDB			
S361	2	((13/215111) or (13/168072)).APP.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:47
S362	0	(12/343178).APP.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:51
S363	6	12/343,178	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:51
S364	2	"20110173060"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 21:48
S365	5	"20110112968"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 22:28
S366	25	13/168,072	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/08/22 15:44

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S160	1647	705/21	USPAT	OR	ON	2015/03/26 16:56
S161	75	S160 and (electronic or digital) near (invoice or check)	USPAT	OR	ON	2015/03/26 16:57
S162	25	S161 and (smart or IC or RFID or EMV) adj card	USPAT	OR	ON	2015/03/26 16:57
S163	0	S162 and TSM	USPAT	OR	ON	2015/03/26 16:58
S164	16	S162 and S161 and provision$4	USPAT	OR	ON	2015/03/26 16:58

S165	16	S162 and provision$4	USPAT	OR	ON	2015/03/26 16:58
S166	0	S165 and TSM	USPAT	OR	ON	2015/03/26 16:58
S167	483	705/14.23	USPAT	OR	ON	2015/03/26 16:58
S168	10	S167 and (electronic or digital) near (invoice or check)	USPAT	OR	ON	2015/03/26 16:58
S169	0	S168 and TSM	USPAT	OR	ON	2015/03/26 16:58
S170	3229	705/41	USPAT	OR	ON	2015/03/26 16:58
S171	259	S170 and (electronic or digital) near (invoice or check)	USPAT	OR	ON	2015/03/26 16:59
S172	114	S171 and (smart or IC or RFID or EMV) adj card	USPAT	OR	ON	2015/03/26 16:59
S173	75	S172 and provision$4	USPAT	OR	ON	2015/03/26 16:59
S174	0	S173 and TSM	USPAT	OR	ON	2015/03/26 16:59
S175	0	S173 and (trusted near service near manag$5)	USPAT	OR	ON	2015/03/26 17:00
S176	0	S171 and (trusted near service near manag$5)	USPAT	OR	ON	2015/03/26 17:00
S177	8994	705/39	USPAT	OR	ON	2015/03/26 17:00
S178	743	S177 and (electronic or digital) near (invoice or check)	USPAT	OR	ON	2015/03/26 17:00
S179	206	S178 and (smart or IC or RFID or EMV) adj card	USPAT	OR	ON	2015/03/26 17:00
S180	1	S179 and (trusted near service near manag$5)	USPAT	OR	ON	2015/03/26 17:00

8/23/2019 6:45:23 AM
C:\Users\ahayles\Documents\EAST\Workspaces\14728349_CONTACTLESSpos.wsp

Bibliographic Data

Application No: 14/728,349

Foreign Priority claimed: ◯ Yes   ◉ No

35 USC 119 (a-d) conditions met: ☐ Yes   ☑ No   ☐ Met After Allowance

Verified and Acknowledged: | /ASHFORD S HAYLES/ | | ASH |
| | Examiner's Signature | | Initials |

Title: | Method and apparatus for mobile payments |

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
06/02/2015	705	3687	RFID-085C1
RULE			

APPLICANTS

RFCyber Corporation, Fremont, CA, UNITED STATES

INVENTORS

Xiangzhen Xie Shenzhen, CHINA

Liang Seng Koh Fremont, CA, UNITED STATES

Hsin Pan Fremont, CA, UNITED STATES

CONTINUING DATA

This application is a CON of 13853937 03/29/2013 PAT 9047601

13853937 has PRO of 61618802 04/01/2012

13853937 is a CIP of 13350832 01/16/2012ABN

13350832 is a CIP of 11534653 09/24/2006 PAT 8118218

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

06/10/2015

** SMALL ENTITY **

STATE OR COUNTRY

CHINA

ADDRESS

LogicPatents, LLC
21701 Stevens Creek Boulevard, #284
CUPERTINO, CA 95015
UNITED STATES

FILING FEE RECEIVED

$730

REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL	Application Number	14/728,349
	Filing Date	06/02/2015
	First Named Inventor	Xiangzhen Xie
	Group Art Unit	3687
	Examiner Name	HAYLES, ASHFORD S
	Attorney Docket Number	RFID-085C1

Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000,
provides for continued examination of an utility or plant application
filed on or after June 8, 1995.
See The American Inventors Protection Act of 1999 (AIPA).

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

NOTE: 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53 (d) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50092 (Aug. 16, 2000); interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. **Submission** required under 37 C.F.R. § 1.114
   a. ☐ Previously submitted
      i. ☐ Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on _____
         (Any unentered amendment(s) referred to above will be entered).
      ii. ☐ Consider the arguments in the Appeal Brief or Reply Brief previously filed on _____
      iii. ☐ Other _____
   b. ☒ Enclosed
      i. ☒ Amendment/Reply
      ii. ☐ Affidavit(s)/Declaration(s)
      iii. ☐ Information Disclosure Statement (IDS)
      iv. ☐ Other _____

2. **Miscellaneous**
   a. ☐ Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of _____ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(i) required)
   b. ☐ Other _____

3. **Fees** The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.
   a. ☐ The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. _____
      i. ☒ RCE fee required under 37 C.F.R. § 1.17(e)   **Small Entity**
      ii. ☒ Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)
      iii. ☐ Other _____
   b. ☐ Check in the amount of $_____ enclosed
   c. ☒ Payment by credit card (Form PTO-2038 enclosed)   paid via PAIR

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED

| Name (Print /Type) | Joe Zheng | Registration No. (Attorney/Agent) | 39,450 |
| Signature | / joe zheng / | Date | 07/24/2019 |

CERTIFICATE OF MAILING OR TRANSMISSION

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner For Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on:

| Name (Print/Type) | Joe Zheng | | |
| Signature | / joe zheng / | Date | 07/24/2019 |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND Fees and Completed Forms to the following address: Assistant Commissioner for Patents, Box RCE, Washington, DC 20231.

Electronic Patent Application Fee Transmittal

Application Number:	14728349
Filing Date:	02-Jun-2015
Title of Invention:	Method and apparatus for mobile payments
First Named Inventor/Applicant Name:	Xiangzhen Xie
Filer:	Joe Zheng
Attorney Docket Number:	RFID-085C1

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension - 1 month with $0 paid	2251	1	100	100
Miscellaneous:				
RCE- 2ND AND SUBSEQUENT REQUEST	2820	1	950	950
		Total in USD ($)		1050

Electronic Acknowledgement Receipt

EFS ID:	36682906
Application Number:	14728349
International Application Number:	
Confirmation Number:	5346
Title of Invention:	Method and apparatus for mobile payments
First Named Inventor/Applicant Name:	Xiangzhen Xie
Customer Number:	26797
Filer:	Joe Zheng
Filer Authorized By:	
Attorney Docket Number:	RFID-085C1
Receipt Date:	24-JUL-2019
Filing Date:	02-JUN-2015
Time Stamp:	19:08:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1050
RAM confirmation Number	072519INTEFSW19090800
Deposit Account	502436
Authorized User	Joe Zheng
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	
37 CFR 1.16 (National application filing, search, and examination fees)	
37 CFR 1.17 (Patent application and reexamination processing fees)	

37 CFR 1.19 (Document supply fees)

37 CFR 1.20 (Post Issuance fees)

37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Continued Examination (RCE)	RCEReqTrns.pdf	124825 0962a323e3f4c213acba97534bc6d127c25 0e908	no	1

Warnings:

This is not a USPTO supplied RCE SB30 form.

Information:

| 2 | Amendment Submitted/Entered with Filing of CPA/RCE | ResponseToFinalOARCE.pdf | 156589

c02c0256f5c9111925402bdc498a5ee5d1a 628b4 | no | 12 |

Warnings:

Information:

| 3 | Fee Worksheet (SB06) | fee-info.pdf | 32280

7b85e9633cc2c346b08edd5555ec9a76f0f7 0384 | no | 2 |

Warnings:

Information:

| | Total Files Size (in bytes): | | 313694 | | |

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.
National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.
New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s):   Xiangzhen Xie et al
Title: Trusted Service Management Process
Serial No.:   14/728,349
Filing Date: 06/02/2015
Confirmation: 5346
Examiner: Ashford Hayles
Group Art Unit: 3687
Docket No.:   RFID-085C1

July 25, 2019

Mail Stop: No-Fee Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Response to Final OA (RCE)

Dear Sir:

In response to Office Action dated 03/25/2019, the Applicant respectfully requests the Examiner to enter the following amendments:

AMENDMENTS TO THE CLAIMS are reflected in the listing of claims which begins on page 2 of this Response.

REMARKS/ARGUMENTS begin on page 8 of this Response.

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AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 12 and 18 as follows:

1. (*Currently amended*) A method for mobile payment, the method comprising:

causing a mobile device to capture data directly from a tag physically presented thereto, wherein the tag receives the data directly from a POS device and allows the mobile device to capture the data therefrom, the data embedded in the tag including an electronic invoice and settlement information with a merchant associated with the POS device;

extracting the electronic invoice from the captured data in the mobile device;

displaying the electronic invoice on a display of the mobile device to show an amount to be paid by a user of the mobile device, wherein the mobile device is configured to execute an installed application therein to capture the data from the tagmedium;

receiving an entry by the mobile device, the entry including an additional amount from the user;

calculating a total amount by adding the additional amount to the amount in the electronic invoice;

generating a payment request in the mobile device in response to the electronic invoice after the user has chosen a paying instrument, wherein the payment request includes the total amount and the settlement information;

displaying the electronic invoice on the display of the mobile device for the user to verify the payment request along with the chosen paying instrument;

sending the payment request from the mobile device to a payment gateway, wherein the payment gateway sends a message directly to the POS device that a monetary transaction per the payment request sent from the mobile device has been successfully completed in the payment gateway with the POS device when an amount equivalent to the total amount is deducted from an account associated with the user; and

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recording a confirmation in the mobile device that the monetary transaction per the payment request has been successfully completed with respect to the electronic invoice.

2. (*Previously amended*) The method as recited in claim 1, wherein said causing a mobile device to capture data directly from a tag physically presented thereto includes placing the mobile device near the tag.

3. (*Previously amended*) The method as recited in claim 2, wherein the POS device provides security and authentication to generate the electronic bill and transfer the data to the tag.

4. (*Previously amended*) The method as recited in claim 1, wherein said displaying the electronic invoice on a display of the mobile device comprises:
   allowing the user to verify the amount in the electronic invoice and make a change to the amount when needed; and
   paying the total amount with the chosen paying instrument, wherein the chosen paying instrument is selected from a group consisting of an electronic wallet already created in the mobile device, a traditional credit or debit card, and an electronic transfer.

5. (*Previously amended*) The method as recited in claim 1 further comprising: causing the mobile device to execute an installed module upon detecting the POS device in a near field of the mobile device, wherein the installed module is executed to receive the data directly from the tag carrying the electronic invoice and the settlement information.

6. (*Previously amended*) The method as recited in claim 5, wherein the data further includes security information about the merchant associated with the POS device, the security information includes an account and bank information of the registered merchant, an identifier of the tag or the POS device.

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7. (*Previously amended*) The method as recited in claim 6, wherein said sending the payment request from the mobile device to a payment gateway comprises:
transporting the payment request over a secured channel to the payment gateway, wherein the payment gateway is configured to perform the monetary transaction per the payment request by deducting an amount from an account owned by the user and generates an electronic notification for sending to the POS device.

8. (*Previously amended*) The method as recited in claim 7, wherein said displaying the electronic invoice on the display of the mobile device comprises:
allowing the user to modify the amount in the electronic invoice when needed;
paying the total amount with an electronic payment provided by an installed module in the mobile device, wherein the installed module in the mobile device is configured to generate the payment request including the data pertaining to the electronic invoice to the payment gateway for processing.

9. (*Previously amended*) The method as recited in claim 8, wherein data exchange between the mobile device and the payment gateway is conducted in a secured channel established therebetween.

10. (*Previously amended*) The method as recited in claim 9, wherein the mobile device includes a secure element providing security and confidentiality required to support secure data communication between the mobile device and the payment gateway.

11. (*Previously amended*) The method as recited in claim 9, wherein said notifying the user in the mobile device that then monetary transaction per the payment request has been successfully completed with the POS device comprising: sending a notification of successful payment to the merchant of the POS device.

12. (*Currently amended*) A method for mobile payment, the method comprising:

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generating a set of data in a point of sale (POS) device, the data including an
electronic invoice and settlement information with a merchant associated with the
POS device;

~~transporting~~ embedding the data directly to a tag;

presenting the tag to the mobile device;

causing the mobile device to capture the data from the tag, wherein the mobile
device executes an installed application therein to retrieve an amount in the
electronic invoice from the data and generate a payment request in response to
the captured data, the payment request being sent to a payment gateway includes
a total amount combining an additional amount added by a user of the mobile
device and ~~an~~the amount expressed in the electronic invoice; and

receiving a message in the POS device directly from the payment gateway that the
electronic invoice has been settled but for the total amount more than the amount
expressed in the electronic invoice, wherein the payment gateway is configured to
send the message directly to the POS device when an amount equivalent to the
total amount is deducted from an account associated with the user of the mobile
devices.

13. (*Previously amended*) The method as recited in claim 12, wherein the tag is
presented near the mobile device to allow the user to use the mobile device to
capture the data.

14. (*Previously amended*) The method as recited in claim 13, wherein the POS device is
provided with security and authentication to generate the electronic invoice.

15. (*Previously amended*) The method as recited in claim 14, wherein the data includes
security information of the merchant associated with the POS device, the security
information includes an account and bank information, an identifier of the tag or the
POS device.

16. (*Previously amended*) The method as recited in claim 15, wherein the message received in the POS device shows how much has been received from the user of the mobile device.

17. (*Previously amended*) The method as recited in claim 12, wherein data exchange between the mobile device and the payment gateway is conducted in a secured channel established between the mobile device and the payment gateway.

18. (*Currently amended*) A system for mobile payment, the system comprising:
    a point of sale (POS) device provided to generate a set of ~~date~~ data including an electronic invoice upon receiving an entry, wherein the data including the electronic invoice and settlement information is transferred to a tag, ~~the~~ a mobile device is executing a module configured to capture the data directly from the tag physically presented thereto, extract an amount expressed in the electronic invoice and display ~~an~~ the amount in the mobile device~~expressed in the electronic in~~voice; and wherein
    the POS device receives an electronic notification directly from a payment gateway that the electronic invoice has been settled for a total amount including an additional amount and the amount expressed in the electronic invoice, the additional amount is added by the user, after the user of the mobile devices verifies the electronic invoice displayed on the mobile device and authorizes a payment to the electronic invoice, the mobile device is configured to generate a payment request to be sent to the payment gateway to proceed with a payment according to the payment request.

19. (*Previously amended*) The system as recited in claim 18, wherein the data from the POS device includes an account and bank information of the merchant of the POS device.

20. (*Previously amended*) The system as recited in claim 19, wherein the payment gateway acts to deduct an amount equivalent to the total amount from an account

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associated with the user of the mobile devices and generates the electronic notification for the POS device.

REMARKS

Claims 1 - 20 were examined again. In the Office Action dated 03/25/2019, Claims 1, 2, 4, 5, 12 and 17-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher U.S. Patent Application Publication 2011/0173060 (hereinafter "Gallagher") in view of Brendell et al. U.S. Patent Application Publication 2013/0048717 (hereinafter "Brendell"), Claims 3, 6-11, 14-15 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher in view of Brendell further in view of Florek et al. 2011/0112968 (hereinafter "Florek"), and Claim 16 is rejected under pre-AIA 35 U.S.C. 103{a) as being unpatentable over Gallagher in view of Brendell in view of Florek further in view of Shank et al. U.S. Patent Application Publication 2011/0066550 (hereinafter "Shank").

The Applicant appreciates the Examiner for providing detailed comments in the Office Action. In the foregoing amendments, Claims 1, 12 and 18 have been amended. No new matters have been introduced. Reconsideration of pending claims is respectfully requested.

Claim Rejections - 35 USC § 103

On Page 4 of this Office Action, Claims 1, 2, 4, 5, 12 and 17-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher in view of Brendell.

As amended, Claim 1 now recites:

causing a mobile device to capture data directly from a tag physically presented thereto, wherein the tag receives the data directly from a POS device and allows the mobile device to capture the data therefrom, the data embedded in the tag including an electronic invoice and settlement information with a merchant associated with the POS device;

extracting the electronic invoice from the captured data in the mobile device;

displaying the electronic invoice on a display of the mobile device to show an amount to be paid by a user of the mobile device, wherein the mobile device is configured to execute an installed application therein to capture the data from the tag;

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…

(*emphasis added*)

As shown in FIG. 1, the mobile device 110 is getting the data directly from a tag (e.g., the contactless card 108), where the tag includes data generated and transferred onto the tag by the POS 106. In other words, the tag itself or data thereon is illegible visually, namely embedded in the tag. As explicitly shown in blocks 126 and 128 of FIG. 1B, an amount being charged is not visually available to a user (aka, customer) when being presented to the user with the tag. The invoice must be retrieved from the captured data. Claim 1 is now amended to explicitly recite "extracting the electronic invoice from the captured data in the mobile device" and "displaying the electronic invoice on a display of the mobile device to show an amount to be paid by a user of the mobile device".

In contrast, Gallagher teaches using a check presenter 2 that includes a wireless communication device 44 and a transparent window 48. As described in Para [0026], a physical guest check is presented to the user, where the check contains all the details of the meal and the total amount due. The window enlarges a logo 46 when the check is removed to alert the guest that the check can be settled by the guest's wireless mobile device. The subtle difference between Gallagher and Claim 1 as amended is that the user knows exactly how much to pay before using his/her mobile device to settle the transaction in Gallagher while the user would not see exactly how much to pay before using his/her mobile device in Claim 1 of the instant application. Another important distinction from Gallagher is that the user must use his/her mobile device to capture the data from the tag, where the invoice or the amount due is retrieved from the captured data. Accordingly, the Applicant submits Gallagher neither teaches nor suggests but teaches away from "*the data embedded in the tag including an electronic invoice and settlement information*" and "*extracting the electronic invoice from the captured data in the mobile device*". Claim 1 as amended shall be allowable over Gallagher.

On Page 7 of the Office Action, the Examiner admits Gallagher fails to explicitly state wherein the payment gateway sends a message directly to the POS device that a

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monetary transaction per the payment request sent from the mobile device has been successfully completed in the payment gateway with the POS device when an amount equivalent to the total amount is deducted from an account associated with the user, and then cites Brendell to show the teaching in combination.

The Applicant respectfully contests the combination of Gallagher and Brendell as it is believed that there is no motivation to combine these two references in the manner proposed by the Examiner. In order to establish a *prima facie* case of obviousness under 35 USC 103, *Graham v. John Deer Co. of Kansas City*, 383 US 1 (1966) requires determining, respectively, the scope and content of the prior art, the difference between the prior art and the claims at issue, and the level of ordinary skilled in the art. Rejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning, to support the legal conclusion of obviousness. *KSR v. Teleflex*, No. 04-1350 (US Apr. 30, 2007) (citing In re Kahn, 441 F. 3d 977, 988 (Canada Fed. 2006)). The suggestion to make the claim combination must be found in the prior art, not in the Applicant's disclosure. In re Vaek, 20 USPQ2d 1438 (Fed. Cir. 1991). Moreover, in accordance with MPEP 2142.02, each prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L.Gore & Associates Inc. v. Garlock, Inc.* 220 USPQ 303 (Fed. Cir. 1993). A third essential requirement for establishing a *prima facie* case, set forth in MPEP 2143.01 is that the proposed modification cannot render the prior art unsatisfactory for its intended purpose.

Brendell teaches contactless payments in a retail environment in which an invoice is generated on a merchant's server (merchant system 202) once a transaction is about to occur. As explicitly shown in FIG. 3 or 4, a user (consumer) uses his/her mobile device to scan a RFID tag 110 to access the invoice based on the tag's ID or a link. A payment can be made directly to the merchant system 202, hence a notification is sent to the merchant. It is believed that the Examiner has viewed that the merchant system 202 and the merchant POS terminal are two different entities. In view of Claim 1 of the instant application, there is a payment gateway which is a third party to the user

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and merchant. The payment notification from the merchant system 202 to a POS terminal is not equivalent to a payment notification from the payment gateway to a merchant as the merchant system 202 still needs a payment gateway to settle a payment. Nevertheless, the modification of Gallagher with Brendell would not cure the deficiencies in Gallagher as discussed above. Accordingly, Claim 1 as amended shall be allowable over Gallagher and Brendell, viewed alone or in combination. Reconsideration of Claims 1-11 is kindly requested.

Claim 12 and Claim 18 have been amended similarly to Claim 1. Without repeating the same, the Applicant wishes to rely upon the above arguments/reasons supporting Claim 1 to support Claim 12 and 18 and submits the combination of Gallagher and Brendell fails to suggest "*to retrieve an amount in the electronic invoice from the data*" and *"extract an amount expressed in the electronic invoice*". Accordingly, the Applicant submits Claim 12 and 18 as amended shall be allowable over Gallagher and Brendell, viewed alone or in combination. Reconsideration of Claims 12-20 is kindly requested.

The patentability of the independent claims has been argued specifically as set forth above and thus Applicant will not take this opportunity to argue further the merits of the rejection with regard to each dependent claim. However, Applicant does not concede that the dependent claims are not independently patentable and reserves the right to argue the patentability of the dependent claims at a later date if necessary.

In view of the above amendments and remark, the Applicant believes that Claims 1-20 shall be in condition for allowance over the cited references. Early and favorable action is being respectfully solicited.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplementary Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned at (408)777-8873.

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to " Mail Stop: No-fee Amendment Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450", July 24, 2019. e-filed.

Name:___Joe Zheng___

Signature: / joe zheng /

Respectfully submitted;

/ joe zheng /

Joe Zheng
Reg.: No. 39,450

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/728,349	Filing Date 06/02/2015	☐ To be Mailed

ENTITY: ☐ LARGE ☑ SMALL ☐ MICRO

APPLICATION AS FILED - PART I

	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA		RATE ($)	FEE ($)
FOR					
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A		N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A		N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A		N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*		x $40 =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*		x $210 =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).				
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))					
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL	

APPLICATION AS AMENDED - PART II

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT	07/24/2019	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0		x $50 =	0
	Independent (37 CFR 1.16(h))	* 3	Minus	*** 3	= 0		x $230 =	0
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	0

		(Column 1)		(Column 2)	(Column 3)			
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=		x $0 =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=		x $0 =	
	☐ Application Size Fee (37 CFR 1.16(s))							
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							
							TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.	LIE
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".	/TARA A WASHINGTON/
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".	
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.	

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/728,349	06/02/2015	Xiangzhen Xie	RFID-085C1	5346

26797   7590   03/25/2019
LogicPatents, LLC
21701 Stevens Creek Boulevard, #284
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EXAMINER
HAYLES, ASHFORD S

ART UNIT	PAPER NUMBER
3687	

NOTIFICATION DATE	DELIVERY MODE
03/25/2019	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspatents@sbcglobal.net

PTOL-90A (Rev. 04/07)

Office Action Summary	Application No. 14/728,349	Applicant(s) Xie et al.
	Examiner ASHFORD S HAYLES	**Art Unit** 3687 — **AIA (FITF) Status** No

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☑ Responsive to communication(s) filed on 2/14/2019.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
2a)☑ This action is **FINAL.**   2b)☐ This action is non-final.
3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5) ☑ Claim(s) 1-20 is/are pending in the application.
   5a) Of the above claim(s) _____ is/are withdrawn from consideration.
6) ☐ Claim(s) _____ is/are allowed.
7) ☑ Claim(s) 1-20 is/are rejected.
8) ☐ Claim(s) _____ is/are objected to.
9) ☐ Claim(s) _____ are subject to restriction and/or election requirement

* If any claims have been determined <u>allowable</u>, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to **PPHfeedback@uspto.gov.**

Application Papers

10)☐ The specification is objected to by the Examiner.
11)☑ The drawing(s) filed on 6/23/2015 is/are: a)☑ accepted or b)☐ objected to by the Examiner.
   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   Certified copies:
     a)☐ All   b)☐ Some**   c)☐ None of the:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☑ Notice of References Cited (PTO-892)
2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.
3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date _____.
4) ☐ Other: _____.

DETAILED ACTION

Amendment received on February 14, 2019 has been acknowledged. Claims 1-6, 8, 12-15 and 18 have been amended and entered. Therefore, claims 1-20 are pending.

Response to Arguments

Applicant's arguments with respect to claims 1-6, 8, 12-15 and 18 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Claim Objections

Claim 18 is objected to because of the following informalities: The amendment to claim 18 appears to read: "*a set of date including*". Based on the context of the claim language it appears that date should be *data*. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out
and distinctly claiming the subject matter which the inventor or a joint inventor regards as the
invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

Claims 1 and 5 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject matter which the

inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claim 1 recites the limitation "the medium" in line 11. There is insufficient antecedent basis for

this limitation in the claim.

Claim 5 recites: "*causing the mobile device to execute an installed module upon detecting the*

POS device in a near field of the mobile device"

The claims as amended are directed toward a POS device writing data to a tag that is physically

brought to the customer to read the electronic invoice. Claim 5 now requires that the mobile device

engage a POS device via NFC communication. It is unclear as to why the mobile device would enter a

near field communication with the POS device when the claims are directed toward reading data from a

tag. The Examiner is interpreting claim 5 as executing an application installed within the mobile device

upon detecting the tag in a near field of the mobile device. Appropriate clarification is requested.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 2, 4, 5, 12 and 17-20 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher U.S. Patent Application Publication 2011/0173060 in view of Brendell et al. U.S. Patent Application Publication 2013/0048717.

As per Claim 1, Gallagher discloses a method for mobile payment, the method comprising: causing a mobile device to capture data directly from a tag physically presented thereto (pg.3, ¶ [0037] discusses the guest recognizes the logo 46, highlighted by the magnifying window 48, as indicating a wireless payment capability and brings his wireless mobile device 62 near the logo. In step 106, the wireless mobile device 62 establishes communication with the wireless communication device 44 and reads the stored payment facilitating information),

wherein the tag receives the data directly from a POS device and allows the mobile device to capture the data therefrom (pg.3, ¶ [0034] discusses the restaurant management module running in the restaurant POS system 52 displays the guest check for the correct table where the guest is sitting. In step 100, when the waiter brings a check presenter near the wireless reader/writer 54, the restaurant management module writes several payment facilitating information to the memory of the wireless communication device 44 attached to the check presenter2 through the wireless reader/writer 54)

the data including an electronic invoice and settlement information with a merchant associated

with the POS device (pg.3, ¶ [0034] discusses the payment facilitating information includes the following

information: 1) restaurant identifier, 2) unique identifier of the wireless communication device 44, if not

present already, 3) identifier of the table where the guest is sitting, 4) identifier of the guest check, 5)

location information of the restaurant interface system 56 such as the URL (Uniform Resource Locator)

and 6) identifier of a restaurant application which is to be run by the wireless mobile device 62 of the

guest when the device is brought near the wireless communication device 44);

displaying the electronic invoice on a display of the mobile device to show an amount to be paid

by a user of the mobile device (pg.3, ¶ [0041] discusses the guest review the guest check information

either on the wireless mobile device or the physical check),

wherein the mobile device is configured to execute an installed application therein to capture

the data from the medium (pg.3, ¶ [0038] discusses the wireless mobile device 62 will attempt to

download it through the restaurant interface system 56 using the URL provided by the wireless

communication device 44. If the wireless mobile device 62 does locate the application within the device

itself, it will load and execute the program. Thus, any subsequent steps done by the wireless mobile

device 62 are under the control of the restaurant application);

receiving an entry by the mobile device, the entry including an additional amount from the user

(pg.3, ¶ [0041] discusses the guest review the guest check information either on the wireless mobile

device or the physical check and adds any gratuity to the total);

calculating a total amount by adding the additional amount to the amount in the electronic

invoice (pg.3, ¶ [0041] discusses the guest reviews the guest check information either on the wireless

mobile device 62 or the physical check and adds any gratuity to the total);

generating a payment request in the mobile device in response to the electronic invoice after

the user has chosen a paying instrument (pg.4, ¶ [0041] discusses upon selection of a financial

instrument to use for payment by the guest, the wireless mobile device 62 retrieves the selected

financial instrument information from a secure memory area of the mobile device),

wherein the payment request includes the total amount and the settlement information (pg.4, ¶

[0042] discusses the wireless mobile device 62 transmits the payment facilitating information, the

retrieved financial instrument information and the total amount including the gratuity to the restaurant

interface system 56 for processing the payment);

displaying the electronic invoice on the display of the mobile device for the user to verify the

payment request along with the chosen paying instrument (pg.4, ¶ [0041] discusses upon selection of a

financial instrument to use for payment ¶ [0042] discusses upon approval by the guest);

sending the payment request from the mobile device to a payment gateway (pg.4, ¶ [0043]

discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved

financial instrument information and the total amount directly to the payment processing system 58 for

processing the payment),

recording a confirmation in the mobile device that the monetary transaction per the payment

request has been successfully completed with respect to the electronic invoice (pg.4, ¶ [0042] discusses

the payment processing system 58 transmits the received approval message to the wireless mobile

device 62 as receipt and to the restaurant POS system 52 to indicate to the restaurant management

software that the guest check has been paid).

Gallagher teaches the payment processing system 58 processes the payment authorization in a

known manner and returns an approval message to the restaurant interface system 56 and Figure 4,

Step 118 Payment Approval Message is transmitted to Restaurant POS System (pg.4, ¶ [0042]), thereby

transferring funds from the customer to the merchant and providing a notification of such transfer to

the POS system.

However, Gallagher fails to explicitly state wherein the payment gateway sends a message directly to the POS device that a monetary transaction per the payment request sent from the mobile device has been successfully completed in the payment gateway with the POS device when an amount equivalent to the total amount is deducted from an account associated with the user.

Brendell teaches wherein the payment gateway sends a message directly to the POS device that a monetary transaction per the payment request sent from the mobile device has been successfully completed in the payment gateway with the POS device when an amount equivalent to the total amount is deducted from an account associated with the user (pg.3, ¶ [0023] discusses the consumer can provide the information to a personal bank, where the bank receives the amount due and the merchant information, along with a consumer identifier. Once the consumer is identified and verified, the bank may approve the transaction and submit payment of the amount due to the merchant of record as indicated by the merchant information. Such a transaction has additional security in that the consumer's account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to deduct the total bill amount from a customer's bank account and send the merchant an indication of the transaction as taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 2, Gallagher discloses the method as recited in claim 1, wherein said causing a mobile device to capture data directly from <u>tag physically presented thereto</u> includes placing the <u>mobile device</u> near the tag (Figure 4, Step 104, Guest brings mobile device near the guest check presenter).

As per Claim 4, Gallagher discloses the method as recited in claim 1, wherein said displaying the electronic invoice on a display of the mobile device comprises:

allowing the user to verify the amount in the electronic invoice and make a change to the amount when needed (Figure 4, Step 110, Guest Reviews Bill and Adds Gratuity); and

paying the total amount with the chosen paying instrument (Figure 4, Step 112, Mobile Device Retrieves Financial Instrument Information From Mobile Device),

wherein the chosen paying instrument is selected from a traditional credit or debit card, and an electronic transfer (pg.4, ¶ [0041] discusses the wireless mobile device 62 retrieves the selected financial instrument information from a secure memory area of the mobile device. The financial instrument information can include an account number, name of the account holder, expiration date and CVV (card verification value) and the like).

However, Gallagher is silent regarding group consisting of an electronic wallet already created in the mobile device,

Brendell teaches group consisting of an electronic wallet already created in the mobile device (pg.3, ¶ [0022] discusses the contactless-enabled device 120 may store multiple accounts which the consumer may select from to make the payment, Incorporated Reference 13/215,111 pg. 3, ¶ [0027] discusses virtual wallet program).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include a virtual wallet within the mobile device as taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer

accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 5, Gallagher discloses the method as recited in claim 1 further comprising:

causing the mobile device to execute an installed module upon detecting the POS device in a near field of the mobile device (pg.3, ¶ [0034] discusses and identifier of a restaurant application which is to be run by the wireless mobile device 62 of the guest when the device is brought near the wireless communication device 44)

wherein the installed module is executed to receive the data <u>directly</u> from the <u>tag</u> carrying the electronic invoice and the settlement information (pg.3, [0038] discusses Based on the restaurant application identifier, the wireless mobile device 62 attempts to locate the application in its data storage… If the wireless mobile device 62 does locate the application within the device itself, it will load and execute the program. Thus, any subsequent steps done by the wireless mobile device 62 are under the control of the restaurant application, ¶ [0040] discusses the line item details of the guest check can be programmed into the data storage of the wireless communication device 44 in step 100 in which case such data will be read by the wireless mobile device 62 in step 106).

As per Claim 12, Gallagher discloses a method for mobile payment, the method comprising:

generating <u>a set of data in a point of sale device, the data including an electronic invoice and settlement information with a merchant associated with the POS device </u>(pg.3, ¶ [0034] discusses upon instruction by the waiter, the restaurant management module running in the restaurant POS system 52 displays the guest check for the correct table where the guest is sitting. In step 100, when the waiter brings a check presenter near the wireless reader/writer 54, the restaurant management module writes several payment facilitating information to the memory of the wireless communication device 44 attached to the check presenter2 through the wireless reader/writer 54… the payment facilitating information includes the following information: 1) restaurant identifier, 2) unique identifier of the

wireless communication device 44, if not present already, 3) identifier of the table where the guest is

sitting, 4) identifier of the guest check, 5) location information of the restaurant interface system 56

such as the URL (Uniform Resource Locator) and 6) identifier of a restaurant application which is to be

run by the wireless mobile device 62 of the guest when the device is brought near the wireless

communication device 44),

transporting the data direct to a tag; (pg.3, ¶ [0034] discusses the restaurant management

module writes several payment facilitating information to the memory of the wireless communication

device 44 attached to the check presenter2 through the wireless reader/writer 54)

presenting the tag to the mobile device (pg.3, ¶ [0036] discusses the waiter brings the

programmed guest check presenter 2 to the guest)

causing the mobile device to capture the data from the tag (pg.3, ¶ [0037] the wireless mobile

device 62 establishes communication with the wireless communication device 44 and reads the stored

payment facilitating information),

wherein the tag receives the data directly from a POS device and allows the mobile device to

capture the data therefrom (pg.3, ¶ [0034] discusses the restaurant management module running in the

restaurant POS system 52 displays the guest check for the correct table where the guest is sitting. In

step 100, when the waiter brings a check presenter near the wireless reader/writer 54, the restaurant

management module writes several payment facilitating information to the memory of the wireless

communication device 44 attached to the check presenter2 through the wireless reader/writer 54)

the data including an electronic invoice and settlement information with a merchant associated

with the POS device (pg.3, ¶ [0034] discusses the payment facilitating information includes the following

information: 1) restaurant identifier, 2) unique identifier of the wireless communication device 44, if not

present already, 3) identifier of the table where the guest is sitting, 4) identifier of the guest check, 5)

location information of the restaurant interface system 56 such as the URL (Uniform Resource Locator)

and 6) identifier of a restaurant application which is to be run by the wireless mobile device 62 of the

guest when the device is brought near the wireless communication device 44);

wherein the mobile device executes an installed application therein to generate a payment

request in response to the captured data, the payment request being sent to a payment gateway

includes a total amount combining an additional amount added by a user of the mobile device and an

amount expressed in the electronic invoice (pg.3, ¶ [0037] discusses the wireless mobile device 62

establishes communication with the wireless communication device 44 and reads the stored payment

facilitating information and pg.4, ¶ [0042] discusses the wireless mobile device 62 transmits the

payment facilitating information, the retrieved financial instrument information and the total amount

including the gratuity to the restaurant interface system 56 for processing the payment); and

receiving a message in the POS device directly from the payment gateway that the electronic

invoice has been settled but for the total amount more than the amount expressed in the electronic

invoice (pg.4, ¶ [0042] discusses the payment processing system 58 transmits the received approval

message to the wireless mobile device 62 as receipt and to the restaurant POS system 52 to indicate to

the restaurant management software that the guest check has been paid),

Gallagher teaches the payment processing system 58 processes the payment authorization in a

known manner and returns an approval message to the restaurant interface system 56 and Figure 4,

Step 118 Payment Approval Message is transmitted to Restaurant POS System (pg.4, ¶ [0042]), thereby

transferring funds from the customer to the merchant and providing a notification of such transfer to

the POS system.

However, Gallagher fails to explicitly state wherein the payment gateway is configured to send

the message directly to the POS device when an amount equivalent to the total amount is deducted

from an account associated with the user of the mobile devices.

Brendell teaches wherein the payment gateway is configured to send the message directly to the POS device when an amount equivalent to the total amount is deducted from an account associated with the user of the mobile devices (pg.3, ¶ [0023] discusses the consumer can provide the information to a personal bank, where the bank receives the amount due and the merchant information, along with a consumer identifier. Once the consumer is identified and verified, the bank may approve the transaction and submit payment of the amount due to the merchant of record as indicated by the merchant information. Such a transaction has additional security in that the consumer's account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to deduct the total bill amount from a customer's bank account and send the merchant an indication of the transaction as taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 13, Gallagher discloses the method as recited in claim 12, wherein the tag is presented near the mobile device to allow the user to use the mobile device to capture the data (Figure 4, Step 104, Guest brings mobile device near the guest check presenter, Step 106, Mobile Device Reads Stored Information from Guest Check Presenter).

As per Claim 17, Gallagher discloses the method recited in claim 12, wherein data exchange between the mobile device and payment gateway is conducted in channel established between the mobile device and payment gateway (pg.4, ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved financial instrument information and the

total amount directly to the payment processing system 58 for processing the payment…pg.3, ¶ [0030]

discusses VISA™ interchange system).

However, Gallagher fails to explicit state a secured channel.

Brendell teaches a secured channel (pg.8, ¶ [0074] discusses a web client may implement

security protocols such as Secure Sockets Layer (SSL) and Transport Layer Security (TLS). A web client

may implement several application layer protocols including http, https, ftp, and sftp).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to include the ability

to communicate via known security protocols as taught by Brendall to provide a contactless payment

system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment

system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag

or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer

accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 18, Gallagher discloses a system for mobile payment, the system comprising:

a point of sale (POS) device provided to generate <u>a set of data including</u> an electronic invoice

upon receiving an entry (Figure 4, Step 100, Restaurant POS Module writes facilitating information to

guest check presenter),

wherein the data including the electronic invoice and settlement information is transferred to a

tag (pg.3, ¶ [0034] discusses the payment facilitating information includes the following information: 1)

restaurant identifier, 2) unique identifier of the wireless communication device 44, if not present

already, 3) identifier of the table where the guest is sitting, 4) identifier of the guest check, 5) location

information of the restaurant interface system 56 such as the URL (Uniform Resource Locator) and 6)

identifier of a restaurant application which is to be run by the wireless mobile device 62 of the guest

when the device is brought near the wireless communication device 44),

the mobile device is executing a module configured to capture the data directly from the tag

physically presented thereto (Figure 4, Step 102, Waiter bring programmed guest check presenter to

guest, Step 106 Mobile Device Reads stored information from the guest check presenter and pg.3, ¶

[0038] discusses any subsequent steps done by the wireless mobile device 62 are under the control of

the restaurant application); and

wherein the POS device receives an electronic notification directly from a payment gateway that

the electronic invoice has been settled for a total amount including an additional amount and the

amount expressed in the electronic invoice (pg.4, ¶ [0042] discusses the payment processing system 58

transmits the received approval message to the wireless mobile device 62 as receipt and to the

restaurant POS system 52 to indicate to the restaurant management software that the guest check has

been paid and ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating

information, the retrieved financial instrument information and the total amount directly to the

payment processing system 58 for processing the payment),

the additional amount is added by the user, after the user of the mobile devices verifies the

electronic invoice displayed on the mobile device (Figure 4, Step 110 Guest Reviews Bill and Adds

Gratuity) and

authorizes a payment to the electronic invoice (pg.4, ¶ [0042] discusses approval by the guest),

the mobile device is configured to generate a payment request to be sent to the payment gateway to

proceed with a payment according to the payment request (pg.4, ¶ [0042] discusses the wireless mobile

device 62 transmits the payment facilitating information, the retrieved financial instrument information

and the total amount including the gratuity to the restaurant interface system 56 for processing the

payment…¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating

information, the retrieved financial instrument information and the total amount directly to the

payment processing system 58 for processing the payment).

Brendell teaches wherein the POS device receives an electronic notification directly from a

payment gateway that the electronic invoice has been settled for a total amount including an additional

amount and the amount expressed in the electronic invoice (pg.3, ¶ [0023] discusses the consumer can

provide the information to a personal bank, where the bank receives the amount due and the merchant

information, along with a consumer identifier. Once the consumer is identified and verified, the bank

may approve the transaction and submit payment of the amount due to the merchant of record as

indicated by the merchant information. Such a transaction has additional security in that the consumer's

account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to deduct the total

bill amount from a customer's bank account and send the merchant an indication of the transaction as

taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a

restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated

with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill,

transmitting the total bill and associated unique identifier to a consumer accessible payment network,

and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

As per Claim 19, Gallagher discloses the system as recited in claim 18. However, Gallagher is

silent regarding wherein the data from the POS device includes an account and bank information of the

merchant of the POS device.

Brendell teaches wherein the data from the POS device includes an account and bank

information of the merchant of the POS device (pg.3, ¶ [0023] discusses the transaction information, for

example, may include the amount due and merchant information…. the consumer can provide the

information to a personal bank, where the bank receives the amount due and the merchant

information, along with a consumer identifier. Once the consumer is identified and verified, the bank

may approve the transaction and submit payment of the amount due to the merchant of record as

indicated by the merchant information[1]).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to include a virtual

wallet within the mobile device as taught by Brendall to provide a contactless payment system for

merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a

total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR

code with the total bill, transmitting the total bill and associated unique identifier to a consumer

accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 20, Gallagher discloses the system of the claimed invention. However, Gallagher is

silent regarding wherein the payment gateway acts to deduct an amount equivalent to the total amount

from an account associated with the user of the mobile devices and generates the electronic notification

for the POS device.

Brendell teaches wherein the payment gateway acts to deduct an amount equivalent to the

total amount from an account associated with the user of the mobile devices and generates the

electronic notification for the POS device (pg.3, ¶ [0023] discusses the consumer can provide the

information to a personal bank, where the bank receives the amount due and the merchant

information, along with a consumer identifier. Once the consumer is identified and verified, the bank

may approve the transaction and submit payment of the amount due to the merchant of record as

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[1] The cited portion of Brendell teaches that the merchant information includes an account and bank information of
a merchant because the bank needs such information to finalize a transaction.

indicated by the merchant information. Such a transaction has additional security in that the consumer's

account number is never transmitted during the processing).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments

at the time of the invention to modify the system of Gallagher to include the ability to deduct the total

bill amount from a customer's bank account and send the merchant an indication of the transaction as

taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a

restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated

with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill,

transmitting the total bill and associated unique identifier to a consumer accessible payment network,

and receiving payment from the consumer for satisfaction of the total bill. *Abstract*

Claims 3, 6-11, 14-15 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher U.S. Patent Application Publication 2011/0173060 in view of Brendell US 2013/0054412 further in view of Florek et al. 2011/0112968.

As per Claims 3 and 14, Gallagher discloses the method as recited in the claimed invention, wherein the POS device generate the electronic bill and transfer the data to the tag (pg.3, ¶ [0034] discusses the restaurant management module running in the restaurant POS system 52 displays the guest check for the correct table where the guest is sitting. In step 100, when the waiter brings a check presenter near the wireless reader/writer 54, the restaurant management module writes several payment facilitating information to the memory of the wireless communication device 44 attached to the check presenter 2 through the wireless reader/writer 54).

However, Gallagher and Brendell are silent regarding POS device provides security and authentication.

Florek et al. teaches wherein POS device provides security and authentication (pg.6, ¶ [0045] discusses Sales Device will be very small and simple. It can be in the form of a small box with a display and keyboard through which the merchant will enter the required payment amount. The identification data can be stored directly in the corresponding element on the printed circuit of Sales Device, or they can be stored on the ICC (integrated circuit card) card or on other carriers as e.g. up until now known SAM (Security Authentication Module) cards with cryptographic key).

Therefore it would have been obvious to one of ordinary skill in the art of mobile commerce at the time of the invention to modify the system of Gallagher and Dryer et al. to include the ability to provide a merchant sales device with a security authentication module to conduct mobile transactions as taught by Florek et al. to provide a method of direct debit payment using a contactless transmission link and describes a configuration, in which a temporary payment terminal, with simplified structure that is intended above all for small business premises, can be created using a mobile communication

device. The solution refers to increase in security and comfort in paying over the mobile communication

device with removable memory card for example in the form of a micro SD card (pg.1, ¶ [0001]).

As per Claims 6 and 15, Gallagher discloses the claimed invention, wherein the data further

includes security information about the merchant associated with the POS device (pg.3, ¶ [0034]

discusses the payment facilitating information includes the following information: 1) restaurant

identifier, 2)unique identifier of the wireless communication device 44, if not present already, 3)

identifier of the table where the guest is sitting, 4) identifier of the guest check, 5) location information

of the restaurant interface system 56 such as the URL (Uniform Resource Locator) and 6) identifier of a

restaurant application),

an identifier of <u>the tag</u> or the POS device (pg.3, ¶ [0034] discusses the payment facilitating

information includes the following information: 2) unique identifier of the wireless communication

device 44, if not present already.

However, Gallagher is silent regarding the security information includes an account and bank

information of the registered merchant.

Brendell teaches wherein the security information includes an account and bank information of

the registered <u>merchant</u> (pg.3, ¶ [0023] discusses the transaction information, for example, may include

the amount due and merchant information…. the consumer can provide the information to a personal

bank, where the bank receives the amount due and the merchant information, along with a consumer

identifier. Once the consumer is identified and verified, the bank may approve the transaction and

submit payment of the amount due to the merchant of record as indicated by the merchant

information[2]).

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[2] The cited portion of Brendell teaches that the merchant information includes an account and bank information of
a merchant because the bank needs such information to finalize a transaction.

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include a virtual wallet within the mobile device as taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 7, Gallagher discloses the claimed invention, wherein said sending the payment request from the mobile device to a payment gateway comprises:

transporting the payment request over a secured channel to the payment gateway (pg.3, ¶ [0030] discusses forwarding request to appropriate interchange system such as VISA™[3],

wherein the payment gateway is configured to perform the monetary transaction per the payment request by deducting an amount from an account owned by the user (pgs,2-3, ¶ [0030]-[0031] discusses when the payment processing system 58 receives a credit card payment authorization request from the restaurant interface system 56, it routes the request to the merchant's acquiring bank which then forwards the request to the appropriate interchange system such as VISA™ which then routes the request to the issuing bank of the credit card. The process is reversed for a payment authorization. The authorization message from the issuing bank is routed to the interchange system and then to the acquirer which routes it to the payment processing system 58 and

generates an electronic notification for sending to the POS device (Figure 4, Step 118, Payment Approval message transmitted to Mobile Device and to Restaurant POS system).

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[3] Examiner notes, it is old and well known to one having ordinary skill at the time of the invention that in order to communicate financial data with VISA™ one must use a secure channel.

As per Claim 8, Gallagher discloses the method as recited in claim 7, wherein said displaying the electronic invoice on the display of the mobile device comprises:

allowing the user to modify the amount in the electronic invoice when needed (Figure 4, Step 110, Guest Reviews Bill and Adds Gratuity),

paying the total amount with an electronic payment provided by an installed module in the mobile device (pg.4, ¶ [0042] discusses upon approval by the guest, the wireless mobile device 62 transmits the payment facilitating information, the retrieved financial instrument information and the total amount including the gratuity to the restaurant interface system 56 for processing the payment),

wherein the installed module in the mobile device is configured to generate the payment request including the data pertaining to the electronic invoice to the payment gateway for processing (pg.3, ¶ [0038] discusses any subsequent steps done by the wireless mobile device 62 are under the control of the restaurant application...pg.4, ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved financial instrument information and the total amount directly to the payment processing system 58 for processing the payment).

As per Claim 9, Gallagher discloses the method recited in claim 8, wherein data exchange between the mobile device and the payment gateway is conducted in a secured channel established there between (pg.4, ¶ [0043] discusses the wireless mobile device 62 can transmit the payment facilitating information, the retrieved financial instrument information and the total amount directly to the payment processing system 58 for processing the payment...pg.3, ¶ [0030] discusses VISA™ interchange system).

However, Gallagher fails to explicit state a secure channel.

Brendell teaches (pg.8, ¶ [0074] discusses a web client may implement security protocols such as Secure Sockets Layer (SSL) and Transport Layer Security (TLS). A web client may implement several application layer protocols including http, https, ftp, and sftp).

Therefore it would have been obvious to one of ordinary skill in the art of contactless payments at the time of the invention to modify the system of Gallagher to include the ability to include the ability to communicate via known security protocols as taught by Brendall to provide a contactless payment system for merchant transactions (e.g., a restaurant) comprises generating, at the contactless payment system, a total bill of purchases associated with a consumer, associating a unique identifier of a RFID tag or a QR code with the total bill, transmitting the total bill and associated unique identifier to a consumer accessible payment network, and receiving payment from the consumer for satisfaction of the total bill.

Abstract

As per Claim 10, Gallagher discloses the method as recited in claim 9, wherein the mobile device includes a secure element providing security and confidentiality required to support secure data communication between the mobile device and the payment gateway (pg.4, ¶ [0041] discusses retrieves the selected financial instrument information from a secure memory area of the mobile device).

However, Gallagher and Brendell fail to explicitly state wherein the mobile device includes a secure element.

Florek et al. teaches (pg.6, ¶ [0049] discusses several units of independent payment cards can be stored on the removable memory card and that either on the physical separate secure elements or on independent domains of one secure element. In this configuration the payment terminal application can run directly on the removable memory card and the data on the customer's payment card are not sent over external readers and neither into internet area, a fact that has positive impact on the security of the payment operation).

Therefore it would have been obvious to one of ordinary skill in the art of mobile commerce at the time of the invention to modify the system of Gallagher and Brendell. to include a secure element to store virtual cards of a customer on a mobile device as taught by Florek et al. to provide a method of direct debit payment using a contactless transmission link and describes a configuration, in which a

temporary payment terminal, with simplified structure that is intended above all for small business

premises, can be created using a mobile communication device. The solution refers to increase in

security and comfort in paying over the mobile communication device with removable memory card for

example in the form of a micro SD card (pg.1, ¶ [0001]).

>   **As per Claim 11**, Gallagher discloses the method as recited in claim 9, wherein said notifying the

user in the mobile device that then monetary transaction per the payment request has been successfully

completed with the POS device comprising:

>   sending a notification of successful payment to the merchant of the POS device (pg.4, ¶ [0042]

discusses the payment processing system 58 transmits the received approval message to the wireless

mobile device 62 as receipt and to the restaurant POS system 52 to indicate to the restaurant

management software that the guest check has been paid).

Claim 16 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Gallagher U.S.

Patent Application Publication 2011/0173060 in view of Brendell US 2013/0054412 in view of Florek

et al. 2011/0112968 further in view of Shank et al. U.S. Patent Application Publication 2011/0066550.

As per Claim 16, Gallagher, Brendall and Florek disclose the method as recited in claim 15.

However, Gallagher, Brendall and Florek are silent regarding wherein the message received in the POS

device shows how much has been received from the user of the mobile device.

Shank teaches wherein the message received in the POS device shows how much has been

received from the user of the mobile device (pg.6, ¶ [0062] discusses the result may be

communicated to the user via email, text message, or any suitable type of notification. An example of a

result 94 received by the billing device 12b is illustrated in FIG. 4F).

Therefore it would have been obvious to one of ordinary skill in the art of mobile commerce at

the time of the invention to modify the system of Gallagher, Brendall and Florek to include the ability to

provide a merchant with notification regarding the completion of payment transaction as taught by

Shank et al. to provide a system and method where a gateway uses an authorization code to authorize a

transaction and to determine an account for each device. The gateway then instructs an account

manager to withdraw the payment amount from the account of the first device and to deposit it into the

account of the second device (Abstract).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ASHFORD S HAYLES whose telephone number is (571)270-5106. The examiner can normally be reached on M-F 6AM-4PM with Flex.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at http://www.uspto.gov/interviewpractice.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fahd Obeid can be reached on 5712703324. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-

direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic

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CANADA) or 571-272-1000.

/ASHFORD S HAYLES/
 Primary Examiner, Art Unit 3687

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Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office
PTO-892 (Rev. 01-2001)   **Notice of References Cited**   Part of Paper No. 20190319

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20130060618-A1	03-2013	Barton; Loren	G06Q20/3223	705/14.23
*	B	US-20130144731-A1	06-2013	Baldwin; Christopher F.	G06Q20/20	705/17
*	C	US-20120078792-A1	03-2012	Bacastow; Steven V.	G06Q20/3223	705/44
*	D	US-8172135-B1	05-2012	Aidasani; Dilip	G06Q20/4012	235/379
*	E	US-20130171929-A1	07-2013	ADAMS; NEIL PATRICK	H04W4/80	455/41.1
*	F	US-8601266-B2	12-2013	Aabye; Christian	G06F21/445	713/168
*	G	US-20100211504-A1	08-2010	Aabye; Christian	G06Q20/10	705/44
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	Q					
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	S					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/728,349	Xie et al.
	Examiner	Art Unit
	ASHFORD S HAYLES	3687

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

CLAIMS

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original	09/21/2017	04/06/2018	09/11/2018	03/19/2019					
	1	✓	✓	✓	✓					
	2	✓	✓	✓	✓					
	3	✓	✓	✓	✓					
	4	✓	✓	✓	✓					
	5	✓	✓	✓	✓					
	6	✓	✓	✓	✓					
	7	✓	✓	✓	✓					
	8	✓	✓	✓	✓					
	9	✓	✓	✓	✓					
	10	✓	✓	✓	✓					
	11	✓	✓	✓	✓					
	12	✓	✓	✓	✓					
	13	✓	✓	✓	✓					
	14	✓	✓	✓	✓					
	15	✓	✓	✓	✓					
	16	✓	✓	✓	✓					
	17	✓	✓	✓	✓					
	18	✓	✓	✓	✓					
	19	✓	✓	✓	✓					
	20	✓	✓	✓	✓					

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14/728,349	Xie et al.
	Examiner	**Art Unit**
	ASHFORD S HAYLES	3687

CPC - Searched*		
Symbol	**Date**	**Examiner**

CPC Combination Sets - Searched*		
Symbol	**Date**	**Examiner**

US Classification - Searched*			
Class	**Subclass**	**Date**	**Examiner**
705	21	09/21/2017	ASH

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	**Date**	**Examiner**
EAST (SEE ATTACHMENTS)	09/21/2017	ASH
UPDATED EAST (SEE ATTACHMENTS)	04/06/2018	ASH
COMMON CITATION (http://ccd.fiveipoffices.org) (SEE ATTACHMENTS)	04/06/2018	ASH
UPDATED EAST (SEE ATTACHMENTS)	09/11/2018	ASH
UPDATED EAST (SEE ATTACHED)	03/19/2019	ASH

Interference Search			
US Class/CPC Symbol	**US Subclass/CPC Group**	**Date**	**Examiner**

/ASHFORD S HAYLES/ Primary Examiner, Art Unit 3687	

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	0	(13/215,111).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:14
L4	8	13/215111	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:14
L5	2	((13/215111) or (13/168072)).APP.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:47
L6	0	(12/343178).APP.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:51
L7	6	12/343,178	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 20:51
L12	2	"20110173060"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 21:48
L19	5	"20110112968"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 22:28
S1	758	(electronic near (purse or wallet)) and	US-PGPUB;	OR	ON	2014/04/13

		NFC	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			06:44
S2	138	S1 and emulat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S3	137	S2 and (app or application or applet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S4	86	S3 and PIN	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S5	43	S4 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/13 06:45
S6	3	(("20130124351") or ("20080011833") or ("20130132219")).PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2014/04/22 17:49
S7	156	(mobile or portable or wireless) near (POS) and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 16:54
S8	34	(mobile or portable or wireless) near (POS) with NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 16:54
S9	0	(smartcard) near (POS) with NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:00
S10	2	(smartcard) near (POS) and NFC	US-PGPUB; USPAT; USOCR;	OR	ON	2014/04/23 17:00

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S11	0	(smartcard) near ("transaction terminal") and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:05
S12	76	(smartcard) near NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:05
S13	40	S12 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:06
S14	98	("smart card" or "chip card" or EMV) near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:11
S15	38	(contactless) near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/23 17:17
S16	217	(contactless) near (POS or payment or transaction) and (electronic or digital) near (receipt or bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:18
S17	217	((contactless) near (POS or payment or transaction)) and (electronic or digital) near (receipt or bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:18
S18	165	S17 and (provision$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:18
S19	124	S18 and NFC	US-PGPUB;	OR	ON	2014/04/24

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			10:18
S20	58	S17 and (restaurant)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:30
S21	139	((contactless or NFC) near (POS or payment or transaction)) and (send$4 or transmit$4) near (receipt or bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:46
S22	59	S21 and (restaurant)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/24 10:46
S23	64	(wireless or mobile) near POS and (contactless near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 21:46
S24	4	POS near (contactless near (card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 22:10
S25	1838	POS near ((card))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 22:11
S26	100	S25 and (contactless near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/25 22:11
S27	16	(portable) near POS and ((nfc or contactless) near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/04/26 20:39

			IBM_TDB			
S28	17	folio and nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:33
S29	0	(restaurant near folio) and nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:37
S30	273	(restaurant or table) and (nfc near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:38
S31	165	S30 and provision$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:38
S32	55	S31 and emulat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:39
S33	32	proximity near mobile near payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:46
S34	403	(mobile near (transaction or payment)) and (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:58
S35	29	(mobile near (transaction or payment)) with (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 21:59
S36	0	(smartcard-smartcard) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2014/04/26 22:14

			EPO; JPO; DERWENT; IBM_TDB			
S37	9	(mobile near phone) with (smartcard)near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:14
S38	2	(mobile near phone) near (transaction or payment) and (smartcard)near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:27
S39	0	(mobile near phone) near (transaction or payment) and (smartcard)near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:28
S40	9	(mobile near phone) and (smartcard)near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:29
S41	67	(person-person) or (peer-peer) and (smartcard near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:35
S42	4	(smartcard or chipcard) and (POS near emulat$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:48
S43	9	(nfc) and (POS near emulat$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:49
S44	0	proximity near smartcard near payment	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/26 22:59
S45	3	"20130124351"	US-PGPUB; USPAT;	OR	ON	2014/04/29 06:04

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S46	54	(portable or mobile or slim or wireless) near (POS or "transaction terminal") and (nfc or emv or smartcard) near (reader)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:14
S47	67	(portable or mobile or slim or wireless) near (nfc or emv or smartcard) near (POS or "transaction terminal" or reader)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:17
S48	123	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (POS or "transaction terminal" or reader)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 06:25
S49	0	(portable or mobile or slim or wireless) near (rfid) near (POS or "transaction terminal")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 07:22
S50	99	(rfid) near (POS or "transaction terminal")	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:18
S51	598	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) and (mobile or wireless or cellular) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:19
S52	104	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (device or terminal) and (mobile or wireless or cellular) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:21
S53	11	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (device or terminal) and (digital or electronic) near (bill or invoice or check)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:28

S54	6	(portable or mobile or wireless) near (contactless) near (transaction or payment) near (device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:32
S55	0	S51 and (person-person or peer-peer) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:42
S56	5	(person-person or peer-peer) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:42
S57	0	("peer to peer") near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:42
S58	1128	(peer) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:43
S59	133	S58 and (nfc or emv or smartcard or contactless) near (device or terminal)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:43
S60	10	S59 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 09:49
S61	550	(portable or mobile or slim or wireless) near (nfc or emv or smartcard or contactless) near (device or terminal or scanner)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 10:05
S62	1	S61 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/04/29 10:05

			DERWENT; IBM_TDB			
S63	0	("2013/0221092").URPN.	USPAT	OR	ON	2014/04/29 11:16
S64	229	(mobile or cellular near phone) and (smartcard)near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:27
S65	180	((mobile or cellular) near phone) and (smartcard)near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:27
S66	1	S65 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:28
S67	46	S65 and emulat$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:29
S68	1776	(electronic near (transaction or payment) near card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:32
S69	397	S68 and (nfc or emv or smartcard or contactless)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:32
S70	49	S69 and (send$4 or transmit$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/04/29 11:32
S71	3	"20130024383"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 07:06

S72	3	"20130132219"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:14
S73	258	TSM with (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:32
S74	161	S73 and (nfc or emv or smartcard or chipcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:32
S75	14	S74 and SAM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:33
S76	147	S74 and "secure element"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 09:33
S77	2	"20130218766"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 11:58
S78	41	(TSM or "trusted service") and (transaction or payment) near sett$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 13:56
S79	3	13/245498	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 13:59
S80	531	provision$4 near (POS or merchant or vendor)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/05/02 14:07

			DERWENT; IBM_TDB			
S81	3	S80 and (TSM or "trusted service") and (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 14:08
S82	2	12/563444	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 18:16
S83	27	(TSM or "trusted service") and (transaction or payment) near settl$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 18:45
S84	5	(TSM or "trusted service") and (purchase) near settl$4	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 19:55
S85	88	(TSM or "trusted service") and (verif$4 or confirm$4) near (purchase or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 19:56
S86	34	S85 and "secure element"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/02 19:58
S87	393	(TSM or "trusted service") and (purchase or transaction) near (process$4 or settl$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:17
S88	152	S87 and (smartcard or chipcard or nfc)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:19
S89	131	S88 and (secure near element)	US-PGPUB; USPAT; USOCR;	OR	ON	2014/05/04 12:19

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S90	58	S89 and (electronic near (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:20
S91	19	S89 and (SAM)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 12:20
S92	2230	(electronic near (purse or wallet)) and (payment or transaction) near (settl$4 or process$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 14:42
S93	41	S92 and (TSM)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/04 14:43
S94	59	(mobile near nfc near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/10 17:20
S95	415	(smartcard or chipcard) and (mobile near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/11 15:04
S96	54	S95 and (secure near element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/11 15:05
S97	53	S96 and (provisioning or personal$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/11 15:24
S98	25	S96 and (provisioning or personaliz$3)	US-PGPUB;	OR	ON	2014/05/11

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:24
S99	78	(smartcard or chipcard) and (nfc near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 15:16
S100	42	S99 and (payment near process$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 15:16
S101	248	(nfc with (invoic$4 or bill$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:13
S102	78	S101 and (mobile near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:14
S103	25	(nfc with mobile near (invoic$4 or bill$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:49
S104	0	(secure near element) and (mobile near (billing or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:52
S105	549	(secure near element) and ((billing or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/13 22:52
S106	83	S105 and (mobile near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/05/13 22:53

				IBM_TDB			
S107	41	(smartcard or chipcard) and ((storing or saving) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:07
S108	0	(nfc near (transaction or payment)) and ((storing or saving) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:08
S109	175	(nfc near (transaction or payment)) and ((bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:08
S110	0	(secure adj element) and ((storing or saving) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:09
S111	107	(secure adj element) and ((transmit$4 or receiv$4) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:09
S112	2	S111 and (nfc near (transaction or payment)) and ((bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10
S113	2	S111 and (nfc near (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10
S114	106	(nfc near (transaction or payment)) and ((bill or invoice) near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:10
S115	15	S114 and TSM	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2014/05/14 23:10

			EPO; JPO; DERWENT; IBM_TDB			
S116	589	(smartcard or chipcard or emv) and ((bill or invoice) near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S117	0	S116 and TSM	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S118	246	S116 and trusted	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S119	27	S116 and trusted near service	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:12
S120	55	(smartcard or chipcard or emv) with ((bill or invoice) near (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/14 23:14
S121	15	"security authentication module" and (electronic or virtual) near (purse or wallet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/15 14:36
S122	10	"security authentication module" and (mobile near (purchase or payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/05/15 14:47
S123	66	(personal$4) near (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/02 14:59
S124	21	S123 and (identif$4 near issuer)	US-PGPUB; USPAT;	OR	ON	2014/10/02 15:00

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S125	2	"20120290376"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/02 16:15
S126	1	((identif$4 or match$4 or locat$4) near issuer) same ((match$4 or compar$4) near (device or element) near (ID or identif$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:16
S127	0	((identif$4 or match$4 or locat$4) near issuer) same ((match$4 or compar$4) near (secure adj element) near (ID or identif$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:17
S128	4	((identif$4 or match$4 or locat$4) near issuer) same ((secure adj element) near (ID or identif$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:18
S129	1	(mobile-mobile) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:40
S130	30	(mobile adj mobile) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:40
S131	1	S130 and (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/03 14:41
S132	1102	(smartcard or chipcard) and (fund adj transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55

S133	1	S132 and (personal$4 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S134	97	S132 and (personal$6near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S135	1	S132 and (personal$6 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:55
S136	11	(Fund adj transfer) and (personal$6 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:56
S137	137	("20010011250" | "20010021927" | "20010027441" | "20010039657" | "20020004783" | "20020042776" | "20020068554" | "20020194138" | "20030023954" | "20030074579" | "20030140176" | "20040029569" | "20040030601" | "20040123152" | "20040128259" | "20040140351" | "20050001711" | "20050071418" | "20050091659" | "20050102679" | "20050149926" | "20050184163" | "20050184164" | "20050184165" | "20050188360" | "20050193218" | "20050222961" | "20060036570" | "20060041507" | "20060126831" | "20060165060" | "20060219774" | "20070067325" | "20070090195" | "20070135164" | "20070169043" | "20070226786" | "20080056501" | "20080073426" | "20080130902" | "20080162834" | "20080167988" | "20080208681" | "20080208762" | "20080270253" | "20090158028" | "20090239512" | "20090261172" | "20090307142" | "20090312011" | "20100012732" | "20100042824" | "20100050271" | "20100058463" | "20100063893" | "20100088237" | "20100114731" | "20100131413" | "20100138518" | "20100203870" | "20100205432" | "20100207742" | "20100211507" | "20100250956" | "20100291896" | "20100291904" | "20100306076" | "20100306107" | "20100306531" | "20100323681" |	US-PGPUB; USPAT; USOCR	OR	ON	2014/10/09 15:57

		"20100330958" | "20110016275" | "20110029671" | "20110072425" | "20110078081" | "20110087610" | "20110113473" | "20110131421" | "20120009873" | "20120129452" | "4851653" | "5221838" | "5991399" | "6005942" | "6092201" | "6101477" | "6141752" | "6151657" | "6230267" | "6233683" | "6402028" | "6434238" | "6484174" | "6601761" | "6609113" | "6633984" | "6647260" | "6792536").PN. OR ("6823520" | "6907608" | "6922835" | "6963270" | "7093122" | "7140549" | "7152782" | "7159180" | "7165727" | "7191288" | "7206769" | "7232073" | "7243853" | "7275685" | "7346170" | "7349885" | "7353396" | "7360691" | "7374099" | "7382762" | "7395535" | "7469151" | "7478389" | "7502946" | "7607175" | "7631346" | "7631810" | "7708198" | "7712658" | "7739731" | "7860486" | "7967215" | "8120460" | "8126806" | "8150767" | "8171137").PN. OR ("8429409").URPN.				
S138	0	contactless near (Fund adj transfer) and ((secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:59
S139	0	contactless near (Fund adj transfer$4) and ((secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 15:59
S140	11	(Fund adj transfer$4) and (personal$6 near (secure adj element))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:00
S141	9	S132 and (updat$4 or modify$4 or edit$4 or chang$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:02
S142	8	(contactless near (transaction or payment)) and (updat$4 or modify$4 or edit$4 or chang$4) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:03
S143	580	(contactless near (transaction or payment)) and (fund$1 near	US-PGPUB; USPAT;	OR	ON	2014/10/09 16:04

		transfer$4)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S144	9	mobile adj (contactless near (transaction or payment)) and (fund$1 near transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:04
S145	5	(contactless) near (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:06
S146	1	(contactless near (transaction or payment)) and (virtual near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:08
S147	0	(contactless near (transaction or payment)) and (digital near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:09
S148	0	(EMV near (transaction or payment)) and (digital near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:12
S149	1	(EMV near (transaction or payment)) and ((digital or electronic or mobile or wireless)near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:13
S150	41	(EMV near (transaction or payment)) and ((bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:13
S151	56	((EMV or chipcard or smartcard) near (transaction or payment)) and ((digital or electronic or mobile or wireless)near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:13

S152	64	((contactless) near (transaction or payment)) and ((digital or electronic or mobile or wireless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:17
S153	62	((contactless) near (transaction or payment)) and ((digital or electronic or paperless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:53
S154	6410	((digital or electronic or paperless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 16:54
S155	2	"20130151400"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:03
S156	0	((mobile or wireless or cellular) adj (contactless) near (purchase or transaction or payment)) and ((digital or electronic or mobile or wireless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S157	73	((mobile or wireless or cellular) adj (contactless) near (purchase or transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S158	0	S157 and ((digital or electronic or mobile or wireless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S159	0	S157 and ((digital or electronic or paperless) near (bill or invoice))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/10/09 17:05
S181	215	(contactless or NFC or wireless or proximity) adj (billing or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2017/09/18 15:36

			DERWENT; IBM_TDB			
S182	8	S181 and (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 15:39
S183	52	(contactless or NFC or wireless or proximity) adj (payment or transaction or purchase) and (electronic adj (invoic$4 or billing))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 15:41
S184	886	(contactless or NFC or wireless or proximity) adj (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 18:00
S185	32	S184 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:01
S186	648	POS adj card	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:29
S187	7	S186 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:29
S188	1	cashless adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:31
S189	2	cashless near POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:32
S190	283	cashless same POS	US-PGPUB; USPAT; USOCR;	OR	ON	2017/09/18 18:32

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S191	2	S190 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 18:35
S192	17804	(SIM) same (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:12
S193	564	(SIM adj card) same (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:12
S194	9	(SIM adj card) near (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:12
S195	11	("20010056398" | "20020097715" | "20020120537" | "20030060246" | "20070295803" | "20100030634" | "20100161478" | "6598028" | "7540408" | "7603312" | "8281991").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/09/18 20:15
S196	2	(card-to-card) near payment	US-PGPUB; USPAT; USOCR	OR	OFF	2017/09/18 20:17
S197	48	POS and generat$4 near (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:18
S198	3936	(mobile or m) adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:49
S199	4	S198 and generat$4 near (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2017/09/18 20:49

			IBM_TDB			
S200	16	S198 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:49
S201	114	S198 and (contactless or NFC or wireless or proximity) adj (payment or transaction or purchase)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 20:54
S202	109	S198 and (SIM adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:55
S203	114	S198 and ((nfc or contactless or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:55
S204	8	S203 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:56
S205	234	merchant adj wallet	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:58
S206	51	merchant adj (mobile adj wallet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 20:58
S207	222	((mobile or m) adj POS) and ((contactless or smart or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:05
S208	69	((mobile or m) adj POS) same ((contactless or smart or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS;	OR	ON	2017/09/18 21:05

			EPO; JPO; DERWENT; IBM_TDB			
S209	1545	((payment or transaction) adj terminal) same ((contactless or smart or chip) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:16
S210	0	S209 and generat$4 near (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:16
S211	21	S209 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:16
S212	91	((peer-to-peer) adj (payment or transaction)) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 21:20
S213	58	S212 and (electronic or digital) near (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/18 21:21
S214	0	((peer-to-peer) adj (POS)) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 21:22
S215	1	((peer-to-peer) adj (POS))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/18 21:22
S216	4	("20070233554" | "20100227553" | "20120092137" | "8229354").PN.	US-PGPUB; USPAT; USOCR	OR	OFF	2017/09/18 21:23
S217	1	(POS near emulat$4) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/09/18 21:24

			IBM_TDB			
S218	56	(POS near application) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:08
S219	11745	POS and SOC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:09
S220	2680	POS and (system near chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:10
S221	366	POS and (system-on-chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:10
S222	12	POS same (system-on-chip)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:10
S223	47	((touch or tap) adj (payment or transaction)) and (contactless or NFC or wireless or proximity) adj (card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:13
S224	8566	(contactless or NFC or wireless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:21
S225	174	S224 and (electronic or digital) adj (bill$4 or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 09:22
S227	11	S224 and (e-bill)	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2017/09/19 09:23

			EPO; JPO; DERWENT; IBM_TDB			
S228	8566	(contactless or NFC or wireless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:15
S229	5	S228 and (electronic or digital) adj (statement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:15
S230	887	(contactless or NFC or wireless or proximity) adj (POS)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:17
S231	31	S230 and (electronic or digital) adj (bill$4 or invoic$4 or statement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:18
S232	3518	(POS) and ((digital or electronic or e) adj (wallet or purse))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:23
S233	282	S232 and (electronic or digital) adj (bill$4 or invoic$4 or statement)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:23
S234	92	S233 and (contactless or NFC or wireless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:23
S235	25	(POS) near ((digital or electronic or e) adj (wallet or purse))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 12:25
S236	189	(merchant) near ((digital or electronic or e) adj (wallet or purse))	US-PGPUB; USPAT;	OR	OFF	2017/09/19 12:53

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S237	4	"20070131780"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/19 16:42
S238	15	("2007/0131780").URPN.	USPAT	OR	OFF	2017/09/19 16:43
S239	184	(nfc or emv or smartcard or contactless or proxmity or chip) near (payment or purchase or transaction) and ((electronic or e or digital) adj (bill$4 or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/19 17:33
S240	59	(nfc or emv or smartcard or contactless or proxmity or chip) near (payment or purchase or transaction) same ((electronic or e or digital) adj (bill$4 or invoic$4))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/19 17:34
S241	4	("2003023080").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 18:17
S242	2	("20040127256").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 18:20
S243	1	(mobile or portable) adj POS and ((contactless or nfc or proximity) adj (adapter))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/19 18:21
S244	294	("2004/0127256").URPN.	USPAT	OR	OFF	2017/09/19 18:22
S245	0	(10/625823).APP.	USPAT; USOCR	OR	OFF	2017/09/19 18:25
S246	95	POS near (purse or wallet)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 07:00

S247	2	"20120290472"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 08:39
S248	1145	POS same (contactless or proximity or RFID) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:05
S249	44	S248 and (fund adj transfer$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:23
S250	76	S248 and ((merchant or vendor) near (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:26
S251	67	S248 and ((merchant or vendor) adj (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 11:26
S252	256	virtual adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:06
S253	14	S252 and (contactless or proximity or RFID) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:06
S254	7	S252 and (emv) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 12:37
S255	3	emv adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2017/09/25 12:38

			DERWENT; IBM_TDB			
S256	0	"201000274677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 13:04
S257	3	"20100274677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 13:04
S258	203	(contactless or proximity or RFID) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S259	0	(NFC) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S260	7	S258 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S261	16	(NFC) near (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:08
S262	0	(smartcard) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:10
S263	0	S258 and (transaction or payment) adj terminal	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 17:12
S264	6563	((customer or client) adj side) and ((payment or transaction) adj process$4)	US-PGPUB; USPAT; USOCR;	OR	OFF	2017/09/25 21:07

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S265	87	S264 and (electronic near (purse or wallet)) and NFC	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:07
S266	34	(merchant-to-person)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:17
S267	3	(person-to-merchant) and (contactless or proximity or RFID) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:19
S268	0	(person-to-merchant) and (nfc) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:19
S269	23	(person-to-merchant) and (nfc)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:19
S270	618	(contactless or proximity or RFID) adj (payment or transaction) same (wallet or purse)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:22
S271	1	S270 and (security adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:22
S272	243	S270 and (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:22
S273	4	S272 and (electronic or digital or e) adj	US-PGPUB;	OR	OFF	2017/09/25

		(invoic$4 or bill$4)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			21:23
S274	0	S272 and (wireless or paperless or nfc) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:24
S275	5	(contactless or proximity or RFID or nfc) adj (payment or transaction) and (wireless or paperless or nfc) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:24
S276	78	(contactless or proximity or RFID or nfc) adj (payment or transaction) near request	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:25
S277	11	(person-to-merchant) and ((smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S278	12	(person-to-merchant) and ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S279	930	(person-to-person) and ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S280	443	S279 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:27
S281	121	S280 and (transmit$4 or send$4) adj (payment or transaction) near request	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2017/09/25 21:28

S282	15	(person-to-person) same ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:28
S283	82	S281 and (electronic near (purse or wallet))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:28
S284	41	S281 and mobile adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:28
S285	72	business-to-consumer and mobile adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:32
S286	12	S285 and ((contactless or smart or chip or RFID or IC) adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 21:32
S287	5	card-to-card and (nfc or contactless or RFID or proximity or wireless) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:34
S288	7	card-to-card and (nfc or contactless or RFID or proximity or wireless) near (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 21:34
S289	203	(contactless or proximity or RFID or nfc) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 22:06
S290	0	(card-to-card) adj (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2017/09/25 22:06

			EPO; JPO; DERWENT; IBM_TDB			
S291	45	(card-to-card) same (invoic$4 or bill$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/09/25 22:06
S292	0	S289 and mobile adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/09/25 22:09
S293	148	(client-side) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S294	1	S293 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S295	0	S293 and (nfc adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S296	212	(client adj side) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:35
S297	6	S296 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:36
S298	2	S296 and (nfc adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:36
S299	358	(closed-loop adj (payment or transaction))	US-PGPUB; USPAT;	OR	OFF	2017/10/04 23:37

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S300	1	S299 and (nfc adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:37
S301	0	S300 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/04 23:37
S302	6	"20100114773"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 08:56
S303	459	(proximity or contactless or smartcard) adj POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 10:06
S304	91	S303 and (mobile adj (payment or transaction))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 10:07
S305	535	(mobile or virtual) adj (wallet or purse) near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:54
S306	339	S305 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:55
S307	179	S306 and (secure adj element)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:57

S308	83	S307 and (smart adj card)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 12:57
S309	4	"20140187153"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 13:12
S310	271	(smartcard) and (electronic or digital) adj (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:37
S311	53	(smartcard) with (electronic or digital) adj (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:38
S312	182	S310 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:38
S313	51	S311 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:39
S314	1265	(electronic or digital) adj (bill or invoice) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:40
S315	1267	(electronic or digital or virtual) adj (bill or invoice) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:40
S316	99209	nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	OFF	2017/10/05 20:41

			DERWENT; IBM_TDB			
S317	66	S315 and nfc	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 20:41
S318	90	S315 and (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/05 21:04
S319	1372	(electronic or virtual or digital) adj (bill or invoice) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:06
S320	50	S319 and (wireless or contactless or nfc or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:12
S321	376	(electronic or virtual or digital) adj (check) and (nfc or wireless or contactless or proximity) adj (transaction or payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S322	376	(electronic or virtual or digital) adj (check) and ((nfc or wireless or contactless or proximity) adj (transaction or payment))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S323	207	S322 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S324	79	S323 and (smartcard)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2017/10/06 06:16
S325	6	"20140143104"	US-PGPUB; USPAT; USOCR;	OR	ON	2017/10/09 07:10

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
S326	3	"20100274677"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 08:38
S327	4	(("20090170559") or ("20120191612")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:46
S328	0	5748737/pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:48
S329	4	"5748737".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:48
S330	13595	(electronic or digital or virtual) adj (wallet or purse)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:49
S331	1082	S330 and (nfc or contactless or proximity) adj (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:49
S332	732	S331 and POS	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:50
S333	87	S332 and (electronic or digital or virtual) adj (bill or invoic$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/09 11:50
S334	25	(electronic or digital or virtual) adj (bill	US-PGPUB;	OR	OFF	2017/10/09

		or invoic$4) adj (payment) and (nfc or contactless or proximity) adj (payment or transaction)	USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			11:54
S335	0	(nfc or contactless or proximity) adj (bill or invoic$4) adj (payment)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/10 06:09
S336	139452	restaurant brands.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/10 13:01
S337	0	restaurantbrands.as.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2017/10/10 13:01
S338	7	"20140006205"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 08:50
S339	6	"20130138517"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 08:52
S340	18375	(electronic or digital) near (bill$4 or invoic$4 or check)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:19
S341	5793	POS near (payment or transaction)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:20
S342	533	S340 and S341	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2018/04/06 09:20

			IBM_TDB			
S343	405	S342 and 705/$	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:20
S344	5	"20110066550"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/04/06 09:39
S345	6	(("20070253187") or ("20090309748") or ("20120323676")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:37
S346	17	nfc near (invoice or bill)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:40
S347	3	"20080167017"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:43
S348	4	"20120078701"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:45
S349	98	(bar or QR or 2D) adj (invoice or bill)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 14:49
S350	61	("2013/0339253").URPN.	USPAT	OR	OFF	2018/09/11 14:55
S351	8	(("7152230") or ("6367011") or ("20130159710")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/11 17:34
S352	0	(13/594914).APP.	USPAT;	OR	OFF	2018/09/12

			USOCR			05:53
S353	0	"20120290472"	USPAT; USOCR	OR	OFF	2018/09/12 11:36
S354	2	"20120290472"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2018/09/12 11:36
S355	119582	(rfid or NFC) adj tag	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/02/28 08:54
S356	963	S355 same (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/02/28 08:54
S357	138	(rfid or NFC) adj (bill or invoice)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/02/28 08:55
S358	9	(("20090248579") or ("20110258120") or ("20130138518") or ("20120253974")).PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2019/03/19 17:16

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S160	1647	705/21	USPAT	OR	ON	2015/03/26 16:56
S161	75	S160 and (electronic or digital) near (invoice or check)	USPAT	OR	ON	2015/03/26 16:57
S162	25	S161 and (smart or IC or RFID or EMV) adj card	USPAT	OR	ON	2015/03/26 16:57
S163	0	S162 and TSM	USPAT	OR	ON	2015/03/26 16:58
S164	16	S162 and S161 and provision$4	USPAT	OR	ON	2015/03/26 16:58
S165	16	S162 and provision$4	USPAT	OR	ON	2015/03/26 16:58
S166	0	S165 and TSM	USPAT	OR	ON	2015/03/26 16:58
S167	483	705/14.23	USPAT	OR	ON	2015/03/26

							16:58
S168	10	S167 and (electronic or digital) near (invoice or check)	USPAT	OR		ON	2015/03/26 16:58
S169	0	S168 and TSM	USPAT	OR		ON	2015/03/26 16:58
S170	3229	705/41	USPAT	OR		ON	2015/03/26 16:58
S171	259	S170 and (electronic or digital) near (invoice or check)	USPAT	OR		ON	2015/03/26 16:59
S172	114	S171 and (smart or IC or RFID or EMV) adj card	USPAT	OR		ON	2015/03/26 16:59
S173	75	S172 and provision$4	USPAT	OR		ON	2015/03/26 16:59
S174	0	S173 and TSM	USPAT	OR		ON	2015/03/26 16:59
S175	0	S173 and (trusted near service near manag$5)	USPAT	OR		ON	2015/03/26 17:00
S176	0	S171 and (trusted near service near manag$5)	USPAT	OR		ON	2015/03/26 17:00
S177	8994	705/39	USPAT	OR		ON	2015/03/26 17:00
S178	743	S177 and (electronic or digital) near (invoice or check)	USPAT	OR		ON	2015/03/26 17:00
S179	206	S178 and (smart or IC or RFID or EMV) adj card	USPAT	OR		ON	2015/03/26 17:00
S180	1	S179 and (trusted near service near manag$5)	USPAT	OR		ON	2015/03/26 17:00

3/19/2019 10:44:23 PM
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