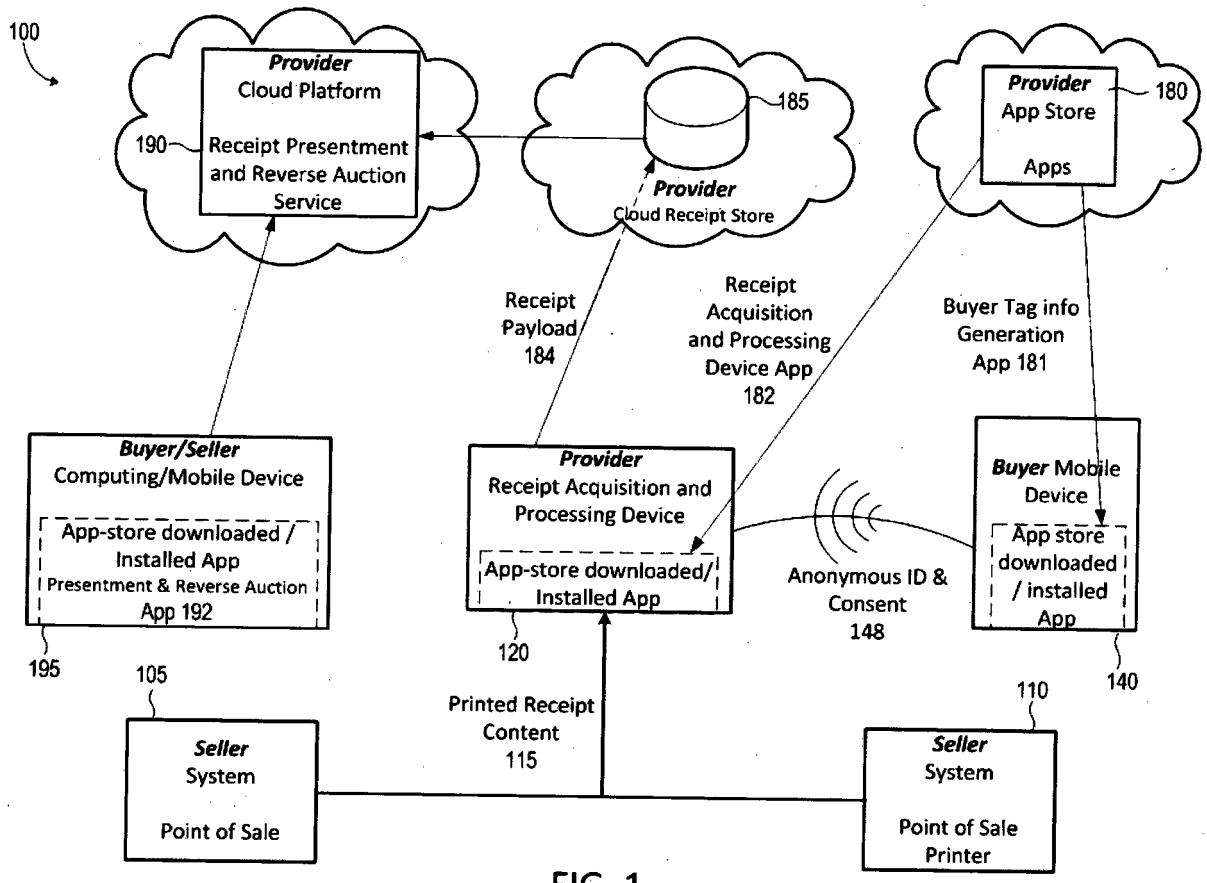

100
Provider
Cloud Platform
190
Receipt Presentment and Reverse Auction Service
185
Provider
Cloud Receipt Store
Provider
App Store
180
Apps
Receipt Payload 184
Receipt Acquisition and Processing Device App 182
Buyer Tag info Generation App 181
Buyer/Seller
Computing/Mobile Device
App-store downloaded / Installed App
Presentment & Reverse Auction App 192
195
Provider
Receipt Acquisition and Processing Device
App-store downloaded/ Installed App
120
Anonymous ID & Consent 148
Buyer Mobile Device
App store downloaded / installed App
140
105
Seller
System
Point of Sale
Printed Receipt Content 115
110
Seller
System
Point of Sale Printer

FIG. 1

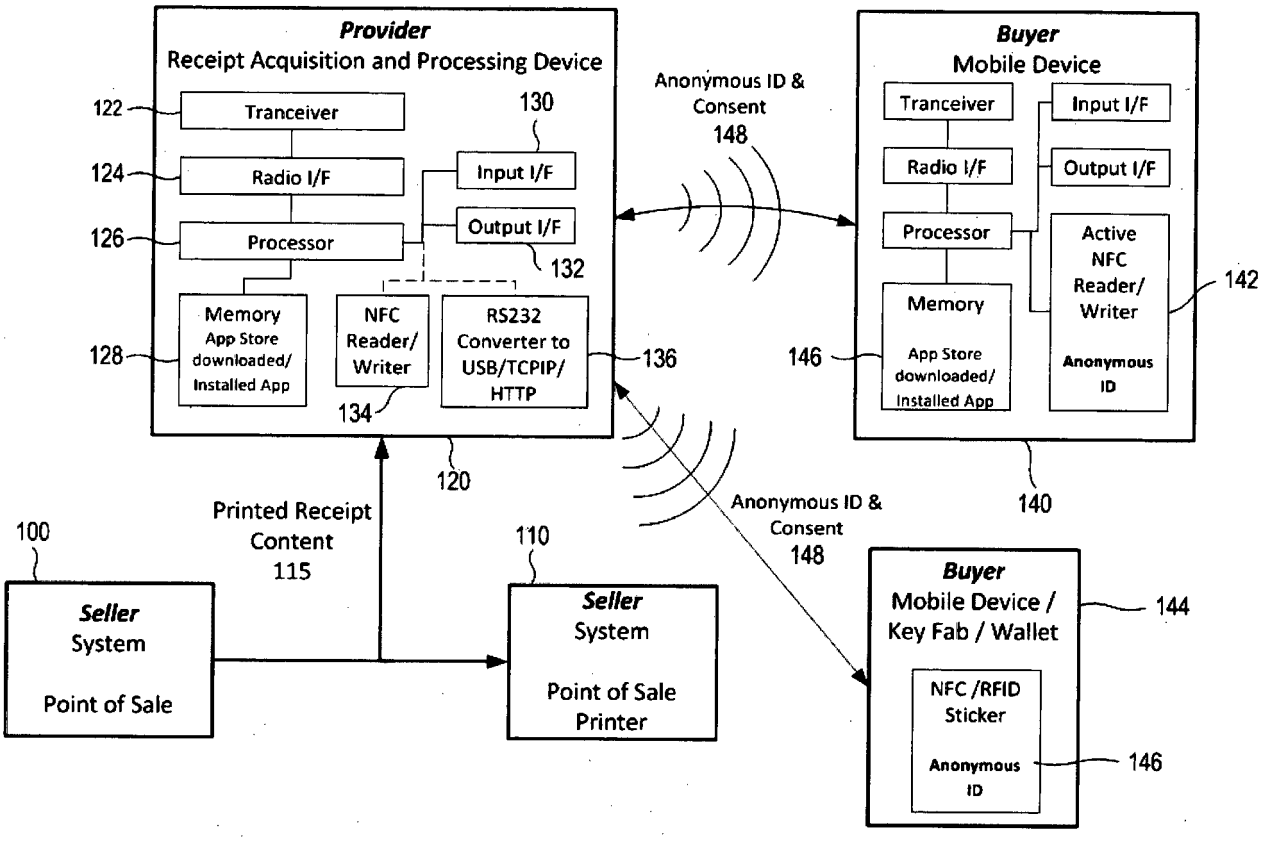

Provider
Receipt Acquisition and Processing Device
122
Tranceiver
124
Radio I/F
126
Processor
128
Memory
App Store downloaded/ Installed App
NFC Reader/ Writer
134
RS232 Converter to USB/TCPIP/ HTTP
130
Input I/F
Output I/F
132
136
120
Anonymous ID & Consent
148
Buyer
Mobile Device
Tranceiver
Radio I/F
Processor
Memory
App Store downloaded/ Installed App
146
Input I/F
Output I/F
Active NFC Reader/ Writer
Anonymous ID
142
140
Anonymous ID & Consent
148
Printed Receipt Content
115
100
Seller
System
Point of Sale
110
Seller
System
Point of Sale Printer
Buyer
Mobile Device / Key Fab / Wallet
144
NFC /RFID Sticker
Anonymous ID
146

FIG. 2

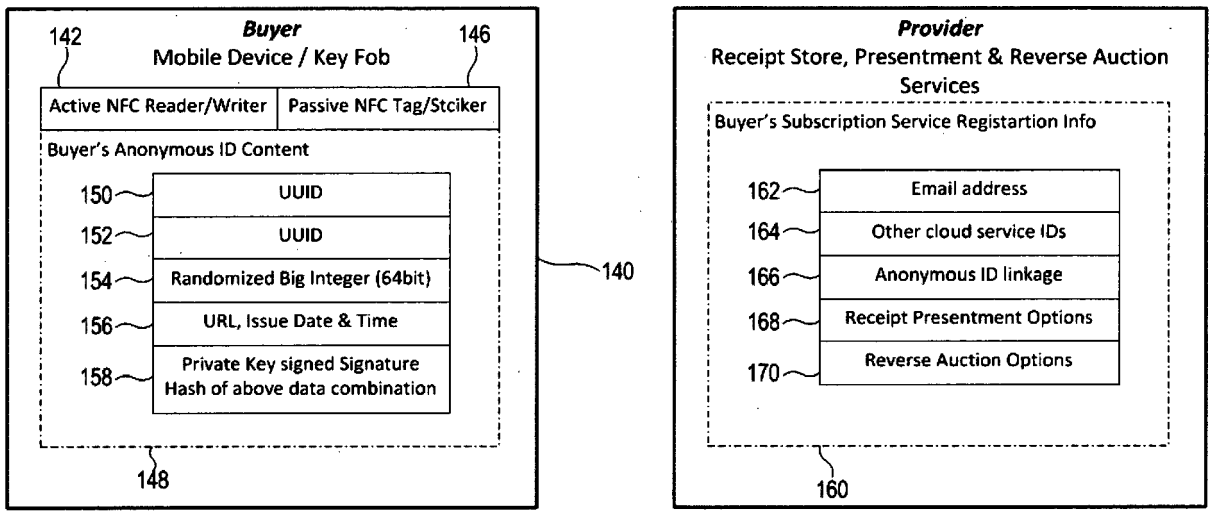

Buyer
Mobile Device / Key Fob
142
146
Active NFC Reader/Writer
Passive NFC Tag/Stciker
Buyer's Anonymous ID Content
150
UUID
152
UUID
154
Randomized Big Integer (64bit)
156
URL, Issue Date & Time
158
Private Key signed Signature
Hash of above data combination
148
140
Provider
Receipt Store, Presentment & Reverse Auction Services
Buyer's Subscription Service Registartion Info
162
Email address
164
Other cloud service IDs
166
Anonymous ID linkage
168
Receipt Presentment Options
170
Reverse Auction Options
160

FIG. 3

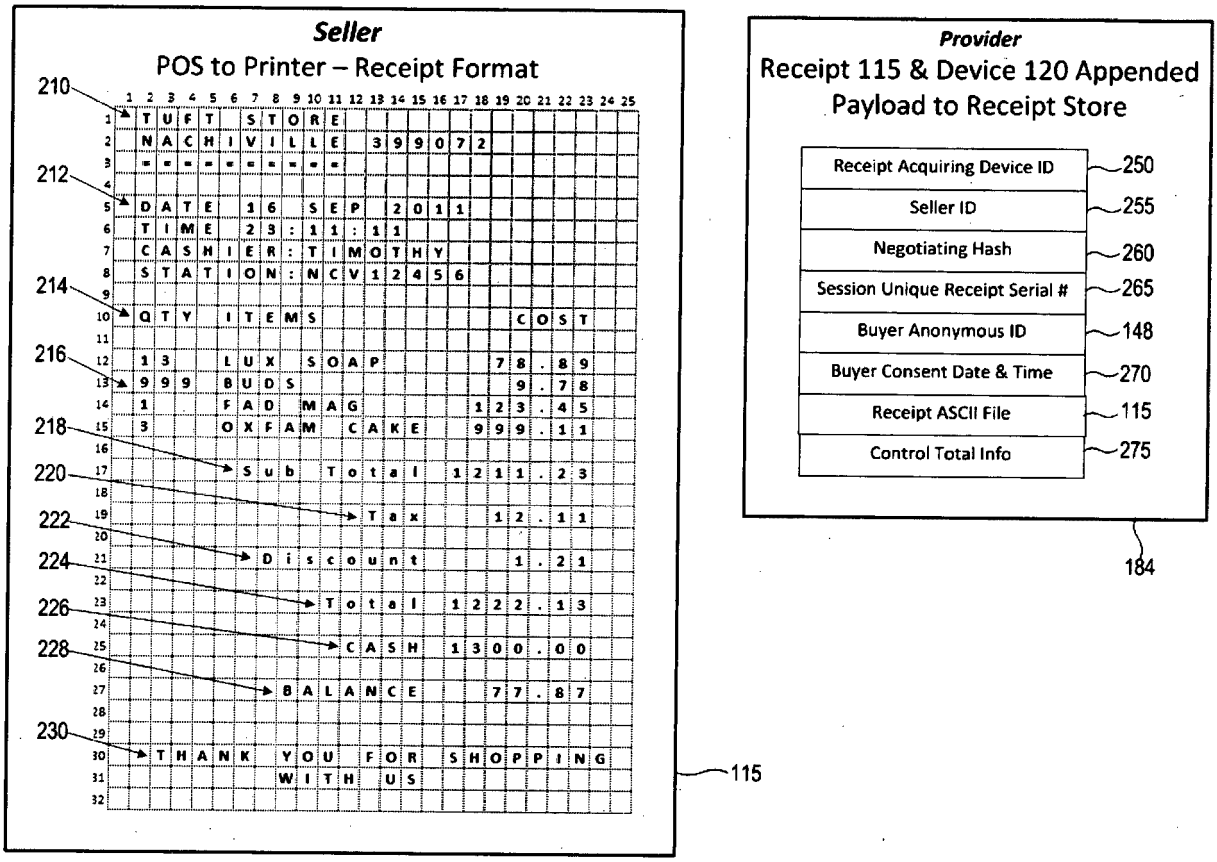

Seller
POS to Printer – Receipt Format
210
212
214
216
218
220
222
224
226
228
230
TUFT STORE
NACHIVILLE 399072
DATE 16 SEP 2011
TIME 23:11:11
CASHIER: TIMOTHY
STATION: NCV12456
QTY ITEMS COST
13 LUX SOAP 78.89
999 BUDS 9.78
1 FAD MAG 123.45
3 OXFAM CAKE 999.11
Sub Total 12111.23
Tax 12.11
Discount 1.21
Total 12222.13
CASH 1300.00
BALANCE 77.87
THANK YOU FOR SHOPPING
WITH US
115
Provider
Receipt 115 & Device 120 Appended Payload to Receipt Store
Receipt Acquiring Device ID 250
Seller ID 255
Negotiating Hash 260
Session Unique Receipt Serial # 265
Buyer Anonymous ID 148
Buyer Consent Date & Time 270
Receipt ASCII File 115
Control Total Info 275
184

FIG. 4

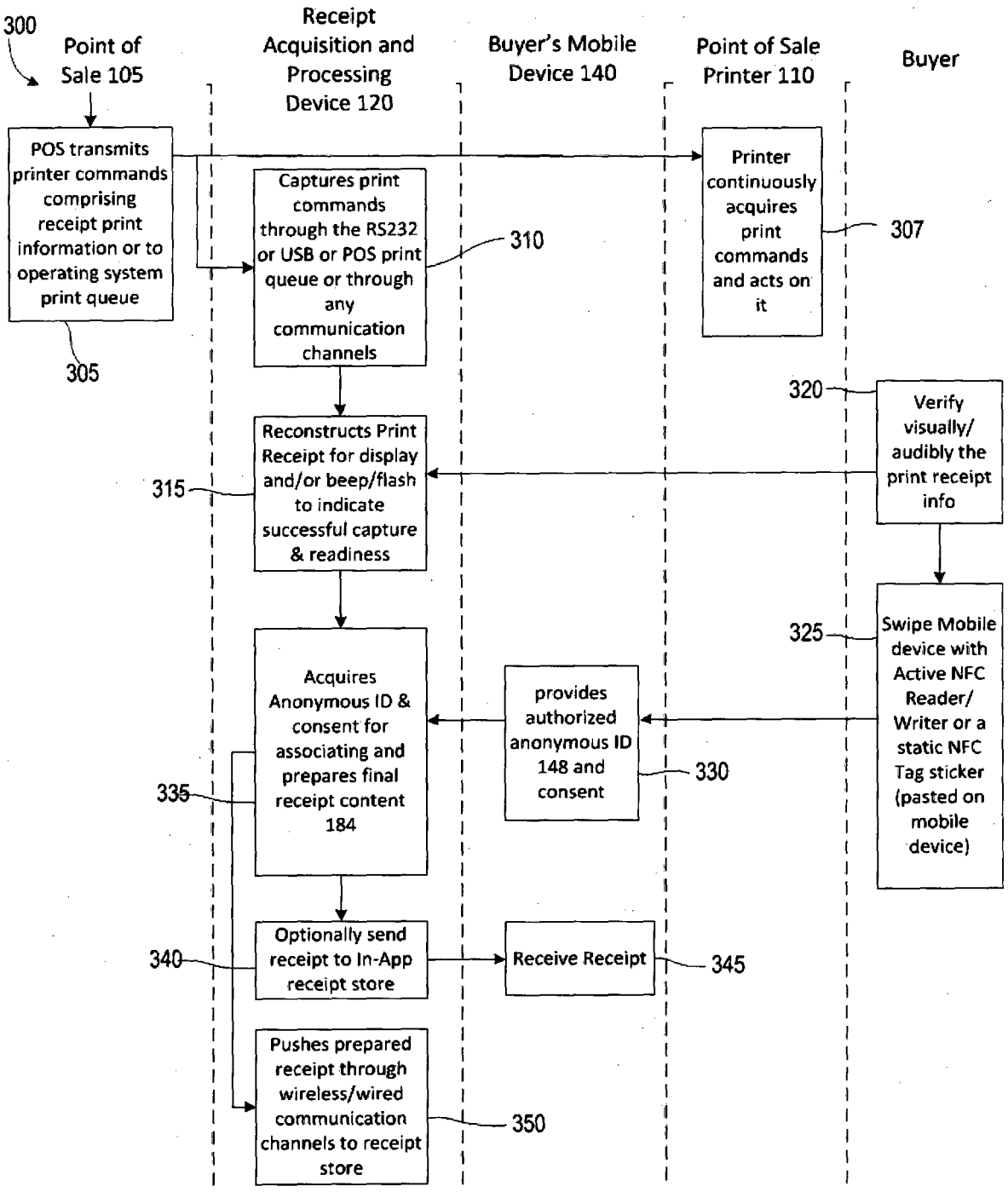

300
Point of Sale 105
Receipt Acquisition and Processing Device 120
Buyer's Mobile Device 140
Point of Sale Printer 110
Buyer
POS transmits printer commands comprising receipt print information or to operating system print queue
305
Captures print commands through the RS232 or USB or POS print queue or through any communication channels
310
Printer continuously acquires print commands and acts on it
307
320
Verify visually/ audibly the print receipt info
Reconstructs Print Receipt for display and/or beep/flash to indicate successful capture & readiness
315
325
Swipe Mobile device with Active NFC Reader/ Writer or a static NFC Tag sticker (pasted on mobile device)
Acquires Anonymous ID & consent for associating and prepares final receipt content 184
provides authorized anonymous ID 148 and consent
330
335
Optionally send receipt to In-App receipt store
340
Receive Receipt
345
Pushes prepared receipt through wireless/wired communication channels to receipt store
350

FIG. 5

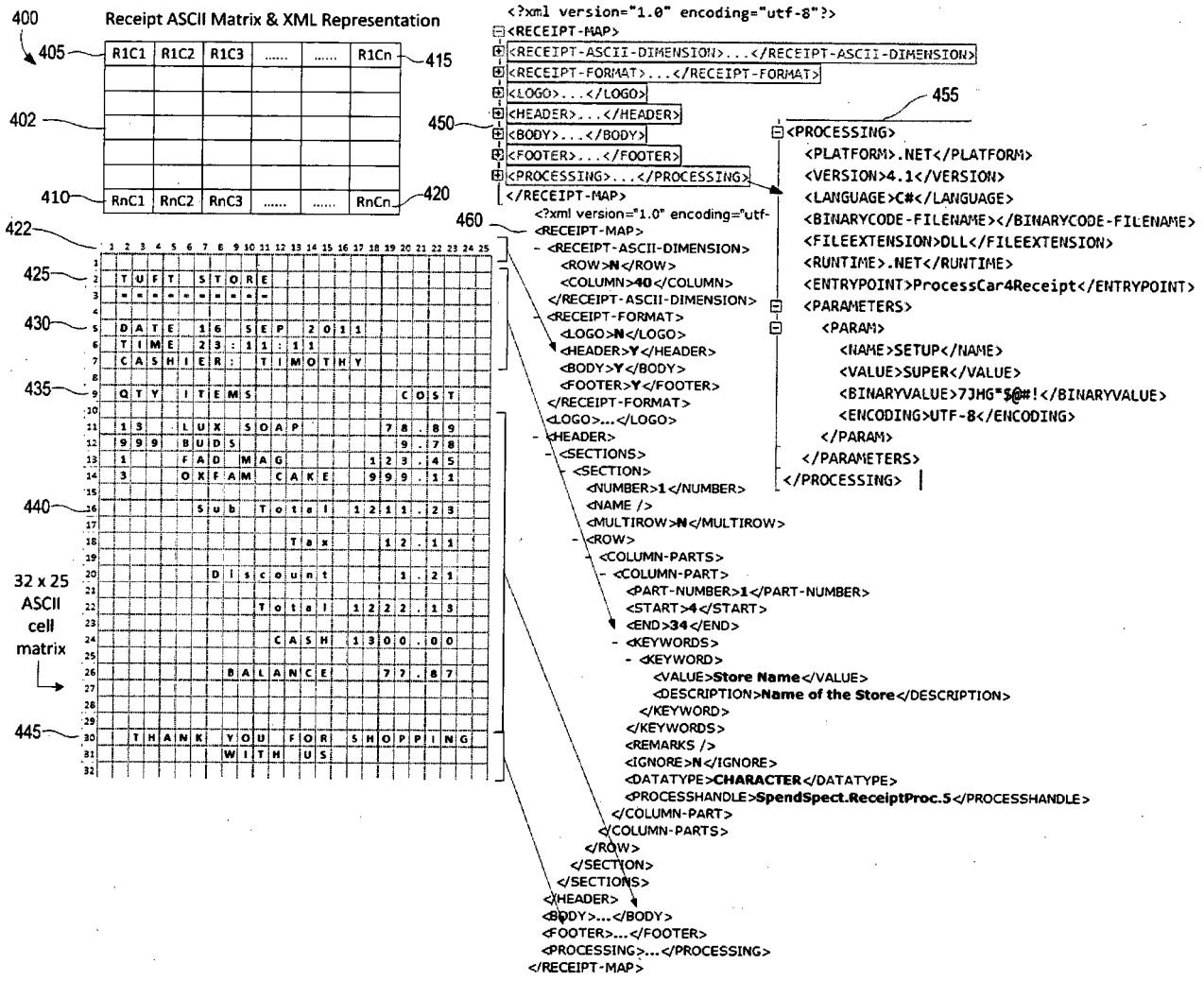

400
Receipt ASCII Matrix & XML Representation
405
R1C1 R1C2 R1C3 .... R1Cn
415
402
450
410
RnC1 RnC2 RnC3 .... RnCn
420
422
425
430
435
440
445
32 x 25 ASCII cell matrix
460
455
<?xml version="1.0" encoding="utf-8"?>
<RECEIPT-MAP>
<RECEIPT-ASCII-DIMENSION>...</RECEIPT-ASCII-DIMENSION>
<RECEIPT-FORMAT>...</RECEIPT-FORMAT>
<LOGO>...</LOGO>
<HEADER>...</HEADER>
<BODY>...</BODY>
<FOOTER>...</FOOTER>
<PROCESSING>...</PROCESSING>
</RECEIPT-MAP>
<PROCESSING>
<PLATFORM>.NET</PLATFORM>
<VERSION>4.1</VERSION>
<LANGUAGE>C#</LANGUAGE>
<BINARYCODE-FILENAME></BINARYCODE-FILENAME>
<FILEEXTENSION>DLL</FILEEXTENSION>
<RUNTIME>.NET</RUNTIME>
<ENTRYPOINT>ProcessCar4Receipt</ENTRYPOINT>
<PARAMETERS>
<PARAM>
<NAME>SETUP</NAME>
<VALUE>SUPER</VALUE>
<BINARYVALUE>7JHG*$@#!</BINARYVALUE>
<ENCODING>UTF-8</ENCODING>
</PARAM>
</PARAMETERS>
</PROCESSING>
<?xml version="1.0" encoding="utf-
<RECEIPT-MAP>
<RECEIPT-ASCII-DIMENSION>
<ROW>N</ROW>
<COLUMN>40</COLUMN>
</RECEIPT-ASCII-DIMENSION>
<RECEIPT-FORMAT>
<LOGO>N</LOGO>
<HEADER>Y</HEADER>
<BODY>Y</BODY>
<FOOTER>Y</FOOTER>
</RECEIPT-FORMAT>
<LOGO>...</LOGO>
<HEADER>
<SECTIONS>
<SECTION>
<NUMBER>1</NUMBER>
<NAME />
<MULTIROW>N</MULTIROW>
<ROW>
<COLUMN-PARTS>
<COLUMN-PART>
<PART-NUMBER>1</PART-NUMBER>
<START>4</START>
<END>34</END>
<KEYWORDS>
<KEYWORD>
<VALUE>Store Name</VALUE>
<DESCRIPTION>Name of the Store</DESCRIPTION>
</KEYWORD>
</KEYWORDS>
<REMARKS />
<IGNORE>N</IGNORE>
<DATATYPE>CHARACTER</DATATYPE>
<PROCESSHANDLE>SpendSpect.ReceiptProc.5</PROCESSHANDLE>
</COLUMN-PART>
</COLUMN-PARTS>
</ROW>
</SECTION>
</SECTIONS>
</HEADER>
<BODY>...</BODY>
<FOOTER>...</FOOTER>
<PROCESSING>...</PROCESSING>
</RECEIPT-MAP>
TUFT STORE
DATE 16 SEP 2011
TIME 23:11:11
CASHIER: TIMOTHY
QTY ITEMS COST
13 LUX SOAP 78.89
999 BUDS 9.78
1 FAD MAG 123.45
3 OXFAM CAKE 999.11
Sub Total 1211.23
Tax 12.11
Discount 1.21
Total 1222.13
CASH 1300.00
BALANCE 77.87
THANK YOU FOR SHOPPING
WITH US

FIG. 6

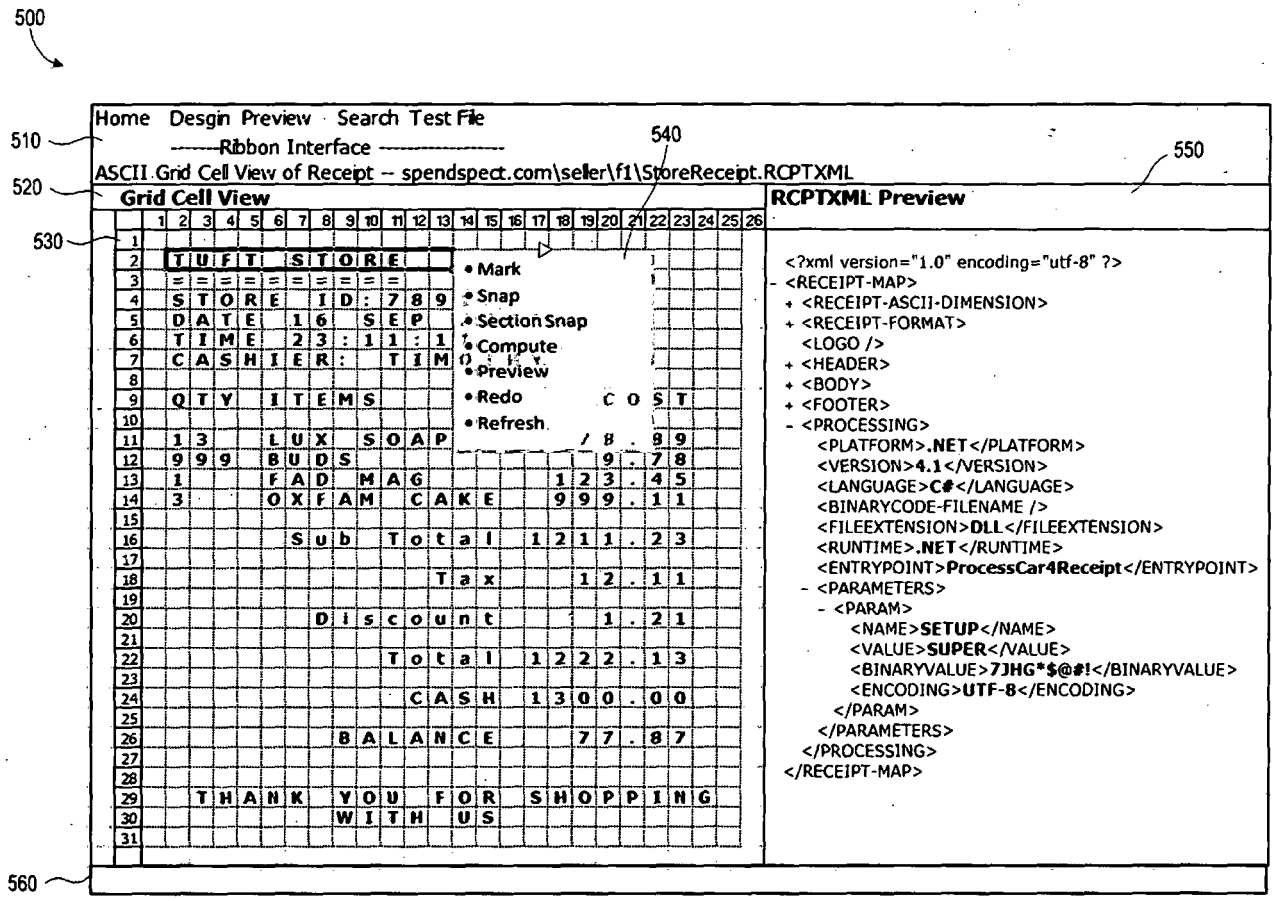

500
Home Desgin Preview Search Test File
510
Ribbon Interface
540
550
ASCII Grid Cell View of Receipt -- spendspect.com\seller\f1\StoreReceipt.RCPTXML
520
Grid Cell View
RCPTXML Preview
530
• Mark
• Snap
• Section Snap
• Compute
• Preview
• Redo
• Refresh
560

FIG. 7

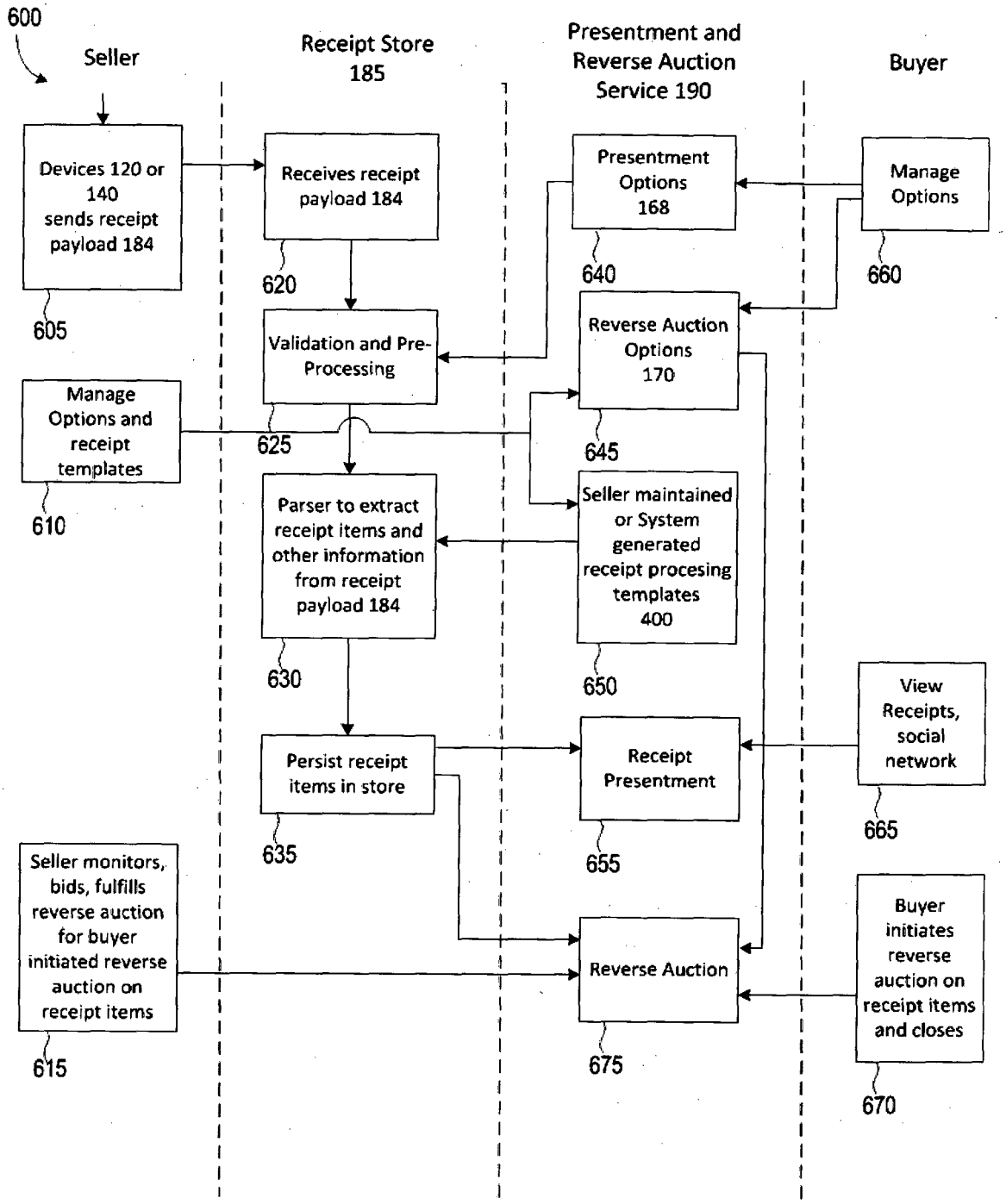

600
Seller
Receipt Store 185
Presentment and Reverse Auction Service 190
Buyer
Devices 120 or 140 sends receipt payload 184
605
Receives receipt payload 184
620
Validation and Pre-Processing
625
Manage Options and receipt templates
610
Parser to extract receipt items and other information from receipt payload 184
630
Persist receipt items in store
635
Seller monitors, bids, fulfills reverse auction for buyer initiated reverse auction on receipt items
615
Presentment Options 168
640
Reverse Auction Options 170
645
Seller maintained or System generated receipt procesing templates 400
650
Receipt Presentment
655
Reverse Auction
675
Manage Options
660
View Receipts, social network
665
Buyer initiates reverse auction on receipt items and closes
670

FIG. 8

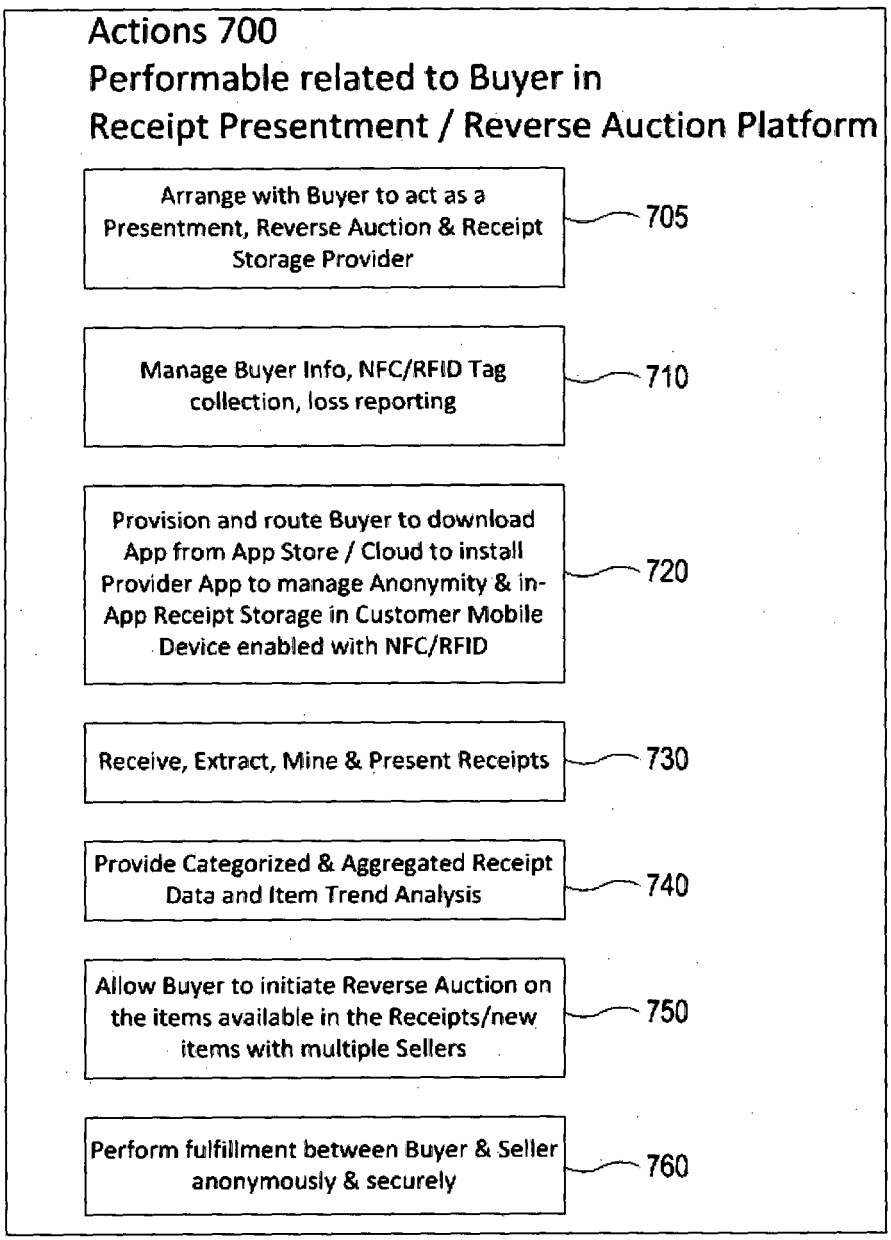

Actions 700
Performable related to Buyer in
Receipt Presentment / Reverse Auction Platform
Arrange with Buyer to act as a Presentment, Reverse Auction & Receipt Storage Provider
705
Manage Buyer Info, NFC/RFID Tag collection, loss reporting
710
Provision and route Buyer to download App from App Store / Cloud to install Provider App to manage Anonymity & in-App Receipt Storage in Customer Mobile Device enabled with NFC/RFID
720
Receive, Extract, Mine & Present Receipts
730
Provide Categorized & Aggregated Receipt Data and Item Trend Analysis
740
Allow Buyer to initiate Reverse Auction on the items available in the Receipts/new items with multiple Sellers
750
Perform fulfillment between Buyer & Seller anonymously & securely
760

FIG. 9

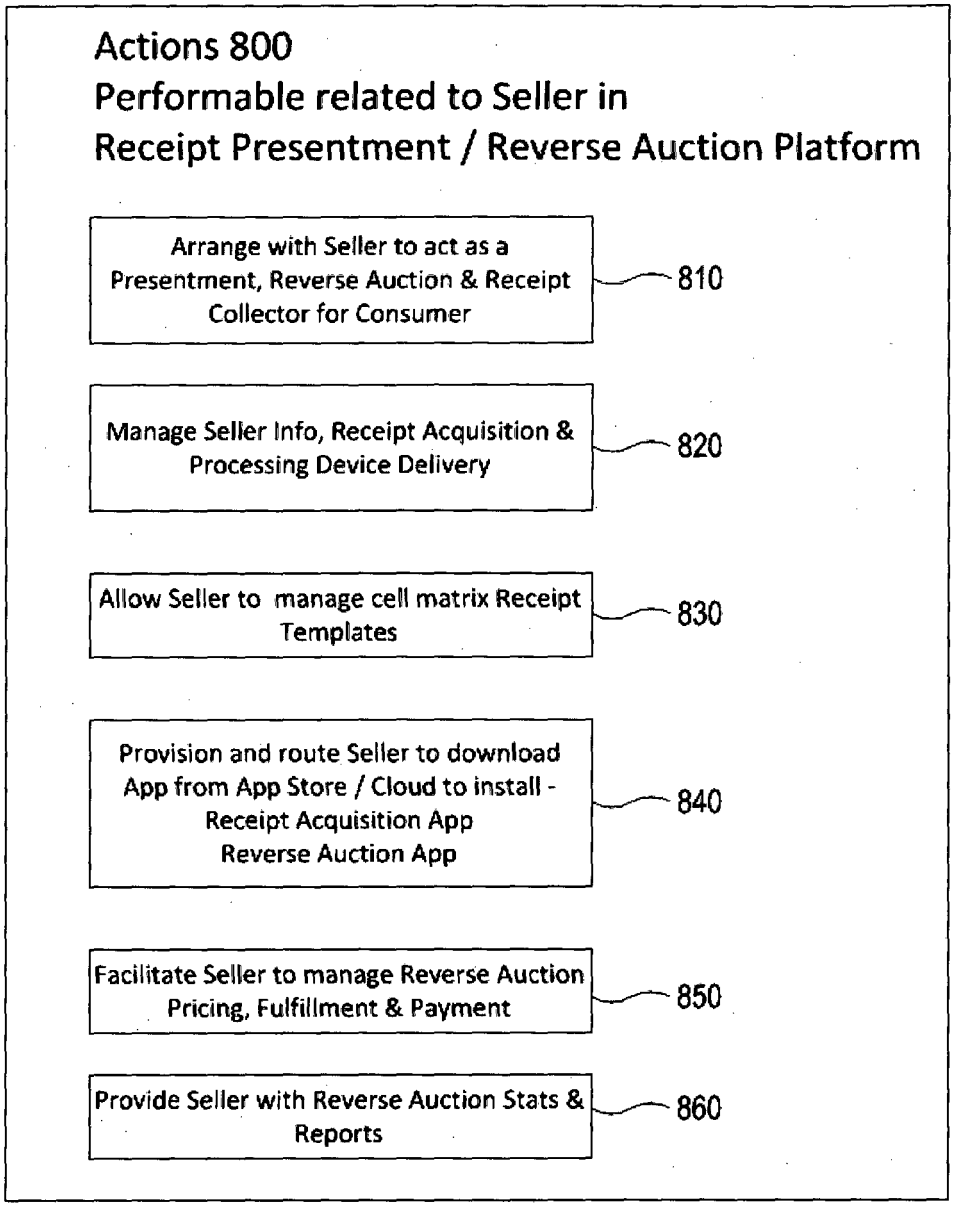

Actions 800
Performable related to Seller in
Receipt Presentment / Reverse Auction Platform
Arrange with Seller to act as a Presentment, Reverse Auction & Receipt Collector for Consumer
810
Manage Seller Info, Receipt Acquisition & Processing Device Delivery
820
Allow Seller to manage cell matrix Receipt Templates
830
Provision and route Seller to download App from App Store / Cloud to install - Receipt Acquisition App Reverse Auction App
840
Facilitate Seller to manage Reverse Auction Pricing, Fulfillment & Payment
850
Provide Seller with Reverse Auction Stats & Reports
860

FIG. 10

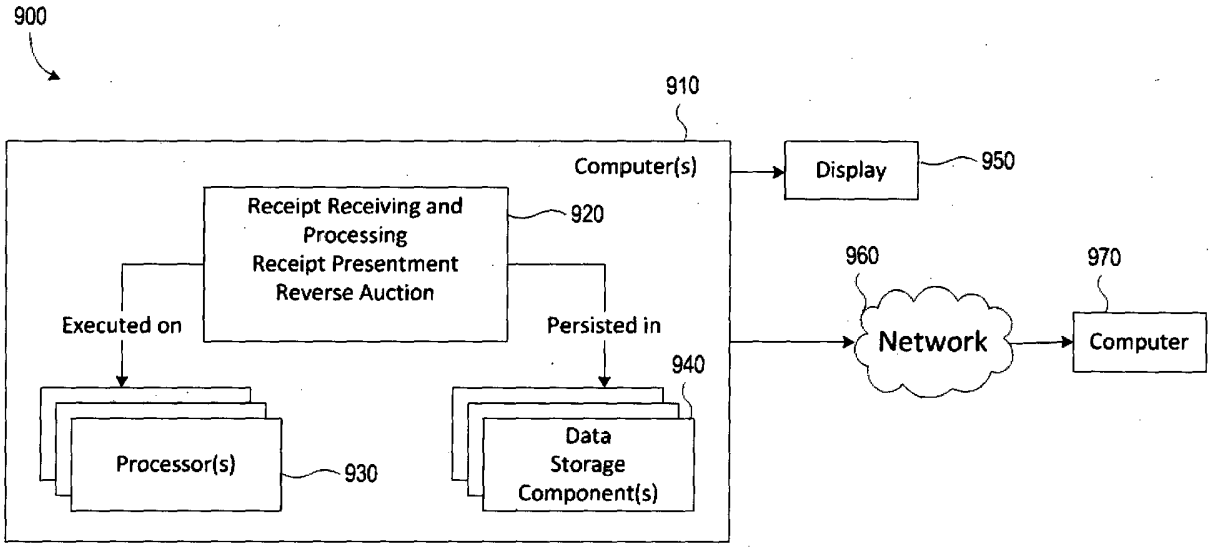

900
910
Computer(s)
Display
950
Receipt Receiving and Processing
Receipt Presentment
Reverse Auction
920
960
970
Executed on
Persisted in
Network
Computer
940
Processor(s)
930
Data Storage Component(s)

FIG. 11