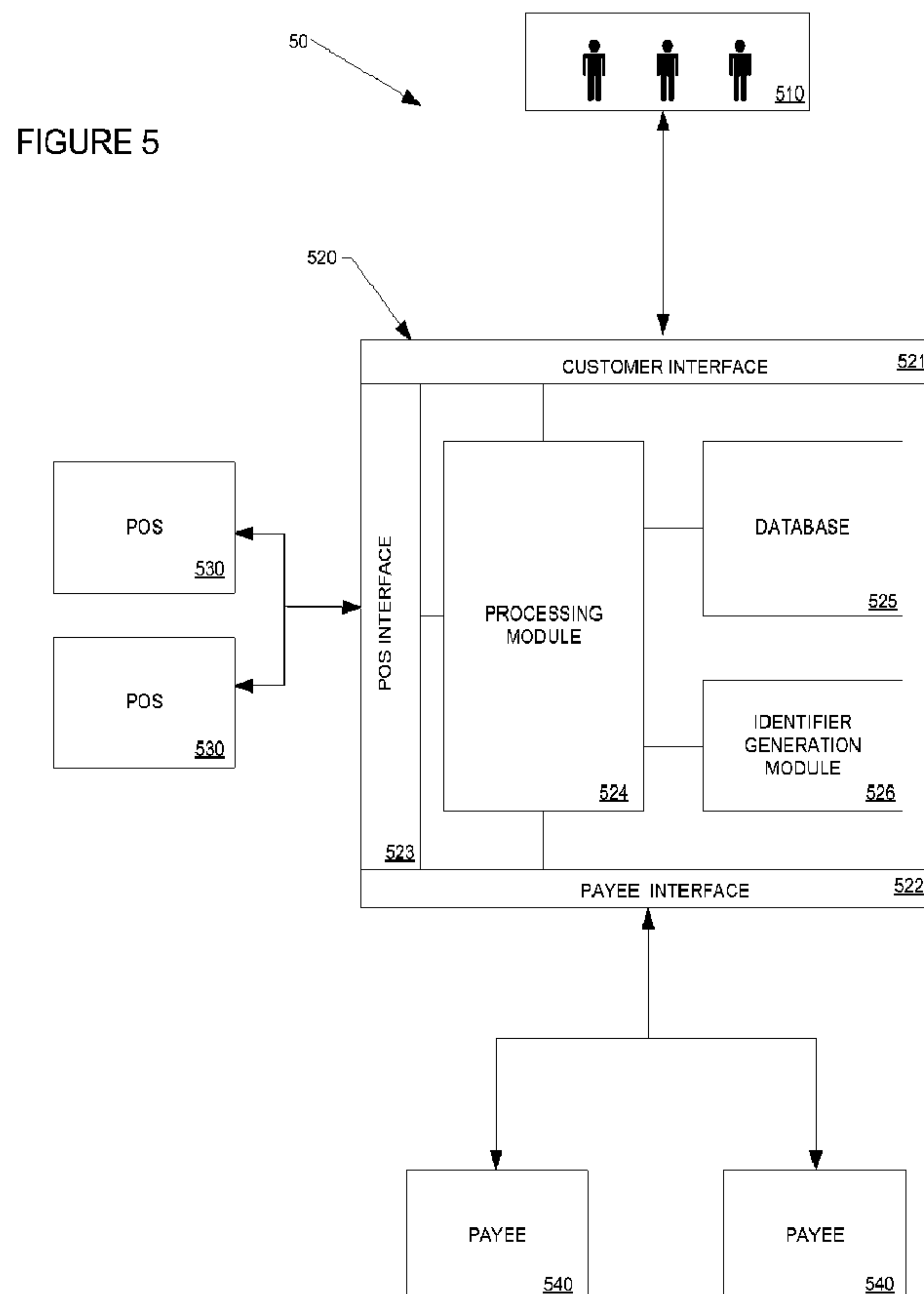




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(54) Titre : SYSTEMES ET PROCEDES PERMETTANT DE REALISER UNE TRANSACTION DE PAIEMENT DE  
FACTURE COMPOSITE  
(54) Title: SYSTEMS AND METHODS FOR CONDUCTING A COMPOSITE BILL PAYMENT TRANSACTION



(57) **Abrégé/Abstract:**

The present invention is directed to systems and methods of conducting a payment system, facilitated between a computerized processor, a point-of-sale, a customer, and one or more payees to whom the customer wishes to make a payment. The method



(57) **Abrégé(suite)/Abstract(continued):**

including the steps of: receiving composite payment transaction information from the customer - including identifying information of the one or more payees and an indication of the an amount of value the customer wishes to pay to each of the one or more payees, associating an identifier with the composite payment transaction information, providing the identifier to the customer, receiving the identifier from the point-of-sale, receiving an amount of value from the point-of-sale, and providing value to the one or more payees in the amount indicated by the customer in the composite payment transaction information. The system configured to provide payment in a similar manner.

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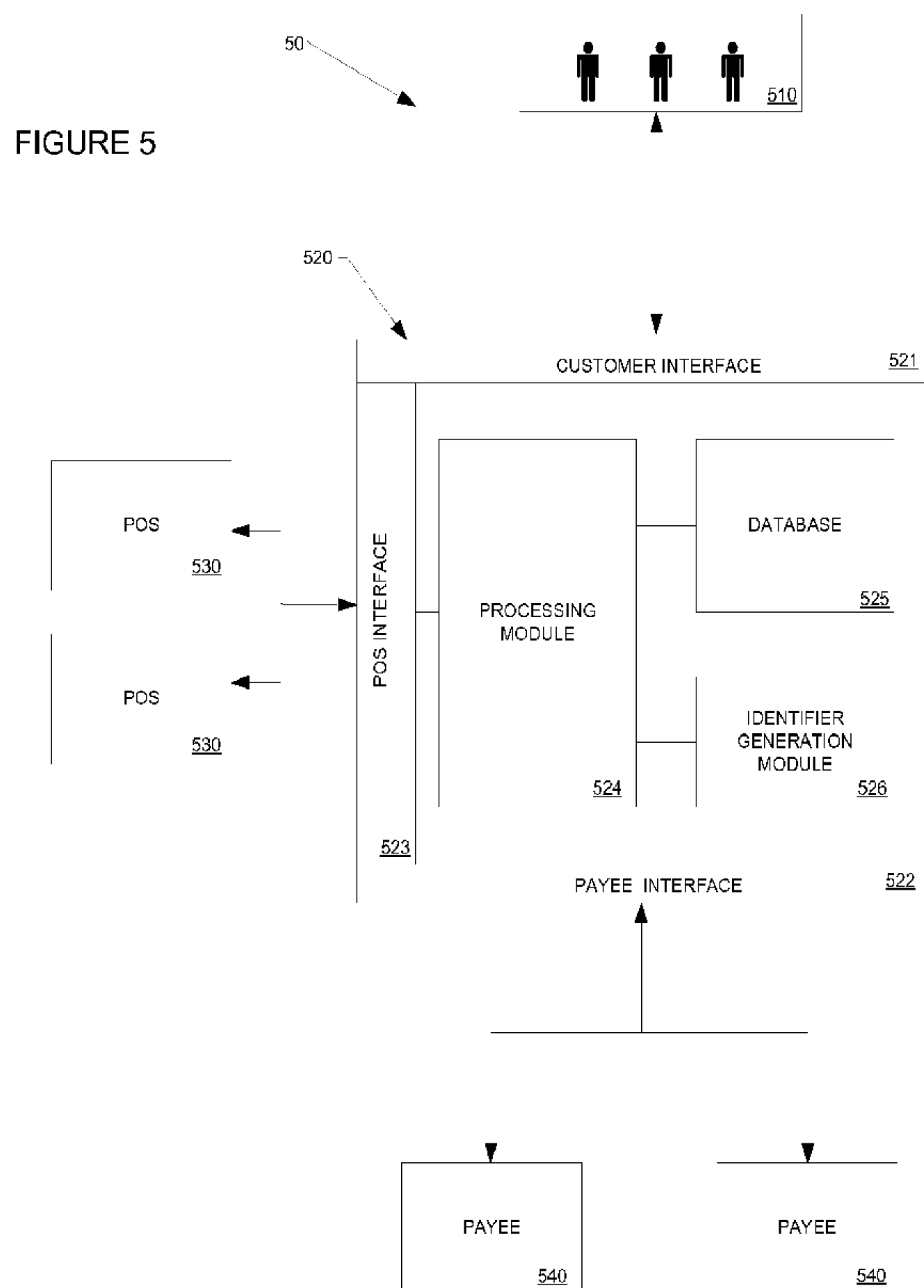
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(54) Title: SYSTEMS AND METHODS FOR CONDUCTING A COMPOSITE BILL PAYMENT TRANSACTION



(57) Abstract: The present invention is directed to systems and methods of conducting a payment system, facilitated between a computerized processor, a point-of-sale, a customer, and one or more payees to whom the customer wishes to make a payment. The method including the steps of: receiving composite payment transaction information from the customer - including identifying information of the one or more payees and an indication of the an amount of value the customer wishes to pay to each of the one or more payees, associating an identifier with the composite payment transaction information, providing the identifier to the customer, receiving the identifier from the point-of-sale, receiving an amount of value from the point-of-sale, and providing value to the one or more payees in the amount indicated by the customer in the composite payment transaction information. The system configured to provide payment in a similar manner.

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1                                    **SYSTEMS AND METHODS FOR**  
2                                    **CONDUCTING A COMPOSITE BILL PAYMENT TRANSACTION**  
3

4    **Background of the Invention**

5    [0001] The present invention is generally directed to systems and methods for conducting bill  
6    pay transactions. Specifically, the present invention is directed to systems and methods of  
7    paying one or more payees utilizing an identifier that is representative of the composite payment  
8    transaction at a point-of-sale.

9    [0002] It is well known for customers to purchase goods or services either upfront (prepaid), or  
10   on credit and later receive a bill from the provider of goods or services requesting payment (post-  
11   paid). The customer typically provides value to the provider of goods or services – or payee –  
12   through the use of a check drawn on a bank account, a credit or debit card, wire transfer, or via  
13   money order or Western Union.

14   [0003] More recently, online payment systems have evolved which generally allow a customer  
15   to access his or her bank account and schedule individual payments, or transfers, from the  
16   customer's account to identified payees. However, such systems require the customer have an  
17   operating bank account; meanwhile the unbanked segment of the population continues to grow.

18   [0004] Additionally, many providers offer online payment platforms. These payment platforms  
19   often receive value from bank accounts, or from credit or debit cards. However, a customer must  
20   individually access each provider's payment platform each month (or other payment cycle) to  
21   make the required payment.

22   [0005] There are numerous bill payment programs and plans, ranging from recurring payment  
23   plans linked to a financial account of a customer to online bill pay offered by most major

1 banking institutions. Such bill pay systems are often focused at the unbanked segment of the  
2 population, and may provide a more efficient and inexpensive method of paying bills than prior  
3 art methods such as money orders or Western Union.

4 [0006] Accordingly, it is desirable to provide systems and methods of conducting bill pay  
5 transactions that do not require the customer to have a bank account, credit card, or money order  
6 – and are more convenient and easy than conducting multiple payment transactions.

7

#### 8 **Summary of the Invention**

9 [0007] Aspects of the invention may include a computer implemented method of managing a  
10 payment system, the method conducted by a computerized processor and facilitated between the  
11 processor, a point-of-sale, a customer, and one or more payees to whom the customer wishes to  
12 make a payment, the processor being in selective communication with the point-of-sale, the  
13 customer, and the one or more payees, the method comprising: receiving composite payment  
14 transaction information from the customer, comprising: identifying information of the one or  
15 more payees; and an indication of the an amount of value the customer wishes to pay to each of  
16 the one or more payees; associating an identifier with the composite payment transaction  
17 information; providing the identifier to the customer; receiving the identifier from the point-of-  
18 sale; receiving an amount of value from the point-of-sale; and providing value to the one or more  
19 payees in the amount indicated by the customer in the composite payment transaction  
20 information.

21 [0008] Additional aspects of the invention may include a computer implemented method of  
22 managing a payment system, the method conducted by a computerized processor and facilitated

1 between the processor, a point-of-sale, a customer, and one or more payees to whom the  
2 customer wishes to make a payment, the processor being in selective communication with the  
3 point-of-sale, the customer, and the one or more payees, the method comprising: receiving  
4 composite payment transaction information from the customer, comprising: information  
5 sufficient to identify the one or more payees; information sufficient to identify an account of the  
6 customer with the one or more payees; and an indication of the an amount of value the customer  
7 wishes to pay to each of the one or more payees; uniquely associating an identifier with the  
8 composite payment transaction information; providing the identifier to the customer in a  
9 machine-readable format; receiving the identifier from the point-of-sale; confirming that the  
10 identifier is valid and that the point-of sale is authorized to conduct the composite payment  
11 transaction; receiving an amount of value from the point-of-sale; providing value to the one or  
12 more payees in the amount indicated by the customer in the composite payment transaction  
13 information; and sending a confirmation to the customer confirming that value has been sent to  
14 the one or more payees.

15 [0009] Additional aspects of the present invention may include a processor for managing a  
16 payment system facilitated between a point-of-sale, a customer, and one or more payees to whom  
17 the customer wishes to make a payment, comprising: a customer interface that provides  
18 selectable communication between the processor and the customer, the customer interface  
19 configured to receive from the customer composite payment transaction information,  
20 comprising: information sufficient to identify the one or more payees; information sufficient to  
21 identify an account of the customer with the one or more payees; and an indication of the an  
22 amount of value the customer wishes to pay to each of the one or more payees; the customer  
23 interface configure to transmit to the customer an identifier uniquely associated with the

1 composite payment transaction information; a point-of-sale interface that provides selectable  
2 communication between the processor and the point-of-sale, the point-of-sale interface  
3 configured to receive from the point-of-sale the identifier and confirmation that payment was  
4 received from the customer; a payee interface that provides selectable communication between  
5 the processor and the one or more payees, the payee interface configured to communicate with  
6 the one or more payees to confirm that the composite payment transaction information is  
7 accurate and transmit to the one or more payees value; and a processing module in  
8 communication with the customer interface, the point-of-sale interface, and the payee interface,  
9 the processing module configured to: uniquely associate an identifier with the composite  
10 payment transaction information received from the customer; provide the identifier to the  
11 customer in a machine-readable format; confirm that the identifier is valid and that the point-of  
12 sale is authorized to conduct the composite payment transaction; and determine an allocation of  
13 value to provide to each of the one or more payees.

14 [0010] These and other aspects will become apparent from the following description of the  
15 invention taken in conjunction with the following drawings, although variations and  
16 modifications may be effected without departing from the spirit and scope of the novel concepts  
17 of the invention.

18

19 **Brief Description of the Drawing**

20 [0011] The present invention can be more fully understood by reading the following detailed  
21 description together with the accompanying drawings, in which like reference indicators are used  
22 to designate like elements. The accompanying figures depict certain illustrative embodiments

1 and may aid in understanding the following detailed description. Before any embodiment of the  
2 invention is explained in detail, it is to be understood that the invention is not limited in its  
3 application to the details of construction and the arrangements of components set forth in the  
4 following description or illustrated in the drawings. The embodiments depicted are to be  
5 understood as exemplary and in no way limiting of the overall scope of the invention. Also, it is  
6 to be understood that the phraseology and terminology used herein is for the purpose of  
7 description and should not be regarded as limiting. The detailed description will make reference  
8 to the following figures, in which:

9 [0012] Figure 1 illustrates a method of conducting one or more payment transactions using a  
10 single identifier, in accordance with some embodiments of the present invention.

11 [0013] Figure 2 illustrates a method of conducting one or more payment transactions using a  
12 single identifier, in accordance with some embodiments of the present invention.

13 [0014] Figure 3 illustrates a method of conducting one or more payment transactions using a  
14 single identifier, in accordance with some embodiments of the present invention.

15 [0015] Figure 4 illustrates a method of conducting one or more payment transactions using a  
16 single identifier, in accordance with some embodiments of the present invention.

17 [0016] Figure 5 depicts a system for conducting one or more payment transactions using a single  
18 identifier, in accordance with some embodiments of the present invention.

19 [0017] Before any embodiment of the invention is explained in detail, it is to be understood that  
20 the present invention is not limited in its application to the details of construction and the  
21 arrangements of components set forth in the following description or illustrated in the drawings.  
22 The present invention is capable of other embodiments and of being practiced or being carried

1 out in various ways. Also, it is to be understood that the phraseology and terminology used  
2 herein is for the purpose of description and should not be regarded as limiting.

3

#### 4 **Detailed Description of the Invention**

5 [0018] The matters exemplified in this description are provided to assist in a comprehensive  
6 understanding of various exemplary embodiments disclosed with reference to the accompanying  
7 figures. Accordingly, those of ordinary skill in the art will recognize that various changes and  
8 modifications of the exemplary embodiments described herein can be made without departing  
9 from the spirit and scope of the claimed invention. Descriptions of well-known functions and  
10 constructions are omitted for clarity and conciseness. Moreover, as used herein, the singular  
11 may be interpreted in the plural, and alternately, any term in the plural may be interpreted to be  
12 in the singular. Reference figures preceded with "S" (e.g., S100) indicates a step.

13 [0019] In general, the systems and methods discussed below are directed to a bill pay system in  
14 which a customer access a processor (for example, via a computer and a website) and provides  
15 bill payment information (such as the identity of the provider, the customer's account number,  
16 and the amount of desired payment). The customer may enter bill payment information for  
17 multiple payment transactions – for example prepaid bills, postpaid bills, or even value transfers  
18 to identified payees unrelated to existing bills or debits. Following receipt of various transaction  
19 information, the processor may return to the customer an identifier. For example, the processor  
20 may return the identifier to a computer used by the customer for printing, it may send the  
21 identifier to an electronic device of the customer such as a mobile telephone or device, or may  
22 provide the identifier to the customer in any other way, such as encoding the identifier on a

1 magnetic stripe. The identifier may be associated with the composite payment transaction  
2 information, meaning it is associated with each payment transaction – and accordingly each  
3 payee identity and amount – provided by the customer.

4 [0020] The identifier may be in any form, including alpha characters, numbers, alpha-numeric  
5 characters, machine readable format, etc. The identifier may be provided in bar code format, QR  
6 code, an encoded magnetic stripe, an encoded radio frequency identification (RFID) tag, etc.  
7 Moreover, the identifier may be recognizable, in whole or in part, by a POS. For example, the  
8 identifier may comprise a stock keeping unit (SKU) or universal price code (UPC) that inform  
9 the POS of the amount due from the customer or the composite payment transaction. This  
10 amount may include taxes, fees, and additional charges.

11 [0021] The customer may then present the identifier to an authorized or acceptable POS. The  
12 identifier may presented during a standard in-lane transaction. In other words, the customer may  
13 purchase additional goods or services and conduct the bill payment transaction concurrently.  
14 The POS may receive the identifier (either by reading the identifier or by having it entered by the  
15 customer or by a clerk). In some cases the POS may recognize from the identifier the total  
16 amount due and may add this amount to the cost of any other additional purchased goods or  
17 services. In some cases the POS may recognize the identifier and route the identifier to the  
18 processor, and receive from the processor the total amount for the composite payment  
19 transaction.

20 [0022] The POS may then add the cost of the composite payment transaction to any other in-lane  
21 purchases, and request payment from the customer. The customer may pay the POS in any  
22 manner accepted by the POS, which may include cash, credit, money orders, stored value, etc.

1 [0023] The processor receives the identifier and may conduct the constituent payment  
2 transactions of the composite payment transaction information. Once payment has been made to  
3 the identified payees, the processor may return a confirmation to the POS, which in turn may  
4 pass the confirmation to the customer. The processor may later settle-up with the POS for the  
5 costs of the payment transaction.

6 [0024] With reference to Figure 1, a method 10 of conducting one or more payment transactions  
7 using a single identifier, in accordance with some embodiments of the present invention will now  
8 be discussed. At S110 one or more payment transactions are associated with a single identifier.  
9 These payment transactions may be for prepaid or post-paid accounts, or may be for single-time  
10 value transfers (for example, purchase such as on e-Bay), or may be entirely unrelated to goods  
11 or services (for example, transferring value to a student or a friend for his or her birthday). The  
12 association may require specific information such as the amount of value to transfer, the identity  
13 of the party receiving the value (i.e., the payee), and if applicable, identification of the customer  
14 account with the payee. The multiple payment transactions associated with the identifier create a  
15 composite payment transaction, and accordingly the information associated with the multiple  
16 payment transactions associated with the identifier create the composite payment transaction  
17 information.

18 [0025] At S120 the identifier may be provided at a POS. The identifier may be in any number of  
19 format, and the provision of the identifier to the POS may be somewhat dependent upon the  
20 format of the identifier. For example, if the identifier is provided in bar code or QR code format,  
21 the identifier may be read by a bar code reader connected to the POS. If the identifier is  
22 provided in a magnetic stripe, a magnetic stripe reader may be utilized. Similarly, if the

1 identifier is provided on a RFID tag, an RFID interrogator may be used. If the identifier is  
2 provided in an alpha, numeric, or alphanumeric format, the identifier may be entered by the  
3 customer or a clerk, or may be recognized by the POS via a optical character recognition  
4 program or if an E13B font is used, read with Magnetic Ink Character Recognition.

5 [0026] A S130 the customer may provide a single payment for the composite payment  
6 transaction. The amount of value provided by the customer may include the combined cost of  
7 the payments, as well as any applicable fees, taxes, commissions, etc. This value may be  
8 provided to the POS in any manner value is accepted by the POS, for example via cash, check,  
9 credit cards, debit cards, stored value cards, etc.

10 [0027] At S140 the one or more payment transactions are performed. The composite payment  
11 transaction information is utilized to conduct each of the constituent payment transactions.

12 [0028] With reference to Figure 2, a method 20 of conducting one or more payment transactions  
13 using a single identifier, in accordance with some embodiments of the present invention will now  
14 be discussed. For exemplary purposes, Figure 2 indicates which party – the customer, processor,  
15 or POS – may perform each step. However, it is fully contemplated that the steps listed may be  
16 performed by any of the three parties, as well as by any additional parties. Moreover, it is fully  
17 contemplated that additional steps may be conducted by the any of the three parties, as well as by  
18 an any additional parties.

19 [0029] At S205 the customer may provide payment information to the processor. The customer  
20 may provide this payment information in any number of ways, including for example via a  
21 computer on the Internet or any other communication network; via a mobile device such as a  
22 mobile telephone, smartphone, or PDA; via a telephone call with either a live operator or

1 interactive voice recognition (IVR) unit; or via a kiosk or dedicated terminal. The payment  
2 information may comprise the information necessary to conduct the payment transaction, such as  
3 information sufficient to identify the payee, information sufficient to identify a particular account  
4 with the payee, information sufficient to identify the customer, and any other information that  
5 may be needed or required to make such payments. This information comprises the composite  
6 payment information.

7 [0030] At S210 the processor may receive the information and may associate an identifier with  
8 the composite payment information. The identifier may be uniquely identified with the  
9 composite payment information, meaning that identical identifiers may not be used (at least, not  
10 used in a manner that may cause confusion; reuse over a large time frame, or with other  
11 constraints such as acceptable POS, payees, or merchants, or geographic areas, may be  
12 acceptable).

13 [0031] At S215 the identifier may be returned to the customer. As noted above, the identifier the  
14 identifier may be in any number of format, and the provision of the identifier to the POS may be  
15 somewhat dependent upon the format of the identifier. For example, if the identifier is provided  
16 in bar code or QR code format, the identifier may be read by a bar code reader connected to the  
17 POS. If the identifier is provided in a magnetic stripe, a magnetic stripe reader may be utilized.  
18 Similarly, if the identifier is provided on a RFID tag, an RFID interrogator may be used. If the  
19 identifier is provided in an alpha, numeric, or alphanumeric format, the identifier may be entered  
20 by the customer or a clerk, or may be recognized by the POS via a optical character recognition  
21 program or if an E13B font is used, read with Magnetic Ink Character Recognition.

1 [0032] At S220 the customer may store the identifier in a tangible medium. For example, the  
2 identifier may be returned to the customer in the form of a bar code, but the customer may be  
3 required to print the bar code. As another example, the identifier may be in the form of a QR  
4 code sent to the customer's mobile telephone or device, and the customer may be required to  
5 save the identifier.

6 [0033] At S225 the customer provides the identifier to a POS. The POS may be any standard  
7 point-of-sale terminal or device. At S230 the POS receives the identifier. The method of  
8 receiving the identifier may be based on the format of the identifier. At S235 the POS may  
9 determine the total amount due for the payment transaction (plus any applicable taxes, fees,  
10 charges, or commissions). The POS may make this determination based upon the identifier  
11 comprising a price code recognizable by the POS – for example an SKU or UPC.

12 [0034] At S240 the POS may receive value from the customer for the composite payment  
13 transaction. At S245 the POS may inform the processor of the transaction and provide the  
14 identifier to the processor. The POS and the processor may settle, either at that time or during a  
15 regular periodic settlement.

16 [0035] At S250 the processor makes the payments that formed the composite payment  
17 transaction. The processor may determine the constituent payment transactions by referencing  
18 the information received from the customer that was associated with the identifier at S210.

19 [0036] With reference to Figure 3, a method 30 of conducting one or more payment transactions  
20 using a single identifier, in accordance with some embodiments of the present invention will now  
21 be discussed. Figure 3 provides a slightly more detailed process.

1 [0037] At S305 the customer may enter information sufficient to identify the payees, amounts of  
2 payments, and any other information needed for payment (such as account information, or  
3 customer identification information). The information for each individual payment to be made  
4 forms the composite payment transaction information. At S310 the processor may receive this  
5 information, and may associate an identifier with the composite payment transaction  
6 information. The identifier may be provided to the customer in any of the formats discussed  
7 above with regard to Figures 1 or 2.

8 [0038] At S315 the customer may record, print, encode, or save the identifier. In this manner,  
9 the customer may bring the identifier with the customer for use during a transaction at a POS.  
10 The transaction at the POS may occur at a later time.

11 [0039] At S320, the customer may present the identifier to the POS. At S325 the POS may read  
12 or receive the identifier. The method of reading or receiving the identifier may be based upon  
13 the format of the identifier.

14 [0040] Depending on the type of identifier, the relationship between the POS and processor, or  
15 any other circumstance, at least two paths may be taken. First, at S330 the POS may determine  
16 the amount owed for the composite payment transaction (including any fees, taxes, charges or  
17 commissions) based upon the identifier itself. For example, this may occur if the identifier  
18 comprises a SKU or UPC.

19 [0041] Alternatively, at S335 the POS may send the identifier to the processor. The POS may  
20 know to send the identifier to the processor via any number of manners, including the use of  
21 specific platform programming or the use of specific issuer identification numbers (IINs). At

1 S340 the processor may determine the amount due for the composite payment transaction, and  
2 may return this amount to the POS.

3 [0042] At S345 the POS may add the amount due for the composite payment transaction to the  
4 amount required for the purchase of any other goods or services. Accordingly, the composite  
5 payment transaction may occur in-lane along with the purchase of other goods or services. For  
6 example, a customer may associate the information, print a bar code, go to a retailer and select  
7 groceries. During check-out the customer may present – in addition to the groceries selected for  
8 purchase – the identifier. The cost of the composite payment transaction may be added to the  
9 cost of the selected groceries.

10 [0043] At S350 the customer may provide payment to the POS. The POS may receive payment  
11 in any manner accepted by the POS, such as cash, credit cards, debit cards, check, or stored value  
12 cards.

13 [0044] At S355 the POS may receive payment, confirm it is valid, and inform the processor of  
14 the transaction. Again depending on the type of identifier, the relationship between the POS and  
15 processor, or any other circumstance, at least two paths may be taken. At S360 the POS may  
16 settle with the processor, and at S365 the processor may pay the payees. The processor knows  
17 which payees to pay and how much to pay based upon the information received from the  
18 customer at S305. Alternatively, at S370 the processor may inform the POS how to settle with  
19 each payee (e.g., the identity of the payees and the amounts of payment), and at S375 the POS  
20 may pay the payees.

21 [0045] At S380 the customer may receive verification of payment.

1 [0046] With reference to Figure 4, a method 40 of conducting one or more payment transactions  
2 using a single identifier, in accordance with some embodiments of the present invention will now  
3 be discussed. Figure 4 outlines some variations and steps that may be included in the overall  
4 process.

5 [0047] At S410 the POS may receive information sufficient to make payments, e.g., information  
6 sufficient to identify payees to paid and the amount of payments. This information may form  
7 composite payment information. At S420 the processor may associate an identifier with the  
8 composite payment information. The identifier may be in various formats. At S421 the  
9 identifier may be in machine-readable format. At S422 the identifier may be in alphanumeric  
10 format. At S423 the identifier may comprise a segment recognizable by a POS – such as a SKU  
11 or UPC.

12 [0048] At S430 the POS may receive the identifier and may send the identifier to the processor.  
13 The processor may at S431 confirm that the identifier is valid; confirm at S432 that payment has  
14 not already been received for the composite payment transaction associated with the identifier;  
15 and/or confirm at S433 that the POS is authorized to conduct the composite payment transaction.

16 [0049] At S440 the processor may authorize the composite payment transaction, and at S441 the  
17 processor may inform the POS of the amount due for the composite payment transaction.

18 [0050] At S450 the composite payment transaction may be conducted at the POS. At S460 the  
19 processor may receive confirmation that the composite payment transaction was conducted, and  
20 at S461 the processor may confirm that funds were received from the customer, and/or that funds  
21 cleared.

1 [0051] At S470 the processor may settle with the POS for the composite payment amount, less  
2 any fees or costs due to the POS.

3 [0052] At S480 the processor may settle with the one or more payees that were identified in the  
4 composite payment transaction information. The processor may settle with the payees in any  
5 number of ways, including at S481 reaching into an account of the payee to directly insert value,  
6 at S482 transferring value to the payee via wire transfer, at S483 providing value to the payee via  
7 the automated clearing house system, or at S484 providing to the payee a virtual prepaid stored  
8 value card number, funded with the amount of payment to the particular payee.

9 [0053] At S490 the customer may receive confirmation of the payment transaction. If there are  
10 any issues and the one or more of the constituent payments to specific payees cannot be  
11 conducted, the processor may provide to the customer an indicia redeemable for the value not  
12 transferred. For example, the processor may provide to the customer a virtual prepaid stored  
13 value card number for use in various transactions. Alternatively, the processor may carry such  
14 funds until a subsequent payment transaction selected by the customer.

15 [0054] With reference to Figure 5, a system 50 for conducting one or more payment transactions  
16 using a single identifier, in accordance with some embodiments of the present invention will now  
17 be discussed. The system 50 may comprise one or more customers 510, a processor 520, one or  
18 more POSs 530, and one or more payees 540.

19 [0055] The processor 520 may comprise a customer interface 521, a payee interface 522, a POS  
20 interface 523, a processing module 524, a database 525, and an identifier generation module 526.  
21 The customer interface 521 may handle all incoming and outbound communications with the one  
22 or more customers 510. Because customers may access the processor in various manners (e.g.,

1 via the Internet, applications, applets, text messaging (SMS/MMS), electronic mail, telephone  
2 calls, etc.), the customer interface 521 may collectively identify a plurality of interfaces with  
3 different customers.

4 [0056] The payee interface 522 may handle all incoming and outbound communications with  
5 various payees, the payment platforms of payees, or parties designated by payees to receive  
6 funds on the payees behalf. In some embodiments, the payee interface 522 may take the form of  
7 an interface on a host-to-host network. Because each payee may have different requirements or  
8 system characteristics, payee interface 523 may collectively identify a plurality of interfaces with  
9 different payees. In some embodiments, the processor 520 may access the payee 540 such that  
10 the processor 520 may determine the amount owed by the customer 510 to the payee 540. The  
11 processor 520 may inform the customer 510 of this amount during determination of the  
12 composite payment transaction information.

13 [0057] The POS interface 523 may handle all incoming and outbound communications with  
14 various POS devices, locations, or merchants. In some embodiments, the POS interface 523 may  
15 take the form of an interface on a host-to-host network. Because each POS may have different  
16 requirements or system characteristics, POS interface 523 may collectively identify a plurality of  
17 interfaces with different POSs.

18 [0058] The processing module 524 may be coupled to the various interfaces (521, 522, 523), as  
19 well as to the database 525 and the identifier generation module 526. The processing module  
20 may perform all determinations, computations, and processing required to conduct the various  
21 payment transactions. For example, the processing module may uniquely associate an identifier  
22 with the composite payment transaction information received from the customer, provide the

1 identifier to the customer in a machine-readable format, confirm that the identifier is valid and  
2 that the point-of sale is authorized to conduct the composite payment transaction, and determine  
3 an allocation of value to provide to each of the one or more payees.

4 [0059] The database may comprise various records associated with the composite payment  
5 transaction. These records may include associate identifiers generated by the identifier  
6 generation module 526 with the customer, the identity of the payees, customer account  
7 information with the payees, and/or payment amount information. The database may store this  
8 information to make future periodic payments more efficient and convenient.

9 [0060] The identifier generation module 526 may generate unique or semi-unique identifiers  
10 associated with each set of composite payment transaction information. The identifiers may be  
11 semi-unique in that the identifiers may be unique in a sub-set of identifiers, based upon  
12 characteristics such as, but not limited to, geographic location or scope, acceptable or authorized  
13 POS or merchants, specific payee identification, temporal limitations (e.g., identifiers may be  
14 periodically recycled), etc

15 [0061] It will be understood that the specific embodiments of the present invention shown and  
16 described herein are exemplary only. Numerous variations, changes, substitutions and  
17 equivalents will now occur to those skilled in the art without departing from the spirit and scope  
18 of the invention. Accordingly, it is intended that all subject matter described herein and shown  
19 in the accompanying drawings be regarded as illustrative only, and not in a limiting sense, and  
20 that the scope of the invention will be solely determined by the appended claims.

1 **WHAT IS CLAIMED IS:**

2

3 1. A computer implemented method of managing a payment system, the method conducted  
4 by a computerized processor and facilitated between the processor, a point-of-sale, a customer,  
5 and one or more payees to whom the customer wishes to make a payment, the processor being in  
6 selective communication with the point-of-sale, the customer, and the one or more payees, the  
7 method comprising:

8 receiving composite payment transaction information from the customer, comprising:

9 identifying information of the one or more payees; and

10 an indication of the an amount of value the customer wishes to pay to each of the  
11 one or more payees;

12 associating an identifier with the composite payment transaction information;

13 providing the identifier to the customer;

14 receiving the identifier from the point-of-sale;

15 receiving an amount of value from the point-of-sale;

16 providing value to the one or more payees in the amount indicated by the customer in the  
17 composite payment transaction information.

18

19 2. The method of claim 1, wherein the identifying information of the one or more payees  
20 comprises:

21 information sufficient to identify the one or more payees; and

22 information sufficient to identify an account of the customer with the one or more payees.

23

1 3. The method of claim 1, wherein the identifier is uniquely associated with the composite  
2 payment transaction information.

3  
4 4. The method of claim 1, wherein the identifier is provided to the customer in a machine-  
5 readable format.

6  
7 5. The method of claim 4, wherein the machine readable format is a bar code.

8  
9 6. The method of claim 5, wherein the bar code comprises information determinable by the  
10 point-of-sale to indicate a total value due from the customer for the composite payment  
11 transaction.

12  
13 7. The method of claim 6, wherein bar code comprises a universal price code (UPC) or  
14 stock keeping unit (SKU).

15  
16 8. The method of claim 4, wherein the machine readable format is selected from the group  
17 consisting of: a QR code, a magnetic stripe, and a radio frequency identification (RFID) tag.

18  
19 9. The method of claim 6, wherein the total value due from the customer for the composite  
20 payment includes fees, taxes, commissions, or additional charges.

21  
22 10. The method of claim 1, wherein the step of receiving the identifier from the point-of-sale  
23 comprises receiving a second identifier associated with the identifier.

1

2 11. The method of claim 1, wherein value is provided to the one or more payees via  
3 automated clearing house (ACH) settlement.

4

5 12. The method of claim 1, wherein value is provided to the one or more payees via wire  
6 transfer.

7

8 13. The method of claim 1, wherein value is provided to the one or more payees via the  
9 processor reaching into a database or account of the one or more payees and inserting value.

10

11 14. The method of claim 1, wherein value is provided to the one or more payees by  
12 transmitting to the one or more payees an indicia associated with a virtual prepaid stored value  
13 card.

14

15 15. The method of claim 1, wherein the one or more payees is a provider of goods or services  
16 to whom the customer owes money for an unpaid bill.

17

18 16. The method of claim 1, further comprising confirming to the customer that value has  
19 been sent to the one or more payees.

20

21 17. The method of claim 1, wherein the step of providing value to the one or more payees in  
22 the amount indicated by the customer in the composite payment transaction information

1 comprises informing the point-of-sale how to distribute the value received with the one or more  
2 payees.

3  
4 18. The method of claim 1, further comprising the step of confirming that the identifier is  
5 valid.

6  
7 19. The method of claim 1, further comprising the step of confirming that a composite  
8 payment transaction associated with the identifier has not been previously conducted.

9  
10 20. The method of claim 1, further comprising the step of confirming that the point-of-sale is  
11 authorized to request the composite payment transaction.

12  
13 21. The method of claim 1, further comprising the step of the processor sending to the point-  
14 of-sale the total amount due for the composite payment transaction.

15  
16 22. The method of claim 1, wherein the step of providing value to the one or more payees in  
17 the amount indicated by the customer in the composite payment transaction information is not  
18 performed until it is confirmed that value has been actually received by the point-of-sale from  
19 the customer.

20  
21 23. A computer implemented method of managing a payment system, the method conducted  
22 by a computerized processor and facilitated between the processor, a point-of-sale, a customer,  
23 and one or more payees to whom the customer wishes to make a payment, the processor being in

1 selective communication with the point-of-sale, the customer, and the one or more payees, the  
2 method comprising:  
3 receiving composite payment transaction information from the customer, comprising:  
4 information sufficient to identify the one or more payees;  
5 information sufficient to identify an account of the customer with the one or more  
6 payees; and  
7 an indication of the an amount of value the customer wishes to pay to each of the  
8 one or more payees;  
9 uniquely associating an identifier with the composite payment transaction information;  
10 providing the identifier to the customer in a machine-readable format;  
11 receiving the identifier from the point-of-sale;  
12 confirming that the identifier is valid and that the point-of sale is authorized to conduct  
13 the composite payment transaction;  
14 receiving an amount of value from the point-of-sale;  
15 providing value to the one or more payees in the amount indicated by the customer in the  
16 composite payment transaction information; and  
17 sending a confirmation to the customer confirming that value has been sent to the one or  
18 more payees.

19  
20 24. A processor for managing a payment system facilitated between a point-of-sale, a  
21 customer, and one or more payees to whom the customer wishes to make a payment, comprising:

1 a customer interface that provides selectable communication between the processor and  
2 the customer, the customer interface configured to receive from the customer composite payment  
3 transaction information, comprising:

4 information sufficient to identify the one or more payees;

5 information sufficient to identify an account of the customer with the one or more  
6 payees; and

7 an indication of the an amount of value the customer wishes to pay to each of the  
8 one or more payees;

9 the customer interface configure to transmit to the customer an identifier uniquely  
10 associated with the composite payment transaction information;

11 a point-of-sale interface that provides selectable communication between the processor  
12 and the point-of-sale, the point-of-sale interface configured to receive from the point-of-sale the  
13 identifier and confirmation that payment was received from the customer;

14 a payee interface that provides selectable communication between the processor and the  
15 one or more payees, the payee interface configured to communicate with the one or more payees  
16 to confirm that the composite payment transaction information is accurate and transmit to the one  
17 or more payees value; and

18 a processing module in communication with the customer interface, the point-of-sale  
19 interface, and the payee interface, the processing module configured to:

20 uniquely associate an identifier with the composite payment transaction  
21 information received from the customer;

22 provide the identifier to the customer in a machine-readable format;

1           confirm that the identifier is valid and that the point-of sale is authorized to  
2   conduct the composite payment transaction; and

3           determine an allocation of value to provide to each of the one or more payees.  
4

5   25.    The processor of claim 24, further comprising a database.  
6

7   26.    The processor of claim 25, wherein the database comprises records of the composite  
8   transaction information, the records associating the identifier therewith.  
9

10   27.   The processor of claim 25, wherein the database comprises records associated with a  
11   customer for use in future composite payment transactions.  
12

13   28.   The processor of claim 24, further comprising an identifier generation module for  
14   generating an identifier representative of the composite payment transaction.  
15

16   29.   The processor of claim 28, wherein the identifier generation module generates an  
17   identifier in a machine-readable format.  
18

19   30.   The processor of claim 29, wherein the machine readable format is a bar code.  
20

21   31.   The processor of claim 30, wherein the bar code comprises information determinable by  
22   the point-of-sale to indicate a total value due from the customer for the composite payment  
23   transaction.

1

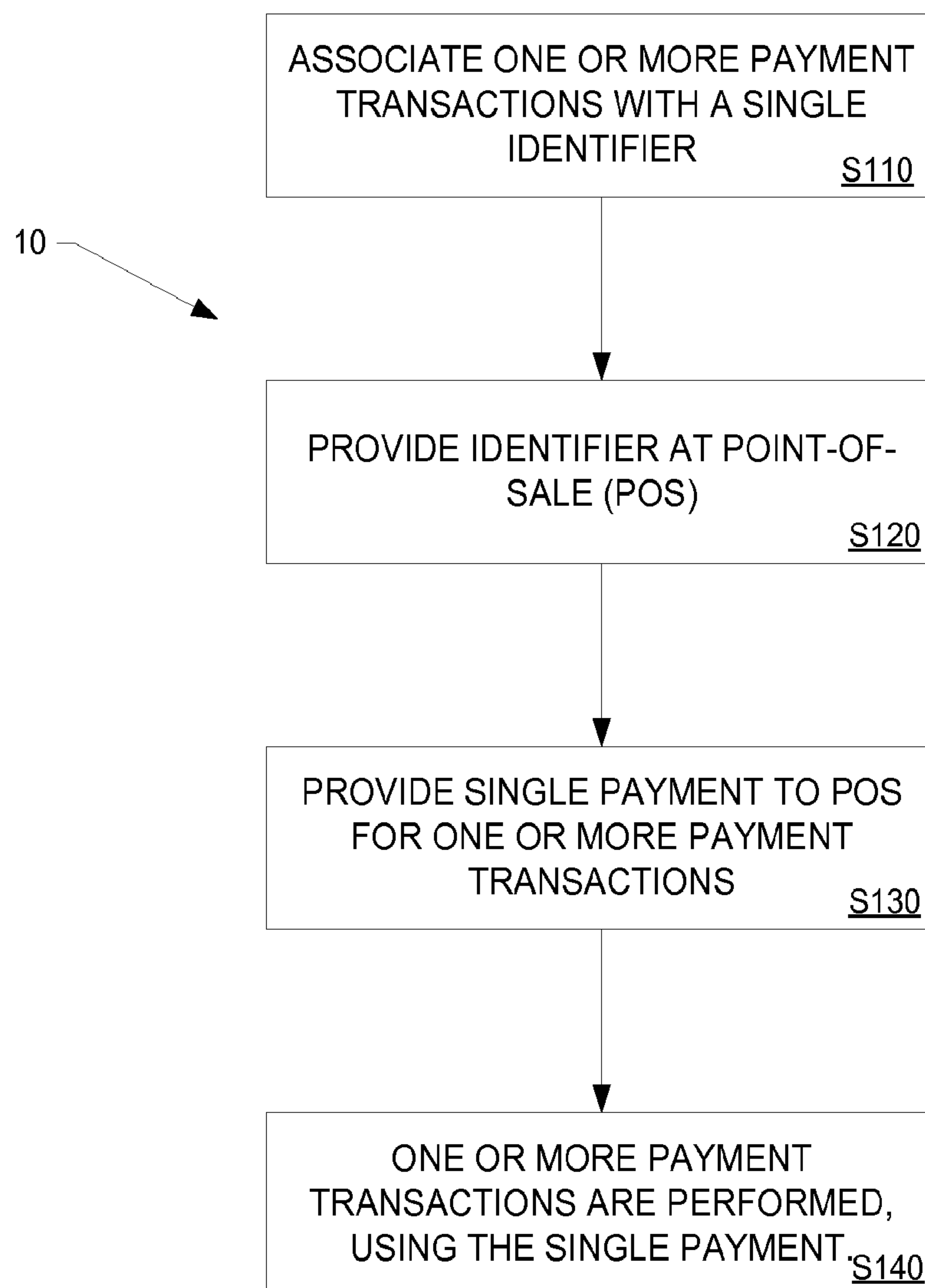
2 32. The processor of claim 30, wherein bar code comprises a universal price code (UPC) or  
3 stock keeping unit (SKU).

4

5 33. The processor of claim 29, wherein the machine readable format is selected from the  
6 group consisting of: a QR code, a magnetic stripe, and a radio frequency identification (RFID)  
7 tag.

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FIGURE 1



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FIGURE 2

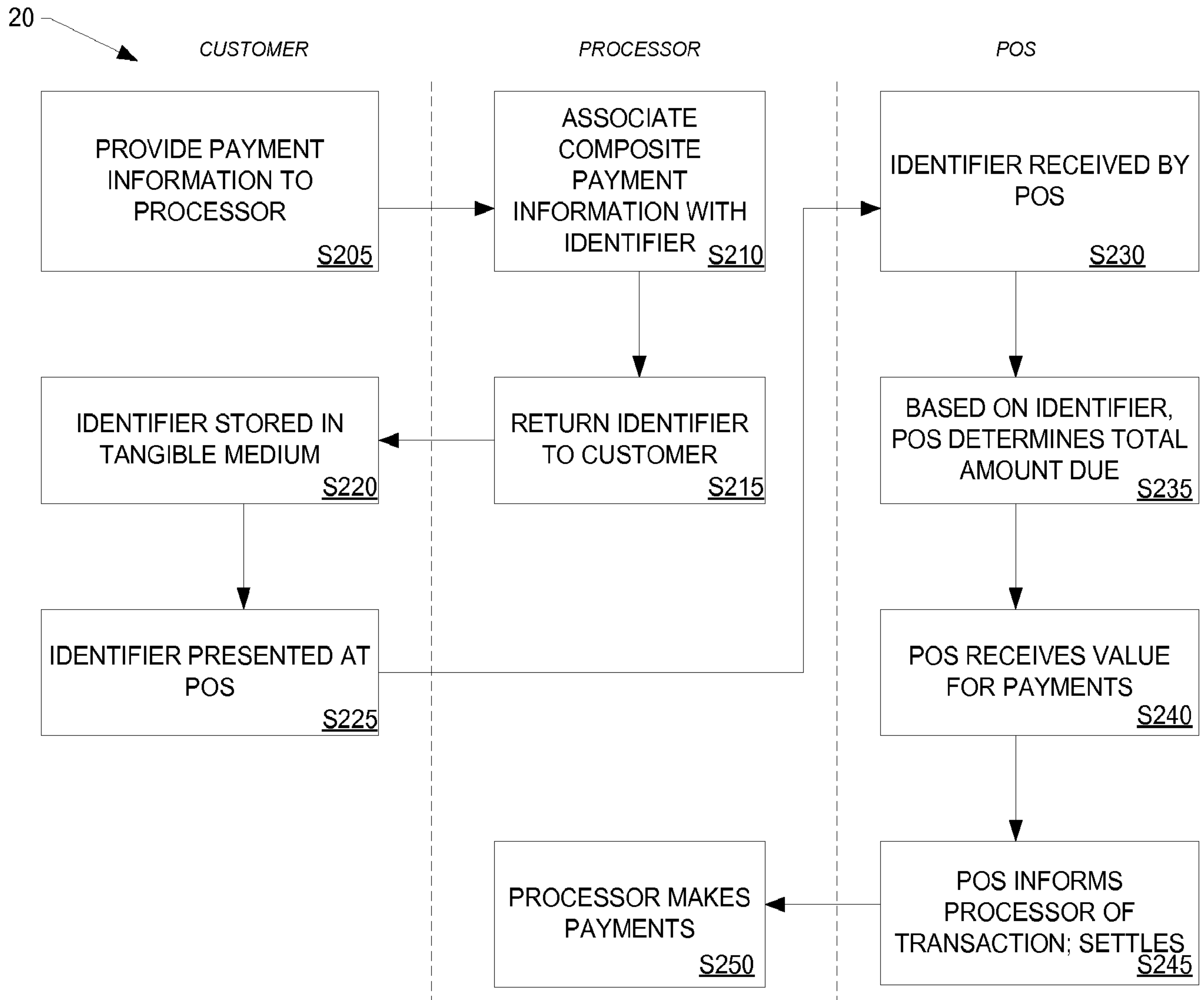
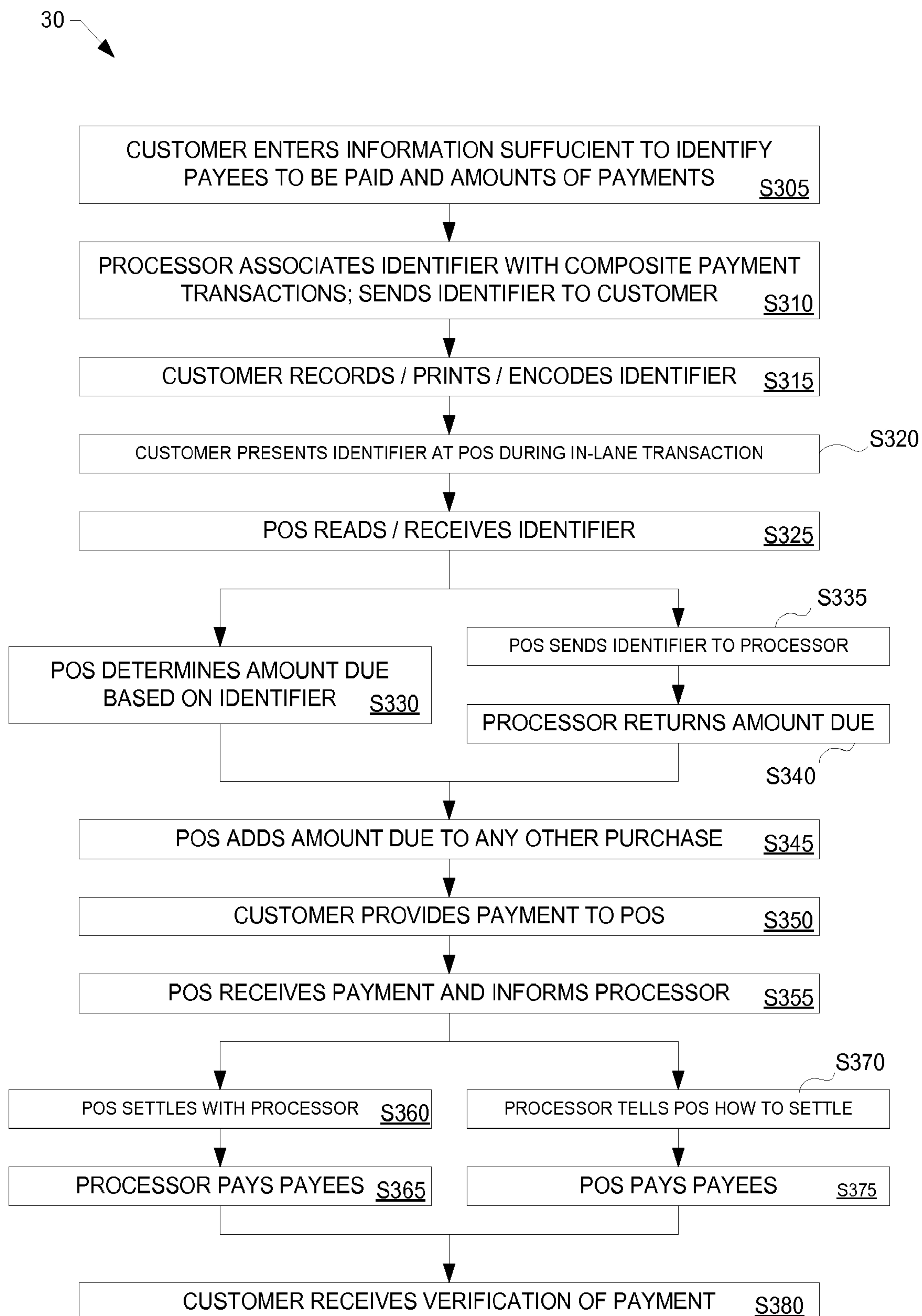


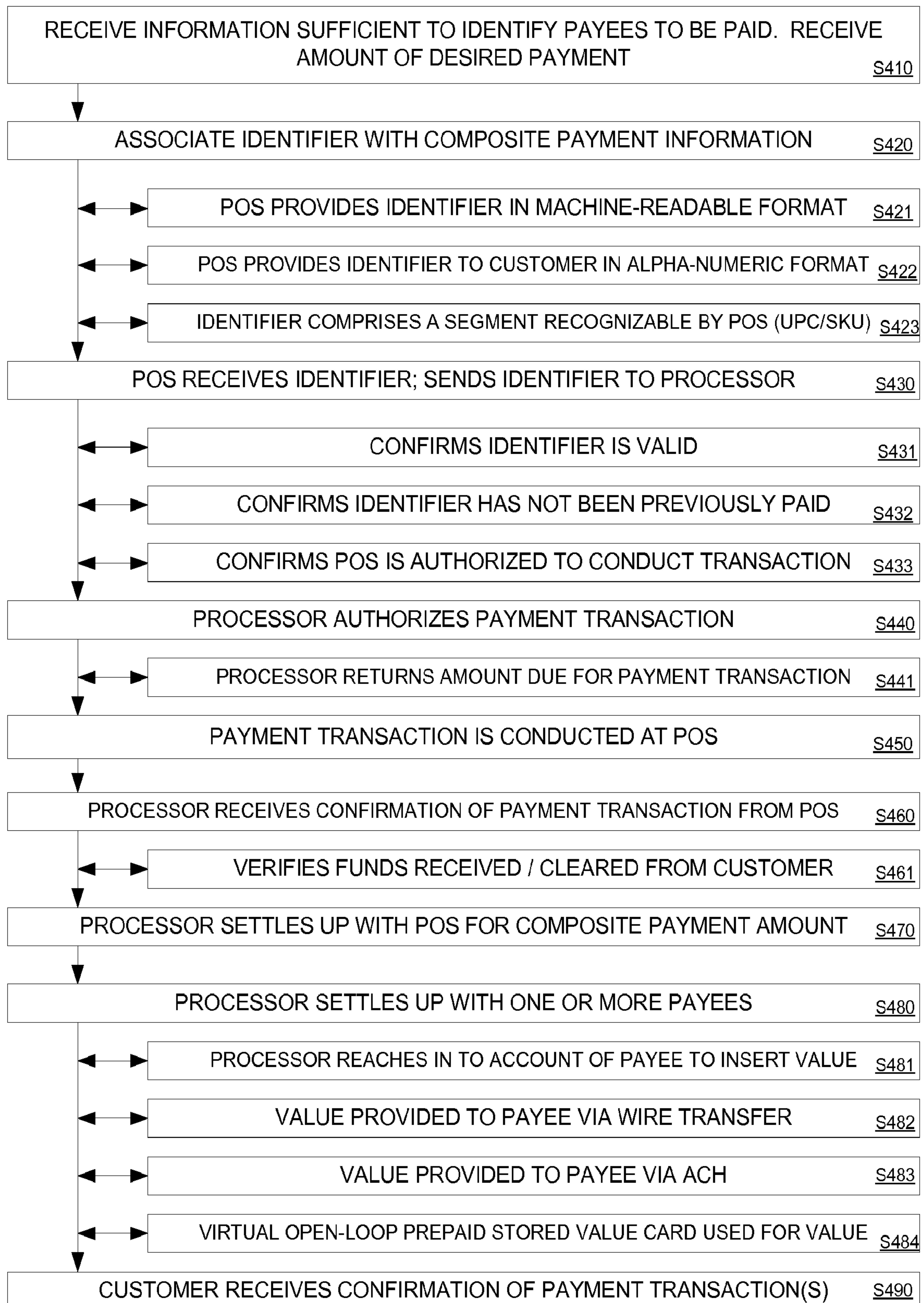
FIGURE 3



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40

FIGURE 4



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FIGURE 5

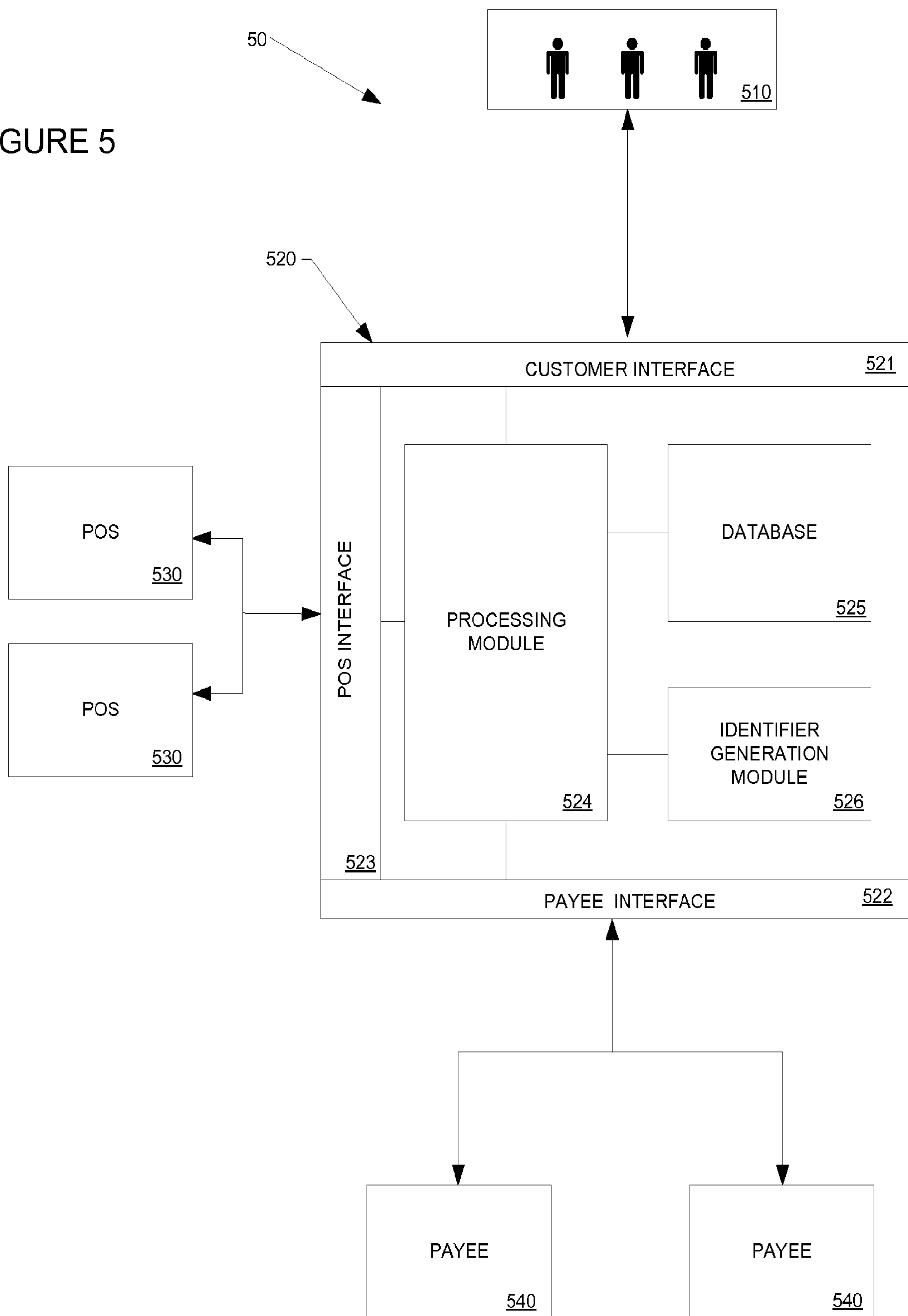


FIGURE 5

