In accordance with a third aspect of the present invention, there is provided a mobile device for a transaction reward system arranged to reward a purchasing customer at point of sale, the mobile device including a network interface arranged to facilitate wireless communications with a remote server, and the mobile device arranged to:

receive at the point of sale purchase transaction information indicative of a purchase transaction;

receive an authentication code confirming at the point of sale that the received purchase transaction information accurately represents the purchase transaction and that the purchase transaction defined by the received purchase transaction information occurred at the point of sale;

communicate the authentication code and the information indicative of the purchase transaction to the server; and

receive a communication from the server indicative that a reward is allocated to the customer if a determination is made by the server that the authentication code is valid.

~~In accordance with a fourth aspect of the present invention, there is provided a~~A transaction reward system for enabling a customer to redeem a reward at point of sale is also described.~~,~~ T~~t~~he system comprises~~ing~~:

a mobile device arranged to receive at the point of sale a merchant identification code identifying the point of sale; and

a server remotely located relative to the mobile device and arranged to communicate wirelessly with the mobile device;

wherein the mobile device is arranged to communicate the merchant identification code to the server;

wherein the server is arranged to make a determination as to whether the received merchant identification code is valid, and to retrieve a customer reward balance associated with rewards earned by the customer;

wherein the mobile device is further arranged to receive redemption information indicative of a redemption transaction made by the customer, and to communicate the redemption information to the server;

wherein the server is further arranged to:

update the customer reward balance in response to the redemption transaction;

retrieve a SKU redemption code associated with a catalogue item selected by the customer to form the basis of the redemption transaction; and

communicate the SKU redemption code to the mobile device; and

wherein the system comprises a point of sale system arranged to:

receive purchase transaction information indicative of a purchase transaction;

receive an SKU redemption code;

validate the SKU redemption code against SKU redemption codes associated with the point of sale system; and

compute the net amount of the purchase transaction by deducting an amount associated with the SKU redemption code from an amount associated with the purchase transaction if the SKU redemption code is determined to be valid.

~~In an embodiment, t~~The mobile device ~~is~~ may be arranged to display catalogue items available for redemption by the customer and associated with the merchant identification code.

~~In an embodiment, t~~The merchant identification code may includes information indicative of a point of sale of a participating merchant's outlet such that the merchant identification code is different for each point of sale.

~~In an embodiment, t~~The merchant identification code may be~~is~~ a two-dimensional code; a quick response (QR) code; a barcode or other optical, machine-readable code; a code with alphanumeric and special characters; or a code associated with a radio frequency identification (RFID) tag. The merchant identification code may include a cryptographic checksum generated by the server using a secret key.

~~In an embodiment, t~~The merchant identification code for each point of sale may be~~is~~ displayed publicly at the corresponding point of sale.

~~In an embodiment, t~~The mobile device may be~~is~~ arranged to receive the merchant identification code of a point of sale by scanning the merchant identification code displayed at the point of sale.

~~In an embodiment, t~~The mobile device may be~~is~~ arranged to receive the merchant identification code of a point of sale by selecting from a list of point of sale of participating merchants displayed on the mobile device through the reward application, wherein each point of sale in the list has a unique merchant identification code associated with it.

~~In an embodiment, t~~The SKU redemption code may includes information indicative of a catalogue item associated with an electronic catalogue of the system which is available for redemption at a specific point of sale of a participating merchant's outlet such that the SKU redemption code is different for each catalogue item.

~~In an embodiment, e~~Each SKU redemption code specific to a point of sale of a participating merchant may be~~is~~ generated by the server in a format that conforms to the format of any normal SKUs acceptable to that participating merchant.

~~In an embodiment, t~~The point of sale system of each point of sale may be~~is~~ arranged to store the SKU redemption codes which are specific to that point of sale such that the SKU redemption codes can be recognised and accepted only by the point of sale system of the specific point of sale.

~~In accordance with a fifth aspect of the present invention, there is provided a~~A method of performing a redemption transaction by a purchasing customer at a point of sale~~, the~~ is also described.

The method comprise~~sing~~:

receiving at the mobile device at the point of sale a merchant identification code identifying the point of sale;

communicating the merchant identification code from the mobile device to the server;

making a determination at the server as to whether the received merchant identification code is valid;

retrieving at the server a customer reward balance associated with rewards earned by the customer;

receiving at the mobile device at the point of sale redemption information indicative of a redemption transaction made by the customer;

communicating the redemption transaction information from the mobile device to the server;

updating the customer reward balance in response to the redemption transaction at the server;

retrieving at the server a SKU redemption code associated with a catalogue item selected by the customer to form the basis of the redemption transaction;

communicating the SKU redemption code from the server to the mobile device;

displaying the SKU redemption code on the mobile device;

showing the displayed SKU redemption code to a cashier at the point of sale;

wherein the system comprises a point of sale system arranged to:

receiving at a point of sale purchase transaction information indicative of a purchase transaction;

receiving at the point of sale an SKU redemption code;

validating the SKU redemption code against SKU redemption codes associated with the point of sale system at the point of sale system; and

computing the net amount of the purchase transaction by deducting an amount associated with the SKU redemption code from an amount associated with the purchase transaction if the SKU redemption code is determined to be valid.

~~In accordance with a sixth aspect of the present invention, there is provided~~Also described is a mobile device for a transaction reward system arranged to redeem a reward previously earned by a purchasing customer at a point of sale against an instant purchase transaction, the mobile device including a network interface arranged to facilitate wireless communications with a remote server~~, and t~~. The mobile device is arranged to:

receive at the point sale a merchant identification code identifying the point of sale;

communicate the merchant identification code to the server;

33. The transaction reward system as claimed in any one of the preceding claims,

wherein the mobile device is arranged to receive at the point of sale a merchant identification code identifying the point of sale, and to communicate the merchant identification code to the server;

wherein the server is arranged to make a determination as to whether the received merchant identification code is valid, and to retrieve a customer reward balance associated with rewards earned by the customer;

wherein the mobile device is further arranged to receive redemption information indicative of a redemption transaction made by the customer, and to communicate the redemption information to the server;

wherein the server is further arranged to:

update the customer reward balance in response to the redemption transaction;

retrieve a SKU redemption code associated with a catalogue item selected by the customer to form the basis of the redemption transaction; and

communicate the SKU redemption code to the mobile device; and

wherein the system comprises a point of sale system arranged to:

receive purchase transaction information indicative of a purchase transaction;

receive an SKU redemption code;

validate the SKU redemption code against SKU redemption codes associated with the point of sale system; and

compute the net amount of the purchase transaction by deducting an amount associated with the SKU redemption code from an amount associated with the purchase transaction if the SKU redemption code is determined to be valid.

~~34. A transaction reward system for enabling a customer to redeem a reward at point of sale, the system comprising:~~

~~a mobile device arranged to receive at the point of sale a merchant identification code identifying the point of sale; and~~

~~a server remotely located relative to the mobile device and arranged to communicate wirelessly with the mobile device;~~

wherein the mobile device is arranged to communicate the merchant identification code to the server;

wherein the server is arranged to make a determination as to whether the received merchant identification code is valid, and to retrieve a customer reward balance associated with rewards earned by the customer;

wherein the mobile device is further arranged to receive redemption information indicative of a redemption transaction made by the customer, and to communicate the redemption information to the server;

wherein the server is further arranged to:

update the customer reward balance in response to the redemption transaction;

retrieve a SKU redemption code associated with a catalogue item selected by the customer to form the basis of the redemption transaction; and

communicate the SKU redemption code to the mobile device; and

wherein the system comprises a point of sale system arranged to:

receive purchase transaction information indicative of a purchase transaction;

receive an SKU redemption code;

validate the SKU redemption code against SKU redemption codes associated with the point of sale system; and

compute the net amount of the purchase transaction by deducting an amount associated with the SKU redemption code from an amount associated with the purchase transaction if the SKU redemption code is determined to be valid.

35. The transaction reward system as claimed in claim 33 or claim 34, wherein the mobile device is arranged to display catalogue items available for redemption by the customer and associated with the merchant identification code.

36. The transaction reward system as claimed in any one of claims 33 to 35, wherein the merchant identification code includes information indicative of a point of

~~sale of a participating merchant's outlet such that the merchant identification code is different for each point of sale.~~

~~37. The transaction reward system as claimed in any one of claims 33 to 36, wherein the merchant identification code is a two-dimensional code; a quick response (QR) code; a barcode or other optical, machine-readable code; a code with alphanumeric and special characters; or a code associated with a radio frequency identification (RFID) tag.~~

~~38. The transaction reward system as claimed in claim 37, wherein the merchant identification code includes a cryptographic checksum generated by the server using a secret key.~~

~~39. The transaction reward system as claimed in any one of claims 33 to 38, wherein the merchant identification code for a point of sale is displayed publicly at the point of sale.~~

~~40. The transaction reward system as claimed in any one of claims 33 to 39, wherein the mobile device is arranged to receive the merchant identification code of a point of sale by scanning the merchant identification code displayed at the point of sale.~~

~~41. The transaction reward system as claimed in any one of claims 33 to 39, wherein the mobile device is arranged to receive the merchant identification code of a point of sale by selecting from a list of point of sale of participating merchants displayed on the mobile device, wherein each point of sale in the list has a unique associated merchant identification code.~~

~~42. The transaction reward system as claimed in any one of claims 33 to 41, wherein the SKU redemption code includes information indicative of a catalogue item associated with an electronic catalogue of the system which is available for redemption at a specific point of sale of a participating merchant's outlet such that the SKU redemption code is different for each catalogue item.~~

~~43. The transaction reward system as claimed in any one of claims 33 to 42, wherein each SKU redemption code specific to a point of sale of a participating merchant is generated by the server in a format that conforms to the format of SKUs acceptable to the participating merchant.~~

~~44. The transaction reward system as claimed in any one of claims 33 to 43, wherein the point of sale system of each point of sale is arranged to store the SKU redemption codes which are specific to the point of sale such that the SKU redemption codes are recongnisable and accepted only by the point of sale system of the specific point of sale.~~

3445. A method of performing a reward transaction for rewarding a purchasing customer at point of sale, the method comprising:

providing a mobile device;

carrying out a purchase transaction;

receiving at the mobile device at the point of sale purchase transaction information indicative of the purchase transaction;

displaying the transaction information on a display of the mobile device;

showing the displayed transaction information to a cashier at the point of sale;

receiving an authentication code from the cashier if the cashier considers the displayed transaction information accurately represents the purchase transaction;

communicating the authentication code and the purchase transaction information from the mobile device to a remote server in communication with the mobile device;

making a determination at the server as to whether the received authentication code is valid; and

allocating a reward to the purchasing customer based on the purchase transaction if the authentication code is determined to be valid.

3546. The method as claimed in claim 3445, comprising generating an authentication code indicative of a cashier at the point of sale such that the authentication code is different for each cashier.

3647. The method as claimed in claim 3445 or claim 3546, comprising generating an authentication code that includes information indicative of a work shift at the point of sale such that the authentication code is different for each work shift.

3748. The method of any one of claims 3445 to 3647, comprising generating an authentication code that includes information indicative of a product associated with a reward offer.

3849. The method of claim 3748, comprising receiving at the mobile device multiple authentication codes, each authentication code including information indicative of a product associated with a reward offer.

3950. The method of claim 3445, comprising generating the authentication code automatically based on a defined time schedule.

4051. The method of claim 3445, comprising generating the authentication code on demand.

4152. The method of any one of claims 3445 to 4051, comprising generating an authentication code that includes information indicative of a valid date and time period, and making a determination at the server as to whether the received authentication code is valid using the valid date and time period information.

4253. The method of claim 4152, wherein the valid date and time period corresponds to a work shift.

~~54~~43. The method of any one of claims 3445 to 4253, wherein the authentication code is a two-dimensional code; a quick response (QR) code; a barcode or other optical, machine-readable code; a code with alphanumeric and special characters; or a code associated with a radio frequency identification (RFID) tag.

4455. The method of any one of the claims 3445 to 4354, wherein the authentication code includes a cryptographic checksum generated by the server using a secret key.

4556. The method of any one of claims 3445 to 4455, comprising arranging the mobile device so as to not display the authentication code when the authentication code is received by the mobile device.

4657. The method of any one of claims 3445 to 5645, comprising arranging the mobile device so as to remove the authentication code from the mobile device after the authentication code is communicated to the server.

4758. The method of any one of claims 3445 to 4657, comprising storing at the server information indicative of registered mobile devices, and accepting an authentication code communicated from a mobile device only if the mobile device is a registered mobile device.

4859. The method of any one of claims 3445 to 4758, wherein the transaction information includes receipt information indicative of a receipt associated with the purchase transaction.

4960. The method of claim 4859, comprising arranging the mobile device to receive the receipt information by scanning a receipt associated with the purchase transaction.

5061. The method of claim 4960, comprising carrying out multiple scans of the receipt in order to capture the whole receipt.

5162. The method of claim 4960 or claim 5061, comprising using an optical character recognition (OCR) software module arranged to convert the receipt information to searchable text.

5263. The method of claim 5162, comprising comparing the text with information in the authentication code in order to make a determination as to whether the purchase transaction is valid.

5364. The method of claim 5263, wherein the text derived from the receipt includes date and/or time information and the method comprises making a determination as to whether the purchase transaction is valid based on the date and/or time information obtained from the receipt.

5465. The method of any one of claims 3445 to 5364, comprising installing a reward application on the mobile device, the reward application operable by a user of the mobile device to carry out at least one of the following:

register as a member of a loyalty program;

update personal particulars;

enter transaction data;

view reward balances;

view a transaction history;

view offers and promotions;

submit a redemption request;

submit a forgotten password request; and/or

change a password.

5566. The method of any one of claims 3445 to 5465, comprising arranging the server so as to facilitate access to the server using a web browser.

5667. The method of claim 5566, comprising arranging the web browser to provide an administration screen usable to add, maintain, and/or modify operational data associated with rewards transactions.

5768. The method of claim 5667, wherein the operational data includes loyalty program provider data indicative of loyalty program providers, merchant data indicative of merchants, campaign rules and reward offers relevant to loyalty programs,

authentication code data, member data indicative of members, and electronic catalogue data indicative of reward items available with the loyalty programs.

5869. The method of any one of claims 3445 to 5768, comprising storing transaction records indicative of purchase transactions in respect of which a valid authentication code has been received at the server.

5970. The method of claim 5869, wherein the transaction records comprise merchant identification information; customer identification information; date and time information; transaction amount information, receipt number information and information indicative of an image of a receipt of each said purchase transaction.

6071. The method of claim 5869 or 5970, comprising facilitating access to the transaction records for verification purposes.

6172. The method of any one of claims 3445 to 6071, comprising facilitating access to the server so that a customer or an administrator on behalf of a customer is able to perform redemption of reward entitlements allocated to the customer.

6273. The method of claim 6172, comprising generating a one-time code (OTC), sending the OTC to a mobile device associated with a customer desiring to perform redemption of a reward entitlement, and subsequently receiving the OTC at the server to thereby verify that the OTC has been received by the customer.

6374. The method of any one of claims 3445 to 6273, comprising:

receiving at the mobile device at the point of sale a merchant identification code identifying the point of sale;

communicating the merchant identification code from the mobile device to the server;

making a determination at the server as to whether the received merchant identification code is valid;

retrieving at the server a customer reward balance associated with rewards earned by the customer;

receiving at the mobile device at the point of sale redemption information indicative of a redemption transaction made by the customer;

communicating the redemption transaction information from the mobile device to the server;

updating the customer reward balance in response to the redemption transaction at the server;

retrieving at the server a SKU redemption code associated with a catalogue item selected by the customer to form the basis of the redemption transaction;

communicating the SKU redemption code from the server to the mobile device;

displaying the SKU redemption code on the mobile device;

showing the displayed SKU redemption code to a cashier at the point of sale;

wherein the system comprises a point of sale system arranged to:

receiving at a point of sale purchase transaction information indicative of a purchase transaction;

receiving at the point of sale an SKU redemption code;

validating the SKU redemption code against SKU redemption codes associated with the point of sale system at the point of sale system; and

computing the net amount of the purchase transaction by deducting an amount associated with the SKU redemption code from an amount associated with the purchase transaction if the SKU redemption code is determined to be valid.

6475. The method of any one of claims 3445 to 6374, comprising holding the authentication code privately and showing the authentication code to a customer only if the cashier determines that the purchase transaction information displayed on the mobile device is correct.

6576. A mobile device for a transaction reward system arranged to reward a purchasing customer at point of sale, the mobile device including a network interface arranged to facilitate wireless communications with a remote server, and the mobile device arranged to:

receive at the point of sale purchase transaction information indicative of a purchase transaction;

receive an authentication code confirming at the point of sale that the received purchase transaction information accurately represents the purchase transaction and that the purchase transaction defined by the received purchase transaction information occurred at the point of sale;

communicate the authentication code and the information indicative of the purchase transaction to the server; and

receive a communication from the server indicative that a reward is allocated to the customer if a determination is made by the server that the authentication code is valid.

6677. The mobile device as claimed in claim 6576, the mobile device arranged to:

receive at the point sale a merchant identification code identifying the point of sale;

communicate the merchant identification code to the server;

receive at the point of sale redemption information indicative of a redemption transaction made by the customer;

communicate the redemption transaction information to the server;

receive a SKU redemption code associated with a catalogue item selected by the customer to form the basis of the redemption transaction from the server; and

present the SKU redemption code to a cashier at the point of sale for entering into a point of sale system to compute the net amount of the purchase transaction by deducting the amount of the SKU redemption code from the amount of the purchase transaction, if a determination is made by the point of sale system that the SKU redemption code is valid.