

Tax exemption system, tax exemption method, and tax exemption program

[Technical Field]

5 [0001]

One aspect of the present disclosure relates to a tax exemption system, a tax exemption method, and a tax exemption program.

10 [Background Art]

[0002]

There are known systems for acquiring information disclosed on a purchase receipt showing goods purchased in a shop, and for implementing processing for tax exemption based on this information. For example, Patent Literature 1 discloses a tax exemption processing device which acquires information indicating that a purchaser is a non-resident and information indicating the price of goods and the amount of consumption tax, then acquires an image of a certificate certifying that the purchaser is a non-resident and an image of a receipt disclosing details of the goods purchased by the purchaser, establishes the amount of a refund corresponding to a tax exemption based on the information indicating the price of the goods and amount of consumption tax, creates purchase record information including details of the certificate and details of the goods purchased based on the image of the certificate and the image of the receipt, and then provides the purchase record information to the National Tax Agency.

[Prior Art Literature]

[Patent Literature]

[0003]

35 [Patent Literature 1] JP 2022-13680 A

[Summary of the Invention]

[Problem to be Solved by the Invention]

[0004]

A system for accurately acquiring information for a tax exemption procedure based on the results of character recognition from a purchase receipt would be desirable.

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[Means for Solving the Problem]

[0005]

A tax exemption system according to one aspect of the present disclosure comprises at least one processor. The
10 at least one processor: acquires receipt data obtained by performing character recognition with respect to a purchase receipt indicating one or more purchased goods purchased at a relevant shop; establishes a price of each of the one or more purchased goods based on the receipt
15 data; identifies the relevant shop based on the receipt data; establishes a tax exemption category of each of the one or more purchased goods purchased at the relevant shop identified, by referring to a shop database which stores shop data including tax exemption category
20 information indicating the tax exemption category of goods for each of a plurality of shops; and generates purchase information indicating the established price and the established tax exemption category of each of the one or more purchased goods.

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[0006]

According to such an aspect, a relevant shop is identified on the basis of receipt data obtained by means of character recognition with respect to a purchase
30 receipt, and the tax exemption category of purchased goods purchased at the relevant shop is established by referring to shop data indicating the tax exemption categories of goods for the individual shops. Purchase information indicating the tax exemption category and
35 price of the purchased goods is then generated. The tax exemption categories of goods which may vary from shop to shop are established by using a shop database, and information for the tax exemption procedure can therefore

be accurately acquired on the basis of results of character recognition from the purchase receipt.

[Advantageous Effects of the Invention]

5 [0007]

According to one aspect of the present disclosure, information for a tax exemption procedure can be accurately acquired on the basis of results of character recognition from a purchase receipt.

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[Brief Description of the Drawings]

[0008]

[Fig. 1] shows an example of application of a tax exemption system.

15 [Fig. 2] shows an example of a functional configuration of an issuing terminal (tax exemption system).

[Fig. 3] shows an example of a hardware configuration of a computer constituting the issuing terminal.

[Fig. 4] shows an example of a purchase receipt.

20 [Fig. 5] is a flowchart showing operations of the issuing terminal.

[Fig. 6] is a flowchart showing an example of processing to generate purchase information.

25 [Fig. 7] is a flowchart showing an example of processing to identify details on a purchase receipt.

[Fig. 8] shows an example of a display of user information and purchase information.

[Embodiment of the Invention]

30 [0009]

Various examples in the present disclosure will be described in detail below with reference to the appended drawings. Identical or similar components will be assigned the same reference symbols in the description of the drawings, and duplicate descriptions will not be given.

35

[0010]

[System Configuration]

A tax exemption system according to the present disclosure is a computer system for implementing processing for a tax exemption procedure (tax refund procedure). The tax exemption system acquires receipt
5 data obtained by performing character recognition with respect to a purchase receipt indicating goods purchased at a shop, and generates purchase information used for the tax exemption procedure, based on the receipt data. A purchase receipt is issued for each purchase procedure
10 (i.e., for each transaction). In the present disclosure, the shop issuing the purchase receipt and identified by the tax exemption system will also be referred to as "the relevant shop".

15 [0011]

Fig. 1 shows an example of application of the tax exemption system according to the present disclosure. In this example, the tax exemption system according to the present disclosure is applied to one or more issuing
20 terminals 10. The issuing terminal 10 is a computer for sending purchase record information, which is used in order for a user to benefit from the tax exemption procedure, to the National Tax Agency. The issuing terminal 10 may be installed in a shop, or may be
25 installed at a tax-free counter where the tax exemption procedure for all purchases made in one or more shops can be undertaken together. This tax-free counter is typically provided in a place where there are multiple shops, such as a shopping mall or a commercial complex.
30 The issuing terminal 10 may be a kiosk terminal where users may themselves carry out the operations for the tax exemption procedure, or may be a computer operated by staff in the shop or at the tax-free counter. Alternatively, a user terminal such as a smartphone or
35 tablet terminal may function as the issuing terminal 10.

[0012]

Each issuing terminal 10 is connected via a communication network N to a shop database 20 and a management server

30. The management server 30 is connected via the communication network N to a purchase record database 40 and an NTA system 50. The communication network N may be constructed by the Internet, an intranet, or a combination thereof. The communication network N may be constructed by a wired network, a wireless network, or a combination thereof. The shop database 20 is a memory device for storing shop data used for processing receipt data. The management server 30 is a computer for consolidated management of purchase record information based on purchase information. The management server 30 is typically run by a tax refund operator (TRO). The purchase record database 40 is a memory device for storing the purchase record information. The NTA system 50 is a computer system of the National Tax Agency. The NTA system 50 manages tax exemption for individual users on the basis of the purchase record information provided from the management server 30.

[0013]

In the present disclosure, a user refers to a person who has purchased goods at a shop and is able to benefit from tax exemption. The user is typically a non-resident such as a foreign traveller. The shop is typically a duty-free shop able to sell goods to such a user in a form in which the tax levied on the goods is exempted in real time or at the end. The tax which is exempted is typically a value-added tax (VAT) such as a consumption tax.

[0014]

Fig. 2 shows an example of the functional configuration of the issuing terminal 10. In this example, the issuing terminal 10 comprises, as functional modules: a user processing unit 11, a receipt processing unit 12, a display control unit 13, and a record generating unit 14. The user processing unit 11 is a functional module for implementing user-related processing. The receipt processing unit 12 is a functional module for implementing purchase receipt-related processing. The

receipt processing unit 12 acquires receipt data, identifies predetermined data items on the purchase receipt based on the receipt data, and makes determinations in regard to several data items. The
5 display control unit 13 is a functional module for displaying purchase information based on the processing above. The record generating unit 14 is a functional module for generating purchase record information on the basis of the purchase information, and sending the
10 purchase record information to the management server 30.

[0015]

Fig. 3 shows an example of a hardware configuration of the computer 100 constituting the issuing terminal 10
15 (tax exemption system). For example, the computer 100 comprises: a processor 101, a main memory unit 102, an auxiliary memory unit 103, a communication control unit 104, an input device 105, and an output device 106. The processor 101 is an arithmetic circuit running an
20 operating system and application programs. The main memory unit 102 is configured by ROM and RAM, for example. The auxiliary memory unit 103 is configured by a hard disk or a flash memory, for example, and generally stores a larger volume of data than the main memory unit 102.
25 The communication control unit 104 is configured by a network card or a wireless communication module, for example. The input device 105 is configured by, for example, a keyboard, a mouse, a touch panel, a card reader, a scanner, a camera, a sound input device, and/or a
30 biometric authentication device, etc. The output device 106 is configured by, for example, a monitor (display device), a speaker, a printer, a card writer, etc.

[0016]

35 The functional modules of the issuing terminal 10 (tax exemption system) are implemented by a tax exemption program 110 prestored in the auxiliary memory unit 103. The processor 101 implements the tax exemption program 110 which has been read into the main memory unit 102.

The processor 101 causes the communication control unit 104, the input device 105, or the output device 106 to operate in accordance with the tax exemption program 110, and reads and writes data from/to the main memory unit
5 102 or the auxiliary memory unit 103. The functional modules of the issuing terminal 10 are implemented by means of such control.

[0017]

10 The tax exemption program 110 may also be provided after being recorded to a non-transitory storage medium such as a CD-ROM, DVD-ROM or semiconductor memory. Alternatively, the tax exemption program 110 may be provided via a communication network as data signals
15 superimposed on carrier waves.

[0018]

[Data Structure]

Shop data prestored in the shop database 20 constitutes
20 electronic data indicating, for each of a plurality of shops, information for processing receipt data corresponding to the relevant shop. In one example, data records of receipt data include, as data items: a shop ID, a shop name, a shop telephone number, tax exemption
25 category information, tax display information, tax rate information, verification method information, specific tax rate information, and shopping bag information. That is to say, the shop data indicates the above data items for each of the plurality of shops.

30

[0019]

The shop ID is a shop identifier uniquely identifying the shop. For example, a registration number under which the shop is registered as a qualified invoice issuing
35 business may be used as the shop ID.

[0020]

The shop name may function as a shop identifier similarly to the shop ID. A number of character strings may be

preset for one shop name, given the possibility of reading errors in character recognition from the receipt. For example, if the shop name is "GIFT MARKET TOKYO", then it is possible that the letter "I" will be misread as the digit "1". Taking account of this possibility, a character string in which the letter "I" in "GIFT" is substituted with the digit "1" may be set as a shop name in addition to the correct character string.

10 [0021]

The telephone number is the telephone number of the shop. It may be the case that the same telephone number is assigned to several shops in a certain commercial complex, so the shop ID and the telephone number do not always have a 1:1 correspondence; they may also have an N:1 correspondence.

[0022]

The tax exemption category information is information indicating the tax exemption category of tax-free goods. The tax exemption category is defined in accordance with a tax exemption condition, for example. The tax exemption category information may be information indicating whether the tax-free goods are general goods or consumable goods. Consumable goods are goods such as foodstuffs, drinks, pharmaceuticals, and cosmetics. General goods are goods other than consumable goods, such as home appliances, watches, shoes, and clothing. The tax exemption condition for consumable goods is a total tax-exclusive sales amount of between JPY 5000 and JPY 500,000 in one day at the same shop for the same user. The tax exemption condition for general goods is a total tax-exclusive sales amount of JPY 5000 or greater in one day at the same shop for the same user. As a different example to "general goods" and "consumable goods", the tax exemption category information may be information indicating whether tax-free goods are luxury goods or general goods. Alternatively, the tax exemption category information may be information indicating whether or not

the tax-free goods are subject to customs inspection. As a further example, the tax exemption category information may be information indicating which of multiple price bands, that are set according to the price of the goods, the tax-free goods belong to. The tax exemption category information is provided to take into account that the tax exemption category of the same article may vary from shop to shop. The tax exemption categories in the following description are assumed to be "general goods" and "consumable goods".

[0023]

The tax display information is information indicating, for each of a plurality of shops, whether the price of goods displayed on the purchase receipt is a tax-exclusive display or a tax-inclusive display. The tax display information is provided to take into account that the format for displaying prices of goods may vary from shop to shop.

[0024]

The tax rate information is information indicating a default value of the tax rate on goods sold at a shop. The default value may be a standard tax rate or a specific tax rate. The default value of the tax rate at the shop may vary for a number of reasons, such as the form (type) of shop, and the selection of goods at the shop. To take account of this, tax rate information is provided for each shop in order to improve the accuracy of reading the purchase receipt.

[0025]

The verification method information is information indicating which of a tax-inclusive total amount, a tax-exclusive total amount, and a difference in amount between the tax-inclusive total amount and a total amount of tax, constitutes a reference amount type. The reference amount refers to an amount based on text on the receipt that is used in order to check a total amount,

which is a purchase amount of purchases on one occasion. The verification method information is provided to take into account that the format in which the total amount is displayed varies from shop to shop.

5

[0026]

The specific tax rate information is information indicating a specific tax rate mark displayed on the purchase receipt. The specific tax rate refers to one of a plurality of tax rates. A reduced tax rate may be cited as an example of a specific tax rate. The specific tax rate information is provided to take into account that marks indicating specific tax rates may vary from shop to shop.

15

[0027]

The shopping bag information is information indicating a threshold for identifying a charge for a shopping bag for holding purchased goods. Plastic bags and paper bags may be cited as examples of shopping bags. The shopping bag information is provided to take into account that the charge for shopping bags may vary from shop to shop.

[0028]

The issuing terminal 10 may also access a predetermined database storing designated goods information. The designated goods information is information indicating one or more designated character strings for identifying designated goods for which the tax exemption category is set at a predetermined value. This predetermined value is assumed to be "consumable goods" in the description which follows. For example, individual designated character strings are character strings associated with a name or category of goods. The designated character string may be stated using a regular expression. The designated goods information is provided to take into account that a specific tax exemption category may be set for specific goods.

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[0029]

The purchase record information stored in the purchase record database 40 is electronic data indicating information of individual purchase procedures. In one
5 example, data items in data records of the purchase record information include a purchase record ID, user information, and purchase information.

[0030]

10 The purchase record ID is an identifier for uniquely identifying individual items of purchase record information.

[0031]

15 The user information is information indicating a user who purchased tax-free goods. In one example, data items of the user information include name, nationality, date of birth, date of landing, passport number, residence status, and intended departure date. The example in the present
20 disclosure describes a passport as the user's identity document. However, another identity document legally recognized within the territory may be used instead of a passport, for example the identity document may be another type of document such as an entry certificate.

25

[0032]

The purchase information is information relating to the purchase procedure in the relevant shop. In one example, the purchase information includes: the shop ID, shop name,
30 purchase date, purchase time, receipt number, total purchase amount of general goods, total purchase amount of consumable goods, and purchase details. The purchase details include the tax exemption category, brand name, quantity, unit price, purchase amount, and specific tax
35 rate category for each of the one or more purchased goods. The receipt number is an identifier uniquely identifying the purchase receipt at the relevant shop. The purchase amount is normally an amount obtained by multiplying the quantity by the unit price. The specific tax rate

category is information indicating the specific tax rate applied to the purchased goods. The specific tax rate category may be information indicating at least whether or not the specific tax rate is applied to the purchased goods, or may be information further indicating the type of specific tax rate applied (the type of tax rate value).

[0033]

[Purchase Receipt]

Fig. 4 shows an example of the purchase receipt. A purchase receipt 200 shown in this example includes: a shop name 201, a shop address 202, a shop telephone number 203, a receipt number 204, a purchase date (purchase receipt issue date 205), purchase details 206, a subtotal (tax-exclusive total amount) 207, a subtotal breakdown 208, a total (tax-inclusive total amount) 209, and an amount of tax 210.

[0034]

The purchase details 206 constitute information relating to each of the one or more purchased goods. The purchase details 206 in this example indicate that a user purchased five items of chocolate G, one wristwatch X, and five cosmetic items Q. The "*" mark in the chocolate G section indicates that a reduced tax rate (specific tax rate) has been applied to the chocolate G. The purchase receipt 200 does not display the number of goods purchased if the number purchased is 1. The amounts in the purchase details 206 are prices exclusive of tax. The subtotal breakdown 208 indicates the tax-exclusive total amount and the amount of tax at each tax rate (for each of a standard tax rate of 10% and a reduced tax rate of 8%).

[0035]

[System Operations]

Operations of the issuing terminal 10 will be described with reference to fig. 5 as an example of the tax exemption method according to the present disclosure.

Fig. 5 is a flowchart showing operations thereof as a processing flow S1.

[0036]

5 In step S11, the user processing unit 11 acquires the user information. The user causes a reader such as a scanner or a camera to read in the user's own passport, and the user processing unit 11 acquires information of the passport which has been read in. The passport reader
10 may be a component of the issuing terminal 10. Alternatively, a user terminal such as a smartphone may function as a reader, and the user processing unit 11 may receive the passport information from the user terminal. The user processing unit 11 may require additional
15 information from the user other than passport information, and may acquire the additional information which has been input, as necessary. The user processing unit 11 acquires the user information including at least the passport information, and further including the additional
20 information acquired, as necessary.

[0037]

In step S12, the receipt processing unit 12 acquires receipt data for each of one or more purchase procedures
25 undertaken by the user, that is, for each of one or more purchase receipts in the user's possession. The receipt data is obtained by performing character recognition with respect to the purchase receipt showing the one or more purchased goods purchased at the relevant shop. The
30 character recognition may be achieved by means of optical character recognition (OCR), for example. The user causes the reader such as a scanner or camera to read in the purchase receipt, and the receipt processing unit 12 acquires the receipt data which has been read in. The
35 purchase receipt reader may be a component of the issuing terminal 10. Alternatively, a user terminal such as a smartphone may function as the reader, and the receipt processing unit 12 may receive the receipt data from the user terminal. In one example, the receipt processing

unit 12 acquires receipt data which has been recorded in accordance with a predetermined notational system for representing individual data objects by means of key-value pairs. JSON may be cited as an example of such a
5 notational system.

[0038]

In step S13, the receipt processing unit 12 generates purchase information based on the receipt data. The
10 details of this processing will be described with reference to fig. 6. Fig. 6 is a flowchart showing an example of this processing.

[0039]

15 In step S131, the receipt processing unit 12 selects the receipt data of one purchase receipt from the receipt data of the one or more purchase receipts acquired.

[0040]

20 In step S132, the receipt processing unit determines whether or not the purchase date on the purchase receipt is valid. The receipt processing unit 12 establishes the purchase date recorded on the purchase receipt, based on the selected receipt data. The receipt processing unit
25 12 compares the purchase date with a system date. If the purchase date matches the system date (i.e., the date of the day in question), the processing advances to step S133. If the purchase date differs from the system date, then the receipt processing unit 12 displays on a display
30 device a date error indicating that the tax exemption procedure cannot be performed for the selected receipt data (i.e., for the selected purchase receipt). If it has not been possible to establish the purchase date based on the receipt data, then the receipt processing unit 12
35 may enquire of the user whether or not the purchase date in the selected receipt data is the date of the day in question (i.e., the system date). If the user selects that the purchase date is the date of the day in question, the receipt processing unit 12 determines that the

purchase date is valid and the processing advances to step S133. If the user selects that the purchase date is not the date of the day in question, the receipt processing unit 12 displays a date error on the display device. When the date error is displayed, the receipt processing unit 12 terminates processing of the selected receipt data and the processing returns to step S131.

[0041]

10 In step S133, the receipt processing unit 12 establishes the shop identifier of the relevant shop. As described above, the shop data shows the correspondence between telephone number and shop identifier for each of the plurality of shops. The receipt processing unit 12
15 establishes the telephone number based on the selected receipt data. The receipt processing unit 12 then looks up the shop identifier corresponding to the telephone number by referring to the shop database 20. For example, the receipt processing unit 12 extracts a shop ID-shop
20 name pair as the shop identifier. If the shop data includes only one shop identifier corresponding to the established telephone number, the receipt processing unit 12 establishes that single shop identifier as the shop identifier of the relevant shop. On the other hand, if
25 the shop data includes two or more shop identifiers corresponding to the established telephone number, the receipt processing unit 12 establishes the shop identifier stated on the purchase receipt from the receipt data as a reference identifier. For example, the
30 receipt processing unit 12 establishes the shop ID and/or the shop name as a reference identifier. The receipt processing unit 12 establishes, as the shop identifier of the relevant shop, one shop identifier corresponding to the reference identifier from the two or more shop
35 identifiers extracted from the shop data. The shop identifier corresponding to the reference identifier is, for example, a shop identifier matching the reference identifier, a shop identifier including the reference

identifier, or the shop identifier which is most similar to the reference identifier.

[0042]

5 If a telephone number cannot be established on the basis of the selected receipt data, the receipt processing unit 12 may establish the shop identifier of the relevant shop using the reference identifier. The receipt processing unit 12 establishes one shop identifier corresponding to
10 the reference identifier as the shop identifier of the relevant shop by referring to the shop database 20.

[0043]

In step S134, the receipt processing unit 12 identifies
15 details on the purchase receipt (purchase details) based on the selected receipt data.

[0044]

Fig. 7 is a flowchart showing an example of the processing
20 to identify details. In step S1341, the receipt processing unit 12 acquires the information required to identify the details on the purchase receipt by referring to the shop database 20. The receipt processing unit 12 extracts from the shop data the tax exemption category
25 information, tax display information, tax rate information, specific tax rate information, and shopping bag information corresponding to the shop identifier established (that is, the relevant shop which has been identified).

30

[0045]

In step S1342, the receipt processing unit 12 extracts information relating to one item of purchased goods from the receipt data. This information will also be referred
35 to below as purchased goods information. For example, the purchased goods information includes at least one of the brand name, the price, a discount amount, the number of goods, and the specific tax rate mark.

[0046]

In step S1343, the receipt processing unit 12 implements processing relating to discounts. The receipt processing unit 12 determines whether or not a discount has been
5 applied to the purchased goods, based on the purchased goods information. For example, the receipt processing unit 12 implements this determination processing based on a predetermined rule relating to a discount display. This rule may be set so that a determination can be made
10 whether the discount is shown as a positive or a negative value. Alternatively, the rule may be set to determine whether or not a currency unit is added to the discount. When a discount is not applied, the receipt processing unit 12 establishes the extracted price as the price of
15 the purchased goods without any modification. On the other hand, when a discount is applied, the receipt processing unit 12 establishes an amount obtained by subtracting the discount from the price as the final price of the purchased goods. That is to say, the receipt
20 processing unit 12 establishes the final price of the purchased goods in a format with the discount applied.

[0047]

In step S1344, the receipt processing unit 12 implements
25 processing relating to shopping bags. The receipt processing unit 12 determines, on the basis of the purchased goods information, whether or not the price established is equal to or less than the threshold indicated in the shopping bag information. If the price
30 is greater than the threshold, the receipt processing unit 12 determines that the purchased goods do not constitute a shopping bag. If the price is equal to or less than the threshold, the receipt processing unit 12 determines that the purchased goods constitute a shopping
35 bag.

[0048]

In step S1345, the receipt processing unit 12 implements processing relating to the specific tax rate. When the

purchased goods information includes a mark indicated in the specific tax rate information, the receipt processing unit 12 determines that a specific tax rate is applied to the purchased goods. That is to say, the receipt
5 processing unit 12 identifies purchased goods to which the specific tax rate is applied. The receipt processing unit 12 then associates the specific tax rate with the purchased goods. On the other hand, if the purchased goods information does not include this mark, the receipt
10 processing unit 12 determines that a specific tax rate is not applied to the purchased goods.

[0049]

In step S1346, the receipt processing unit 12 establishes
15 the number of purchased goods. If the number of purchased goods is 1, as on the purchase receipt 200 described above, that number is sometimes not displayed on the purchase receipt. If the purchased goods information does not include a number, the receipt processing unit 12
20 establishes the number of purchased goods as 1. If the purchased goods information includes a number, the receipt processing unit 12 establishes that number without further modification.

25 [0050]

In step S1347, the receipt processing unit 12 implements processing relating to the tax display. The receipt processing unit 12 selects either the tax-exclusive display or the tax-inclusive display as a tax display
30 format on the purchase receipt, based on the tax display information. If the tax display information gives a tax-exclusive display, the receipt processing unit 12 determines that the price established is the tax-exclusive price. If the tax display information gives a
35 tax-inclusive display, the receipt processing unit 12 determines that the price established is the tax-inclusive price.

[0051]

In step S1348, the receipt processing unit 12 establishes the tax rate on the purchased goods. In one example, the receipt processing unit 12 establishes the default value indicated in the tax rate information as the tax rate on the purchased goods, excluding the following exceptions.

5 The first exemption is when a specific tax rate is applied to the purchased goods as described above. The second exemption is that when the purchased goods constitute a shopping bag, the receipt processing unit 12 establishes

10 a standard tax rate as the tax rate on the purchased goods, regardless of the tax rate information.

[0052]

In step S1349, the receipt processing unit 12 establishes the tax exemption category of the purchased goods. In one example, the receipt processing unit 12 establishes the tax exemption category indicated in the tax exemption category information as the tax exemption category of the purchased goods, excluding the following exceptions. The

20 first exemption is that when a specific tax rate has been applied to the purchased goods, the receipt processing unit 12 establishes the tax exemption category of the purchased goods as "consumable goods". The second exception is that when the purchased goods constitute a

25 shopping bag, the receipt processing unit 12 establishes the tax exemption category of the purchased goods as "general goods", which is the tax exemption category corresponding to shopping bags. The third exemption is that when the brand name (name of the purchased goods)

30 includes any designated character string indicated in the designated goods information stored in a predetermined database, i.e., when purchased goods including a designated character string have been identified, the receipt processing unit 12 sets the tax exemption

35 category of the purchased goods as the predetermined value for "consumable goods" which is the tax exemption category corresponding to the designated goods information.

[0053]

As indicated in step S1350, the receipt processing unit 12 implements the processing of steps S1342-S1349 for each of the one or more purchased goods indicated in the selected receipt data. The processing returns to step S1342 if there are any purchased goods still to be processed (NO in step S1350). In the repeat of step S1342, the receipt processing unit 12 extracts from the receipt data the purchased goods information relating to the next purchased goods. In the repeat of steps S1343-S1349, the receipt processing unit 12 implements the identifying and determination processing for the next purchased goods. Step S134 ends when all of the purchased goods indicated in the selected receipt data have been processed (YES in step S1350).

[0054]

Returning to fig. 6, in step S135, the receipt processing unit 12 establishes the validity of the total amount established from the receipt data.

[0055]

Based on the selected receipt data, the receipt processing unit 12 identifies at least one of the total amounts stated on the purchase receipt as a reference amount. The purchase receipt states the tax-inclusive total amount and/or the tax-exclusive total amount and total amount of tax. The receipt processing unit 12 identifies, as the reference amount, at least one of the tax-inclusive total amount, the tax-exclusive total amount, and the difference in amount between the tax-inclusive total amount and the total amount of tax, correspondingly with the text on such a purchase receipt.

[0056]

The receipt processing unit 12 extracts verification method information corresponding to the relevant shop identified, from the shop data, and selects the type of reference amount. The receipt processing unit 12

calculates the total of the prices of each of the one or more purchased goods, and compares that total with the reference amount corresponding to the selected type. If the total is consistent with the reference amount, the receipt processing unit 12 determines that the prices of the purchased goods and the total amount are matching in the receipt data. If the total is not consistent with the reference amount, the receipt processing unit 12 displays on the display device an amount error indicating that the amount-related information has possibly not been correctly read from the purchase receipt. An amount error can be generated if some of the details on the purchase receipt have not been correctly read.

15 [0057]

The receipt processing unit 12 may compare the total of the prices of each of the one or more purchased goods with each of the one or more reference amounts identified. That is to say, the receipt processing unit 12 compares the total with at least one of the tax-inclusive total amount, the tax-exclusive total amount, and the difference in amount. For example, the receipt processing unit 12 can use such a comparison method if there is no verification method information recorded at the relevant shop identified. If the total is consistent with any of the reference amounts, the receipt processing unit 12 determines that the prices of the purchased goods and the total amount are matching in the receipt data. If the total is inconsistent with any of the reference amounts, the receipt processing unit 12 displays an amount error on the display device.

[0058]

In step S136, the receipt processing unit 12 determines the validity of the total number of purchases established from the receipt data. The receipt processing unit 12 establishes the total number of purchases stated on the purchase receipt, based on the selected receipt data. The receipt processing unit 12 calculates the total of the

numbers of each of the one or more purchased goods, and compares that total with the total number of purchases established. If the total is consistent with the total number of purchases, the receipt processing unit 12
5 determines that the number of purchased goods and the total number of purchases are matching in the receipt data. If the total is not consistent with the total number of purchases, the receipt processing unit 12 displays on the display device a number error indicating that the
10 number-related information has possibly not been correctly read from the purchase receipt. Similarly to an amount error, a number error can also be generated if some of the details on the purchase receipt have not been correctly read.

15

[0059]

In step S137, the receipt processing unit 12 generates purchase information. The receipt processing unit 12 may set unmodified values indicated in the receipt data for
20 each of the data items in the purchase information, or may set these values based on details identified on the purchase receipt (i.e., the result of step S134).

[0060]

25 If the prices of each of the one or more purchased goods were established as tax-exclusive prices, the receipt processing unit 12 calculates, for each of the one or more purchased goods, the tax-inclusive prices of those purchased goods, based on the price established and the
30 tax rate established. If the prices of each of the one or more purchased goods were established as tax-inclusive prices, the receipt processing unit 12 calculates, for each of the one or more purchased goods, the tax-exclusive prices of those purchased goods, based on the
35 price established and the tax rate established. Furthermore, the receipt processing unit 12 calculates a total purchase amount of general goods and a total purchase amount of consumable goods. The receipt

processing unit 12 generates the purchase information so as to include these calculation results.

[0061]

5 The receipt processing unit 12 generates purchase information indicating the established shop identifier (i.e., the shop identifier of the relevant shop), and the tax-exclusive price, tax-inclusive price, tax exemption category and tax rate for each of the one or more
10 purchased goods. One of the tax-exclusive price and the tax-inclusive price is established according to the tax display format, and the other is calculated using the established price and tax rate. The purchase information shows the tax-exclusive price and the tax-inclusive price
15 of purchased goods to which a discount has been applied in a format with the discount applied. If purchased goods to which a specific tax rate is applied have been identified, the purchase information shows the correspondence between those purchased goods and the
20 specific tax rate. The purchase information may show the tax exemption category for shopping bags.

[0062]

As described above, the receipt processing unit 12
25 establishes the tax exemption category of each of the one or more purchased goods purchased at the relevant shop identified, by referring to the shop database 20 (shop data). The processing to establish the tax exemption category includes a case in which the tax exemption
30 category of the purchased goods is established on the basis of the tax exemption category information, rather than using the specific tax rate information, shopping bag information, and designated goods information. This establishing processing also includes a case in which the
35 tax exemption category is established by using at least one of the specific tax rate information, shopping bag information, and designated goods information, for at least one of the one or more purchased goods.

[0063]

As described above, the receipt processing unit 12 establishes the tax rate for each of the one or more purchased goods purchased at the relevant shop identified, by referring to the shop database 20 (shop data). The processing to establish the tax rate includes a case in which the tax rate for the purchased goods is established on the basis of the tax rate information, rather than using the specific tax rate information and shopping bag information. This establishing processing also includes a case in which the tax rate is established by using at least one of the specific tax rate information and the shopping bag information, for at least one of the one or more purchased goods.

15

[0064]

As indicated in step S138, the receipt processing unit 12 implements the processing of steps S131-S137 for the receipt data on all of the purchase receipts acquired. The processing returns to step S131 if there is any receipt data still to be processed (NO in step S138). In the repeat of step S131, the receipt processing unit 12 selects the receipt data on the next purchase receipt. In the repeat of steps S132-S137, the receipt processing unit 12 implements the processing for the selected receipt data. Step S13 ends when all of the receipt data has been processed (YES in step S138).

[0065]

Returning to fig. 5, the display control unit 13 displays the user information and the purchase information on the display device in step S14. Fig. 8 shows an example of the user information and purchase information display. In this example, the display control unit 13 displays a screen 300, given in the English language, on the display device. This screen 300 includes: a passport information area 310 displaying passport information which may be used as user information; a purchase information area 320 displaying the purchase information; and an issue button

330 for generating and sending the purchase record information.

[0066]

- 5 The passport information area 310 shows the passport information (e.g., user name and date of birth) read from a passport.

[0067]

- 10 The purchase information area 320 includes: a combo box 321 for selecting the relevant shop; a details area 322 showings details of purchases at the relevant shop selected; and a summary area 323 showing a summary of purchases at the relevant shop selected. The details area
15 322 shows: the shop name (SHOP), the receipt date (RECEIPT DATE), a receipt identification number (RECEIPT NO.), the name of the purchased goods (PRODUCT), the number of purchased goods (QTY), the tax-exclusive price of the purchased goods (NET AMT.), the tax-inclusive
20 price of the purchased goods (GROSS AMT.), the tax rate on the purchased goods (VAT), and the tax exemption category of the purchased goods (CONSUMABLE). In this example, the tax exemption category is indicated by a toggle switch, showing "consumable goods" when the toggle
25 switch is ON and showing "general goods" when the toggle switch is OFF. The summary area 323 shows: the tax-exclusive total amount for general goods (NON-CONSUMABLE TOTAL), the tax-exclusive total amount for consumable goods (CONSUMABLE TOTAL), the total tax-exclusive amount
30 (PURCHASE TOTAL), the total amount of tax (VAT TOTAL), the fee (FEE) for the tax exemption procedure which is paid to the TRO, and the amount of tax to be refunded to the user (REFUND TOTAL). The information displayed in the purchase information area 320 corresponds to the purchase
35 receipt 200 shown in fig. 4.

[0068]

Returning to fig. 5, in step S15, the record generating unit 114 generates, for each of the one or more purchase

receipts, purchase record information corresponding to the relevant purchase receipt, based on the user information and the purchase information. For example, the record generating unit 14 generates purchase record
5 information in response to a predetermined user operation.

[0069]

In step S16, the record generating unit 14 sends the purchase record information to the management server 30
10 at a predetermined timing. The management server 30 receives the purchase record information and stores the purchase record information in the purchase record database 40. Transmission of the purchase record information to the management server 30 is an example of
15 processing to output purchase record information in order to store this purchase record information in the purchase record database 40.

[0070]

20 In the example of fig. 8, an operator such as the user or a member of staff clicks or taps on the issue button 330 after confirming the information on the screen 300, and the record generating unit 14 generates and sends the purchase record information in response to this user
25 operation (steps S15 and S16).

[0071]

The management server 30 sends the purchase record information in the purchase record database 40 to the NTA
30 system 50 at a predetermined timing. The NTA system 50 replies to the management server 30 with a reception result after checking the purchase record information. The purchase record information received by the NTA system 50 can be referenced by customs officials. The
35 user can benefit from a predetermined tax exemption procedure based on this purchase record information.

[0072]

[Variant Example]

Features relating to the present disclosure were described in detail above based on various examples. However, the present disclosure is not limited to the examples above. The features relating to the present disclosure may be modified in various ways within a scope that does not depart from the essential point thereof.

[0073]

In the present disclosure, the expression "the at least one processor: implements first processing, implements second processing,... and implements nth processing.", or corresponding expressions, is a concept including cases where the agent implementing the first processing to the nth processing (i.e., the processor) changes partway through. That is to say, this expression describes a concept including both a case in which the same processor implements all of the n processing operations, and a case in which the processor changes according to an arbitrary plan during the n processing operations.

20

[0074]

The processing sequence in the method implemented by the at least one processor is not limited to the examples described above. For example, some of the steps mentioned above may be omitted, and the steps may be implemented in a different order. Furthermore, any two or more of the steps mentioned above may be combined, and some of the steps may be amended or deleted. Alternatively, other steps may also be implemented in addition to the steps above.

30

[0075]

For the processing to identify details on the purchase receipt (step S134), for example, the receipt processing unit 12 need not implement at least one of the abovementioned steps S1343-S1349, for example the receipt processing unit 12 may implement only one of steps S1343-S1349.

35

[0076]

As another example relating to the processing to identify details on the purchase receipt (step S134), the receipt processing unit 12 may establish the category of goods to which the purchased goods belong in conjunction with at least one of the abovementioned steps S1343-S1349. The category of goods refers to information indicating the type of goods, such as "foodstuffs/beverages", "clothing and accessories", "cosmetics", and "home appliances". In this case, the receipt processing unit 12 establishes the category of goods corresponding to each item of goods by referring to a predetermined goods database which stores consumption categories of individual items of goods. The receipt processing unit 12 then generates purchase information further including the category of goods for each of the one or more purchased goods. Based on this purchase information, the record generating unit 14 generates and outputs purchase information further including the category of goods for each of the one or more purchased goods.

[0077]

The tax exemption system according to the present disclosure may be applied to a computer or computer system other than the issuing terminal 10. In this regard, the tax exemption system need not implement the processing associated with the user information, and need not implement the processing relating to the purchase record information.

30

[0078]

When the computer system or the computer compares magnitude relationships of two values, either of the two criteria "equal to or greater than" and "greater than" may be used, and either of the two criteria "equal to or less than" and "less than" may be used.

35

[0079]

[Additional Nodes]

The present disclosure also includes the aspects indicated below, as will be understood from the various examples described above.

5 (Additional Note 1)

A tax exemption system comprising at least one processor, wherein

the at least one processor:

10 acquires receipt data obtained by performing character recognition with respect to a purchase receipt indicating one or more purchased goods purchased at a relevant shop,

establishes a price of each of the one or more purchased goods based on the receipt data,

15 identifies the relevant shop based on the receipt data,

establishes a tax exemption category of each of the one or more purchased goods purchased at the relevant shop identified, by referring to a shop database which
20 stores shop data including tax exemption category information indicating the tax exemption category of goods for each of a plurality of shops, and

generates purchase information indicating the established price and the established tax exemption
25 category of each of the one or more purchased goods.

(Additional Note 2)

The tax exemption system disclosed in Additional Note 1, wherein

30 the shop data further includes tax display information indicating, for each of the plurality of shops, whether the price displayed on the purchase receipt is a tax-exclusive display or a tax-inclusive display, and

35 the at least one processor:

selects either the tax-exclusive display or the tax-inclusive display as a tax display format on the purchase receipt, based on the tax display information corresponding to the relevant shop identified, and

generates purchase information indicating either a tax-exclusive price or a tax-inclusive price as the established price for each of the one or more purchased goods, based on the receipt data and the selected tax display format.

(Additional Note 3)

The tax exemption system disclosed in Additional Note 1 or 2, wherein

the shop data further includes tax rate information indicating, for each of the plurality of shops, a default value of a tax rate on goods sold at those shops, and the at least one processor:

establishes the tax rate on the one or more purchased goods based on the receipt data and the tax rate information corresponding to the relevant shop identified, and

generates purchase information further indicating the tax rate established for each of the one or more purchased goods.

(Additional Note 4)

The tax exemption system disclosed in any one of Additional Notes 1 to 3, wherein

the at least one processor:

identifies, on the basis of the receipt data, at least one reference amount which is used to check a total amount and is based on text on the purchase receipt, where the at least one reference amount is at least one of a tax-inclusive total amount, a tax-exclusive total amount, and a difference in amount between the tax-inclusive total amount and a total amount of tax,

calculates a total of the prices of each of the one or more purchased goods, and

displays an amount error on a display device if the calculated total differs from any of the at least one reference amounts identified.

(Additional Note 5)

The tax exemption system disclosed in Additional Note 4, wherein

the shop data further includes verification method information indicating which of the tax-inclusive total amount, the tax-exclusive total amount, or the difference in amount, is the reference amount type for each of the plurality of shops, and

the at least one processor:

selects the identified reference amount type based on the verification method information corresponding to the relevant shop identified, and

displays an amount error if the calculated total differs from the reference amount corresponding to the selected type.

15

(Additional Note 6)

The tax exemption system disclosed in any one of Additional Notes 1 to 5, wherein

the at least one processor:

establishes the number of each of the one or more purchased goods based on the receipt data,

calculates the total of the numbers established for each of the one or more purchased goods, and

displays a number error on the display device if the calculated total differs from a total number of purchases stated on the purchase receipt and indicated by the receipt data.

25
(Additional Note 7)

30 The tax exemption system disclosed in any one of Additional Notes 1 to 6, wherein

the shop data further includes, for each of the plurality of shops, a correspondence between a telephone number of the relevant shop and a shop identifier uniquely identifying the relevant shop, and

35 the at least one processor:

establishes the telephone number based on the receipt data,

establishes the shop identifier corresponding to the established telephone number as the shop identifier of the relevant shop, based on the shop data, and

displays on the display device purchase information
5 further indicating the shop identifier established.

(Additional Note 8)

The tax exemption system disclosed in Additional Note 7, wherein

10 if the shop data includes two or more shop identifiers corresponding to the established telephone number, the at least one processor:

establishes the shop identifier stated on the purchase receipt from the receipt data as a reference
15 identifier, and

establishes one of the two or more shop identifiers corresponding to the reference identifier as the shop identifier of the relevant shop.

20 (Additional Note 9)

The tax exemption system disclosed in any one of Additional Notes 1 to 8, wherein

the at least one processor:

establishes a purchase date stated on the purchase
25 receipt, based on the receipt data, and

displays a date error on the display device if the purchase date differs from a system date.

(Additional Note 10)

30 The tax exemption system disclosed in any one of Additional Notes 1 to 9, wherein

the shop data further includes, for each of the plurality of shops, specific tax rate information indicating a specific tax rate mark displayed on the
35 purchase receipt, and

the at least one processor:

determines whether or not there are purchased goods to which the specific tax rate is applied among the one or more purchased goods, based on the specific tax rate

information corresponding to the relevant shop identified,
and,

if purchased goods to which the specific tax rate
is applied have been identified, generates purchase
5 information further indicating a correspondence between
the identified purchased goods and the specific tax rate.

(Additional Note 11)

The tax exemption system disclosed in any one of
10 Additional Notes 1 to 10, wherein

the at least one processor:

accesses a predetermined database which stores
designated goods information indicating one or more
designated character strings for identifying designated
15 goods for which the tax exemption category is set at a
predetermined value,

determines whether or not there are purchased goods
including the designated character string corresponding
to the relevant shop identified among the one or more
20 purchased goods, and,

if purchased goods including the designated
character string have been identified, generates purchase
information indicating the predetermined value as the tax
exemption category of the purchased goods identified.

25

(Additional Note 12)

The tax exemption system disclosed in any one of
Additional Notes 1 to 11, wherein

the at least one processor:

30 determines, for each of the one or more purchased
goods, whether or not a discount has been applied to the
relevant purchased goods, and

generates, for purchased goods to which the discount
has been applied, purchase information indicating a tax-
35 exclusive price and a tax-inclusive price in a format
with the discount applied.

(Additional Note 13)

The tax exemption system disclosed in any one of Additional Notes 1 to 12, wherein

the shop data further includes shopping bag information indicating, for each of the plurality of shops, a threshold for identifying a charge for a carrier bag for holding the purchased goods, and

the at least one processor:

determines whether or not the receipt data includes a price identified as equal to or less than the threshold corresponding to the relevant shop,

if a price equal to or less than the threshold has been identified, determines that the purchased goods corresponding to the identified price constitute a shopping bag, and

generates purchase information further including the identified shopping bag and the tax exemption category corresponding to the identified shopping bag.

(Additional Note 14)

The tax exemption system disclosed in any one of Additional Notes 1 to 13, wherein

the at least one processor:

generates purchase record information corresponding to the purchase receipt based on the purchase information, and

outputs the purchase record information in order to store the purchase record information in a purchase record database.

(Additional Note 15)

A tax exemption method implemented by means of a tax exemption system comprising at least one processor, the tax exemption method comprising:

a step of acquiring receipt data obtained by performing character recognition with respect to a purchase receipt indicating one or more purchased goods purchased at a relevant shop;

a step of establishing a price of each of the one or more purchased goods based on the receipt data;

a step of identifying the relevant shop based on the receipt data;

5 a step of establishing a tax exemption category of each of the one or more purchased goods purchased at the relevant shop identified, by referring to a shop database which stores shop data including tax exemption category information indicating the tax exemption category of goods for each of a plurality of shops; and

10 a step of generating purchase information indicating the established price and the established tax exemption category of each of the one or more purchased goods.

(Additional Note 16)

15 A tax exemption program for causing a computer to implement:

a step of acquiring receipt data obtained by performing character recognition with respect to a purchase receipt indicating one or more purchased goods purchased at a relevant shop;

20 a step of establishing a price of each of the one or more purchased goods based on the receipt data;

a step of identifying the relevant shop based on the receipt data;

25 a step of establishing a tax exemption category of each of the one or more purchased goods purchased at the relevant shop identified, by referring to a shop database which stores shop data including tax exemption category information indicating the tax exemption category of goods for each of a plurality of shops; and

30 a step of generating purchase information indicating the established price and the established tax exemption category of each of the one or more purchased goods.

[0080]

35 According to Additional Notes 1, 15 and 16, the relevant shop is identified on the basis of receipt data obtained by means of character recognition with respect to the purchase receipt, and the tax exemption category of purchased goods purchased at the relevant shop is

established by referring to shop data indicating the tax exemption categories of goods for the individual shops. Purchase information indicating the tax exemption category and price of the purchased goods is then
5 generated. The tax exemption categories of goods which may vary from shop to shop are established by using a shop database, and information for the tax exemption procedure can therefore be accurately acquired on the
10 basis of results of character recognition from the purchase receipt.

[0081]

According to Additional Note 2, a tax display format on the purchase receipt is selected by referring to shop
15 data indicating the tax display format for individual shops. It is then established whether the prices of individual purchased goods are tax-exclusive prices or tax-inclusive prices, based on the selected tax display format. The tax display format which may vary from shop
20 to shop is established by using the shop database, so information for the tax exemption procedure can be accurately acquired.

[0082]

25 According to Additional Note 3, the tax rate of individual purchased goods is established by referring to shop data indicating a default value of the tax rate for individual shops. The default value of the tax rate at the shop may vary for a number of reasons, such as the
30 form (type) of shop, and the selection of goods at the shop. This default value is established by using the shop database, so information for the tax exemption procedure can be accurately acquired.

35 [0083]

According to Additional Note 4, the total of the prices of the purchased goods is compared with at least one reference amount stated on the purchase receipt (the reference amount being at least one of the tax-inclusive

total amount, the tax-exclusive total amount, and the difference in amount between the tax-inclusive total amount and the total amount of tax), and a check relating to the purchase amount can therefore be efficiently
5 carried out. Furthermore, an amount error is displayed if the total of the prices of the purchased goods differs from any of the reference amounts, so persons involved such as users can be prompted to take measures relating to processing of the purchase receipt, such as performing
10 character recognition again.

[0084]

According to Additional Note 5, the reference amount type is selected by referencing the shop data which indicates,
15 for the individual shops, the type of reference amount which is compared with the total of the prices of the purchased goods. The format for displaying the total amount may vary from shop to shop, but the reference amount type is selected by using the shop database, so
20 the verification relating to the purchase amount can be more easily carried out.

[0085]

According to Additional Note 6, the total of the numbers
25 of purchased goods is compared with the total number of purchases stated on the purchase receipt, so the verification relating to the number of purchases can be efficiently carried out. Furthermore, a number error is displayed if the total of the numbers of purchased goods
30 differs from the total number of purchases, so the user can be prompted to take measures relating to processing of the purchase receipt, such as performing character recognition again.

35 [0086]

According to Additional Note 7, a shop identifier is established from the telephone number in the receipt data by referring to the shop data which includes correspondences between shop telephone numbers and shop

identifiers. Character recognition has relatively high accuracy for telephone numbers which consist of digits. The shop identifier is established by using the telephone number and the shop data, so information for the tax exemption procedure can be accurately acquired.

[0087]

According to Additional Note 8, if the shop data includes two or more shop identifiers corresponding to the telephone number of the shop, the shop identifier is finally established by also using the shop identifier stated on the purchase receipt (reference identifier). The shop identifier on the purchase receipt is used only if a single shop identifier cannot be established simply from the telephone number, for which character recognition has relatively high accuracy, whereby information for the tax exemption procedure can be accurately acquired.

[0088]

According to Additional Note 9, a date error is displayed if the purchase date differs from the system date (i.e., the date of the day in question). In one example, the tax exemption procedure cannot be used for a purchase receipt which is not processed on the day it was issued. By introducing a means for checking the validity of the purchase date, it is possible to pre-emptively prevent a situation in which the tax exemption procedure is carried out for an unsuitable purchase receipt.

30

[0089]

According to Additional Note 10, purchased goods to which a specific tax rate is applied are identified by referring to shop data indicating a specific tax rate mark for individual shops. The tax rate mark for which the display format on the purchase receipt may vary from shop to shop is established by using the shop database, so information for the tax exemption procedure can be accurately acquired.

[0090]

According to Additional Note 11, by referring to designated goods information indicating one or more
5 designated character strings for identifying goods for which the tax exemption category should be set at a predetermined value, purchased goods which should be set in such a way are identified. By using designated
10 character strings, it is possible to flexibly and accurately determine purchased goods for which the tax exemption category should be set.

[0091]

According to Additional Note 12, the prices of purchased
15 goods are displayed in a format that takes account of discounts applied. Accordingly, information for the tax exemption procedure can be accurately acquired even if prices of purchased goods which may be subject to the tax exemption procedure have been discounted.

20

[0092]

According to Additional Note 13, it is established whether or not the purchased goods include a shopping bag, by referring to shop data indicating a threshold for
25 identifying a shopping bag charge. The threshold for identifying a shopping bag, for which the price may vary from shop to shop, is provided as a data item in the shop data, thereby enabling information for the tax exemption procedure to be accurately acquired.

30

[0093]

According to Additional Note 14, purchase record information corresponding to the purchase receipt is generated and output on the basis of the generated
35 purchase information. Purchase information for the tax exemption procedure can be accurately acquired, and the purchase record information stored in the purchase record database can also be accurately prepared.

[Key to Symbols]

[0094]

10... Issuing terminal, 11... User processing unit, 12...
Receipt processing unit, 13... Display control unit, 14...
5 Record generating unit, 20... Shop database, 30... Management
server, 40... Purchase record database, 50... NTA system,
110... Tax exemption program, 200... Purchase receipt, 300...
Screen, 310... Passport information area, 320... Purchase
information area, 330... Issue button.

10

CLAIMS

1. Tax exemption system comprising at least one processor, wherein
 - 5 the at least one processor:
 - acquires receipt data obtained by performing character recognition with respect to a purchase receipt indicating one or more purchased goods purchased at a relevant shop,
 - 10 establishes a price of each of the one or more purchased goods based on the receipt data,
 - identifies the relevant shop based on the receipt data,
 - establishes a tax exemption category of each of the
 - 15 one or more purchased goods purchased at the relevant shop identified, by referring to a shop database which stores shop data including tax exemption category information indicating the tax exemption category of goods for each of a plurality of shops, and
 - 20 generates purchase information indicating the established price and the established tax exemption category of each of the one or more purchased goods.
2. Tax exemption system according to Claim 1, wherein
 - 25 the shop data further includes tax display information indicating, for each of the plurality of shops, whether the price displayed on the purchase receipt is a tax-exclusive display or a tax-inclusive display, and
 - 30 the at least one processor:
 - selects either the tax-exclusive display or the tax-inclusive display as a tax display format on the purchase receipt, based on the tax display information corresponding to the relevant shop identified, and
 - 35 generates purchase information indicating either a tax-exclusive price or a tax-inclusive price as the established price for each of the one or more purchased goods, based on the receipt data and the selected tax display format.

3. Tax exemption system according to Claim 1 or 2,
wherein

the shop data further includes tax rate information
5 indicating, for each of the plurality of shops, a default
value of a tax rate on goods sold at those shops, and
the at least one processor:

establishes the tax rate on the one or more
purchased goods based on the receipt data and the tax
10 rate information corresponding to the relevant shop
identified, and

generates purchase information further indicating
the tax rate established for each of the one or more
purchased goods.

15

4. Tax exemption system according to Claim 1 or 2,
wherein

the at least one processor:

identifies, on the basis of the receipt data, at
20 least one reference amount which is used to check a total
amount and is based on text on the purchase receipt,
where the at least one reference amount is at least one
of a tax-inclusive total amount, a tax-exclusive total
amount, and a difference in amount between the tax-
25 inclusive total amount and a total amount of tax,

calculates a total of the prices of each of the one
or more purchased goods, and

displays an amount error on a display device if the
calculated total differs from any of the at least one
30 reference amounts identified.

5. Tax exemption system according to Claim 4, wherein

the shop data further includes verification method
information indicating which of the tax-inclusive total
35 amount, the tax-exclusive total amount, or the difference
in amount, is the reference amount type for each of the
plurality of shops, and

the at least one processor:

selects the identified reference amount type based on the verification method information corresponding to the relevant shop identified, and

displays an amount error if the calculated total
5 differs from the reference amount corresponding to the selected type.

6. Tax exemption system according to Claim 1 or 2,
wherein
10 the at least one processor:
establishes the number of each of the one or more purchased goods based on the receipt data,
calculates the total of the numbers established for each of the one or more purchased goods, and
15 displays a number error on the display device if the calculated total differs from a total number of purchases stated on the purchase receipt and indicated by the receipt data.

20 7. Tax exemption system according to Claim 1 or 2,
wherein
the shop data further includes, for each of the plurality of shops, a correspondence between a telephone number of the relevant shop and a shop identifier
25 uniquely identifying the relevant shop, and
the at least one processor:
establishes the telephone number based on the receipt data,
establishes the shop identifier corresponding to the
30 established telephone number as the shop identifier of the relevant shop, based on the shop data, and
generates purchase information further indicating the shop identifier established.

35 8. Tax exemption system according to Claim 7, wherein
if the shop data includes two or more shop identifiers corresponding to the established telephone number, the at least one processor:

establishes the shop identifier stated on the purchase receipt from the receipt data as a reference identifier, and

establishes one of the two or more shop identifiers
5 corresponding to the reference identifier as the shop identifier of the relevant shop.

9. Tax exemption system according to Claim 1 or 2,
wherein
10 the at least one processor:

establishes a purchase date stated on the purchase receipt, based on the receipt data, and

displays a date error on the display device if the purchase date differs from a system date.
15

10. Tax exemption system according to Claim 1 or 2,
wherein

the shop data further includes, for each of the plurality of shops, specific tax rate information
20 indicating a specific tax rate mark displayed on the purchase receipt, and

the at least one processor:
determines whether or not there are purchased goods to which the specific tax rate is applied among the one
25 or more purchased goods, based on the specific tax rate information corresponding to the relevant shop identified, and,

if purchased goods to which the specific tax rate is applied have been identified, generates purchase
30 information further indicating a correspondence between the identified purchased goods and the specific tax rate.

11. Tax exemption system according to Claim 1 or 2,
wherein

35 the at least one processor:
accesses a predetermined database which stores designated goods information indicating one or more designated character strings for identifying designated

goods for which the tax exemption category is set at a predetermined value,

determines whether or not there are purchased goods including the designated character string corresponding to the relevant shop identified among the one or more purchased goods, and,

if purchased goods including the designated character string have been identified, generates purchase information indicating the predetermined value as the tax exemption category of the purchased goods identified.

12. Tax exemption system according to Claim 1 or 2, wherein

the at least one processor:

determines, for each of the one or more purchased goods, whether or not a discount has been applied to the relevant purchased goods, and

generates, for purchased goods to which the discount has been applied, purchase information indicating a tax-exclusive price and a tax-inclusive price in a format with the discount applied.

13. Tax exemption system according to Claim 1 or 2, wherein

the shop data further includes shopping bag information indicating, for each of the plurality of shops, a threshold for identifying a charge for a carrier bag for holding the purchased goods, and

the at least one processor:

determines whether or not the receipt data includes a price identified as equal to or less than the threshold corresponding to the relevant shop,

if a price equal to or less than the threshold has been identified, determines that the purchased goods corresponding to the identified price constitute a shopping bag, and

generates purchase information further including the identified shopping bag and the tax exemption category corresponding to the identified shopping bag.

14. Tax exemption system according to Claim 1 or 2,
wherein
the at least one processor:
5 generates purchase record information corresponding
to the purchase receipt based on the purchase information,
and
outputs the purchase record information in order to
store the purchase record information in a purchase
10 record database.

15. Tax exemption method implemented by means of a
tax exemption system comprising at least one
processor, the tax exemption method comprising:
15 a step of acquiring receipt data obtained by
performing character recognition with respect to a
purchase receipt indicating one or more purchased goods
purchased at a relevant shop;
a step of establishing a price of each of the one
20 or more purchased goods based on the receipt data;
a step of identifying the relevant shop based on the
receipt data;
a step of establishing a tax exemption category of
each of the one or more purchased goods purchased at the
25 relevant shop identified, by referring to a shop database
which stores shop data including tax exemption category
information indicating the tax exemption category of
goods for each of a plurality of shops; and
a step of generating purchase information indicating
30 the established price and the established tax exemption
category of each of the one or more purchased goods.

16. Tax exemption program for causing a computer to
implement:
35 a step of acquiring receipt data obtained by
performing character recognition with respect to a
purchase receipt indicating one or more purchased goods
purchased at a relevant shop;

a step of establishing a price of each of the one or more purchased goods based on the receipt data;

a step of identifying the relevant shop based on the receipt data;

5 a step of establishing a tax exemption category of each of the one or more purchased goods purchased at the relevant shop identified, by referring to a shop database which stores shop data including tax exemption category information indicating the tax exemption category of
10 goods for each of a plurality of shops; and

a step of generating purchase information indicating the established price and the established tax exemption category of each of the one or more purchased goods.