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[Appointed agent][Identification Number]100111969 [Patent attorney][Name]HIRANO,
Yukari
[Fee-related information]
[Deposit account number]034669
[Payment amount]21,000 yen
[The list of submitted documents]
[Document name]Description 1
[Document name]Drawings 1
[Document name]Abstract 1
[Necessity of proof] Necessary

[Document Name]Abstract

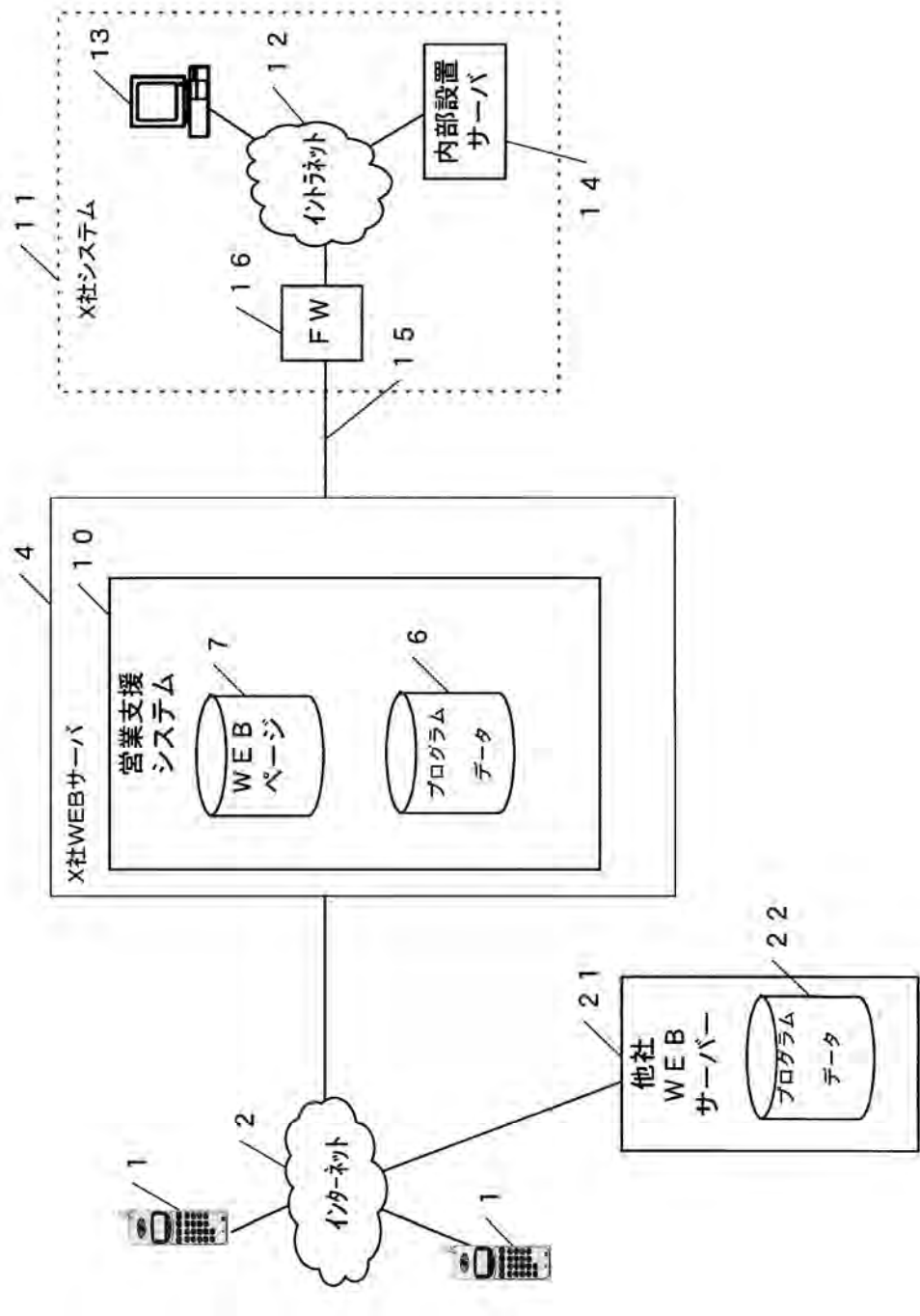
[Abstract]

[Problem]To execute various functions for business support in real time by using a portable telephone and the Internet.

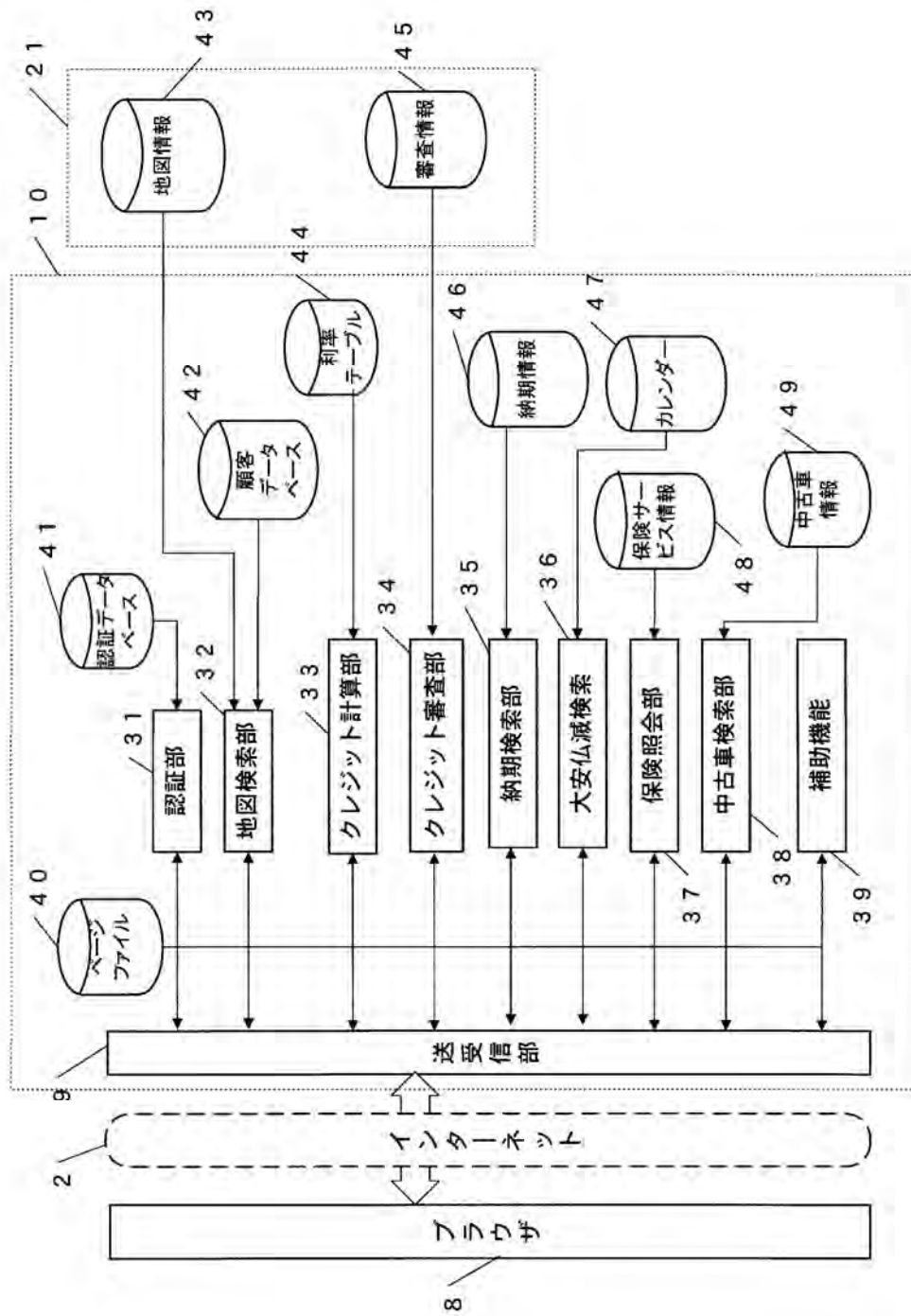
[Means for solving]The business support system is realized on a server which can be connected through the Internet to a cellular phone having a connection function to the Internet and a browser function for displaying information received through the Internet. A menu providing unit configured to provide a business support menu showing a list of business support functions to a browser of the mobile phone; a storage device configured to store a program for executing the business support function and data used by the program; and And a business support function execution means for starting a program corresponding to the selected business support function in response to the selection of the business support function from the provided business support menu and transmitting the processing result of the program to the browser. When the business support function is executed, a corresponding program can be downloaded.

[Selected drawing]Fig.2

[Fig. 1]



[Fig. 2]



[Fig. 3]

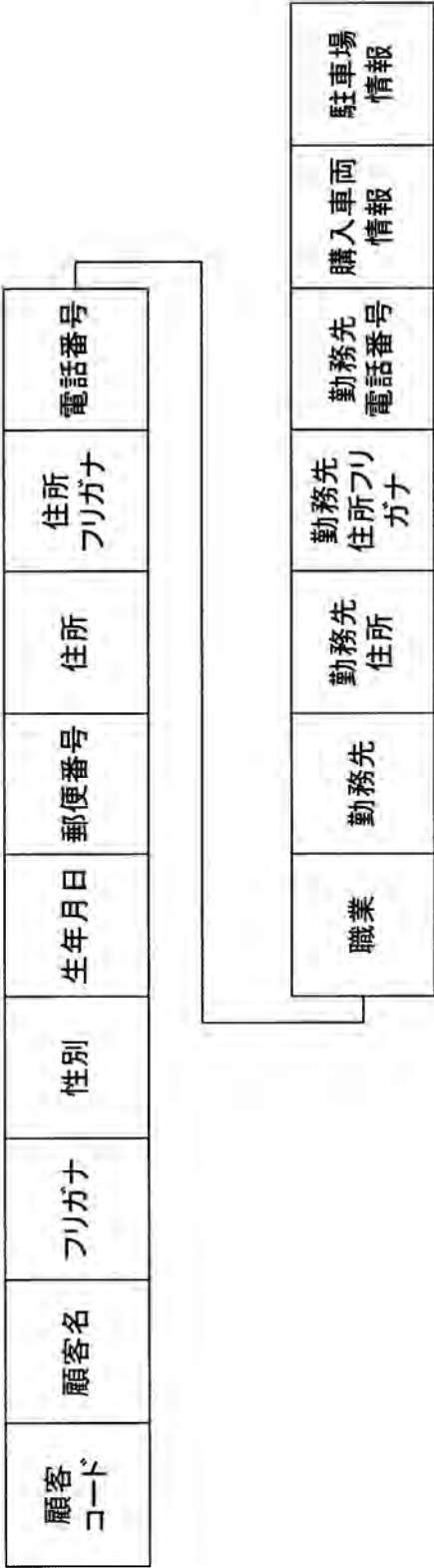
認証データベースのレコード

販売店 コード	拠点 コード	営業 コード	パス ワード
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[Fig. 4]

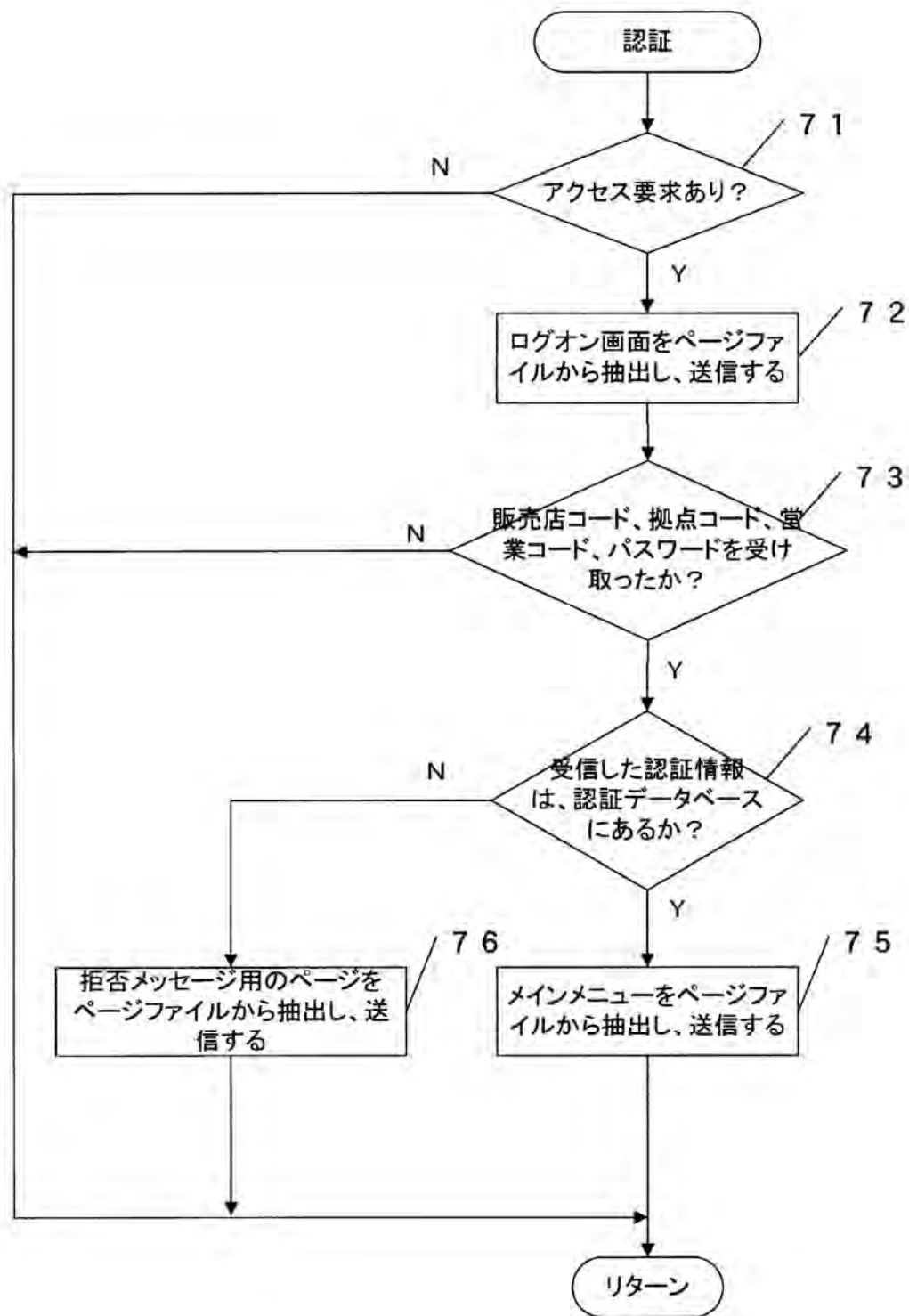
[Fig. 5]

顧客データベースのレコード



項目	支払回数	実質年率
省略時値	—	5.6
AAA車	36	5.6
BBB車	36	4.6
BBB車	60	4.6
CCC車	36	3.7

[Fig. 6]



[Fig. 7]

(a)

ログイン画面

販売店コード(7桁)

拠点コード(2桁)

営業コード(4桁)

パスワード(4桁)

送信

(b)

メインメニュー

地図検索

クレジット計算

クレジット審査

納期検索

大安／仏滅検索

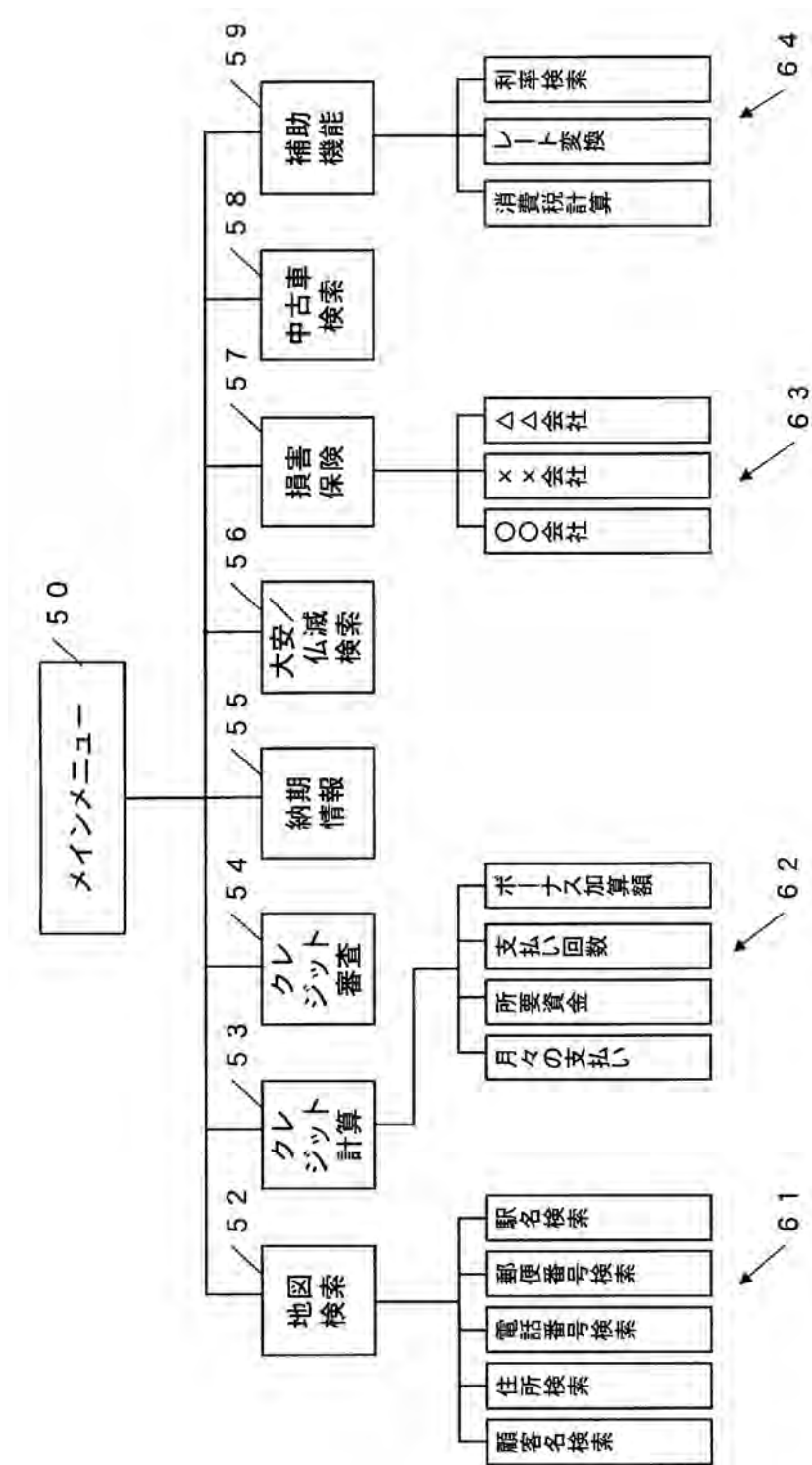
損害保険

中古車検索

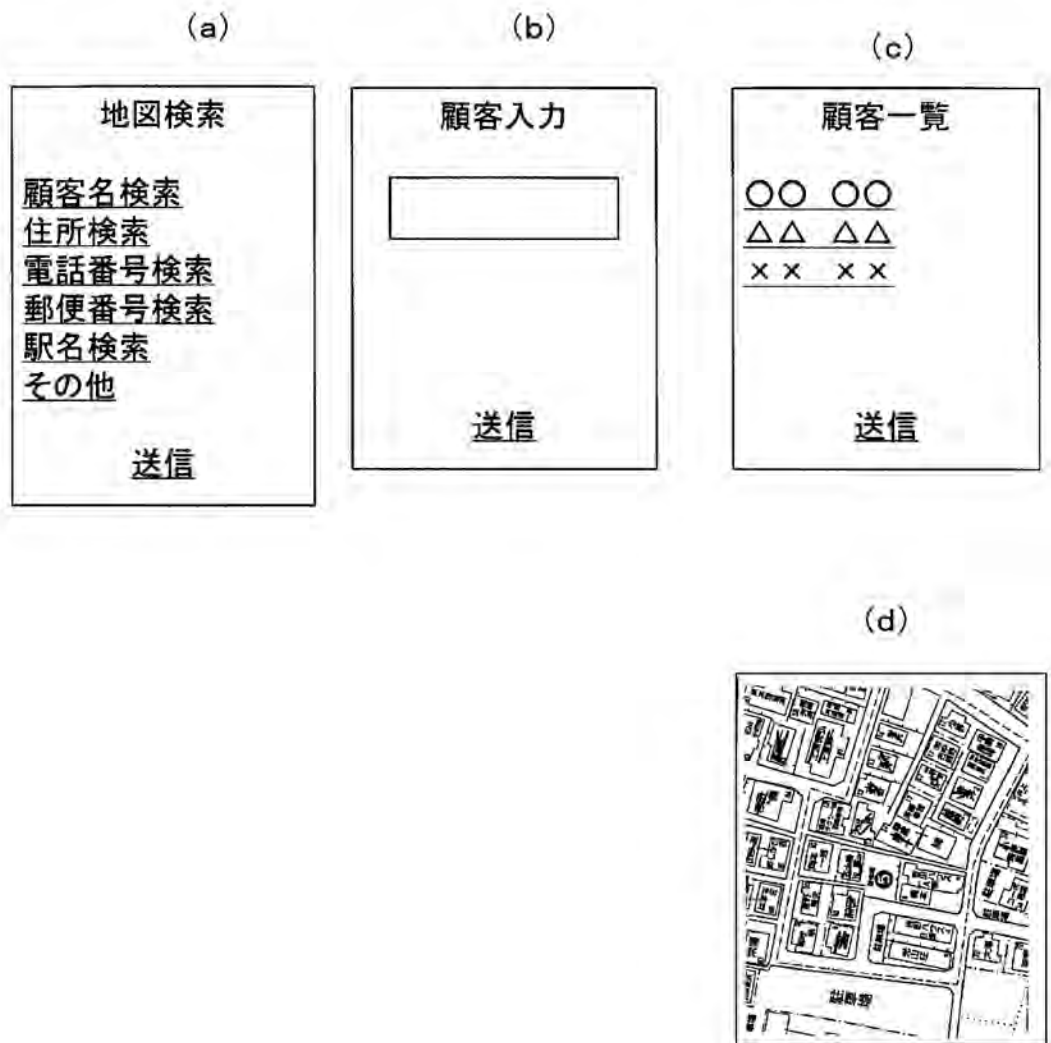
補助機能

送信

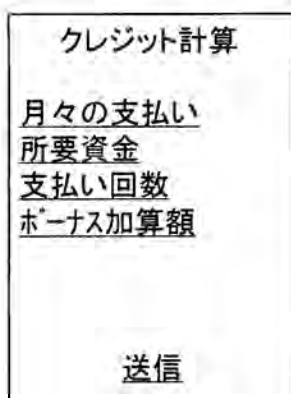
[Fig. 8]



[Fig. 9]



[Fig. 10]



[Fig. 11]

[Fig. 12]

(a)

月々の支払い

支払い H12 ▼ 06 ▼

実質年率 5.6 %

資金 円

支払回数 3 ▼ 回(選択)

回(任意)

ボーナス加算 YES ▼

初回ボーナススキップ YES ▼

ボーナス 月 円

月 円

送信

(c)

所要資金

支払い H12 ▼ 06 ▼

実質年率 5.6 %

月々 円

支払回数 3 ▼ 回(選択)

回(任意)

ボーナス加算 YES ▼

初回ボーナススキップ YES ▼

ボーナス 月 円

月 円

送信

(e)

支払回数

支払い H12 ▼ 06 ▼

実質年率 5.6 %

資金 円

月々 円

ボーナス加算 YES ▼

初回ボーナススキップ YES ▼

ボーナス 月 円

月 円

送信

(g)

ボーナス加算額

支払い H12 ▼ 06 ▼

実質年率 5.6 %

資金 円

支払回数 3 ▼ 回(選択)

回(任意)

月々 円

初回ボーナススキップ YES ▼

送信

(b)

支払 2000年6月

資金 2,230,000円

手数料 125,000円

合計 2,355,000円

初回 300,024円

月々 40,416円 × 36回

ボーナス

8月100千円 × 3回

12月100千円 × 3回

最終2003年5月

実質年率5.60%

(d)

支払 2000年6月

資金 2,230,000円

手数料 125,000円

合計 2,355,000円

初回 300,024円

月々 40,416円 × 36回

ボーナス

8月100千円 × 3回

12月100千円 × 3回

最終2003年5月

実質年率5.60%

(f)

支払 2000年6月

資金 2,230,000円

手数料 125,000円

合計 2,355,000円

初回 300,024円

月々 40,416円 × 36回

ボーナス

8月100千円 × 3回

12月100千円 × 3回

最終2003年5月

実質年率5.60%

(h)

支払 2000年6月

資金 2,230,000円

手数料 125,000円

合計 2,355,000円

初回 300,024円

月々 40,416円 × 36回

ボーナス

8月100千円 × 3回

12月100千円 × 3回

最終2003年5月

実質年率5.60%

クレジット審査

か性

か名

生年記号

大正:2

昭和:3

平成:4

生年月日

〒番号 -

地番コード

Tel

所要資金 千

円

支払回数 回

3

6

12

24

36

48

60

72

任意

返信先Tel

送信

[Fig. 13]

(a)

納期検索

商品名

型式

G/MまたはA/T

車体色

送信

(b)

該当車一覧

AAA車 XXX

A/T ホワイト

BBB車 YYY

A/T ブラック

送信

(c)

納期検索結果

商品名 AAA車

型式 XXX

A/T

車体色 ホワイト

在庫 有

納期予定 001212

[Fig. 14]

(a)

大安／仏滅索

検索年月

12 ▼ 年 06 ▼ 月

送信

(b)

検索結果

2000年6月

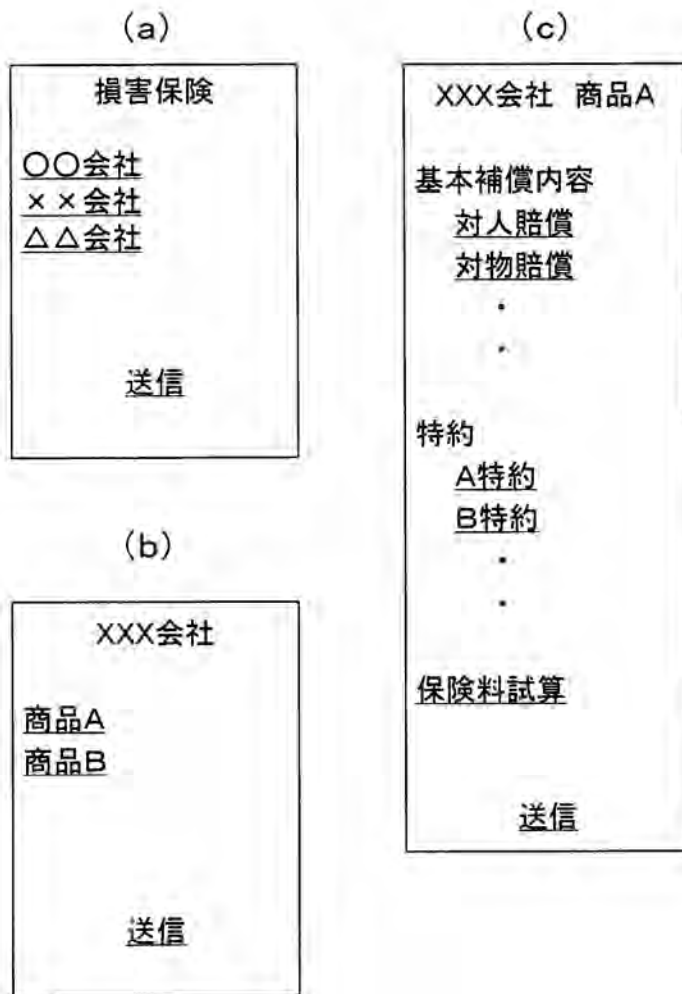
大安

2 8 14 20 26

仏滅

7 13 19 25

[Fig. 15]



[Fig. 16]

(a)

中古車検索

車名

▼

タイプ

▼

排気量

▼

送信

(b)

該当車一覧

AAA車 XXX A/T

4ドア 1500cc

20000千円

BBB車 YYY M/T

4ドア 1500cc

2500千円

送信

(c)

車両詳細情報

車名 AAA車

タイプ XXX

年式 YYY

価格 20000千円

走行距離 4,200km

ミッション A/T

車体色 ホワイト

排気量 1500cc

燃料 ガソリン

装備品 エアコン

パワステ

パワーウィンドウ

ステレオ

サンルーフ

エアバッグ

ABS

[Fig. 17]

(a)

補助機能

消費税計算

レート変換

利率検索

送信

(b)

消費税計算

本体価格計算

税込み価格

税込み価格計算

本体価格

円

円

送信

(c)

本体価格

2,100,000円

消費税額

105,000円

合計

2,205,000円

送信

(d)

レート変換

実金→アドオン

実質年率

支払回数

3

回(選択)

回(任意)

送信

(e)

実質年率5.60%

支払回数36回

アドオン率8.87%

(f)

利率検索

車名

支払回数

3

回(選択)

送信

(g)

実質年率

省略時値

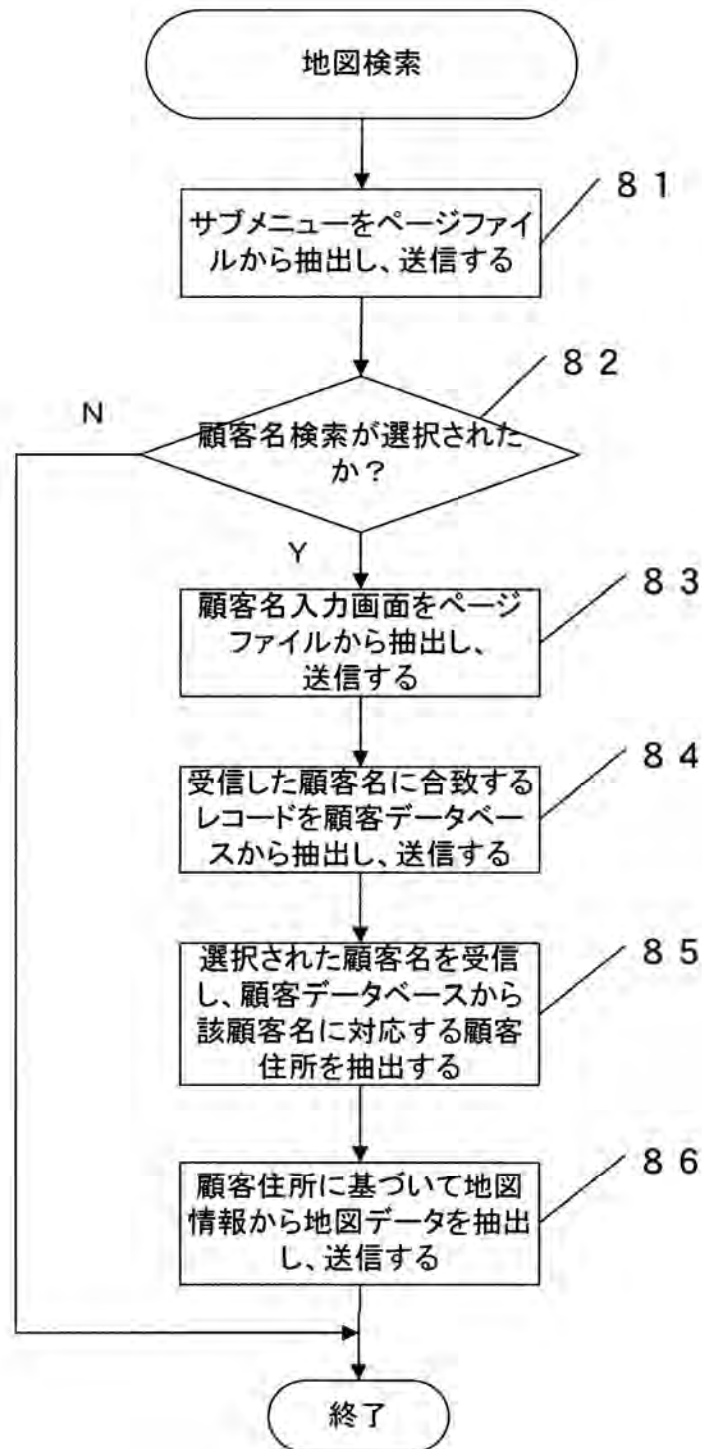
5.6%

BBB車

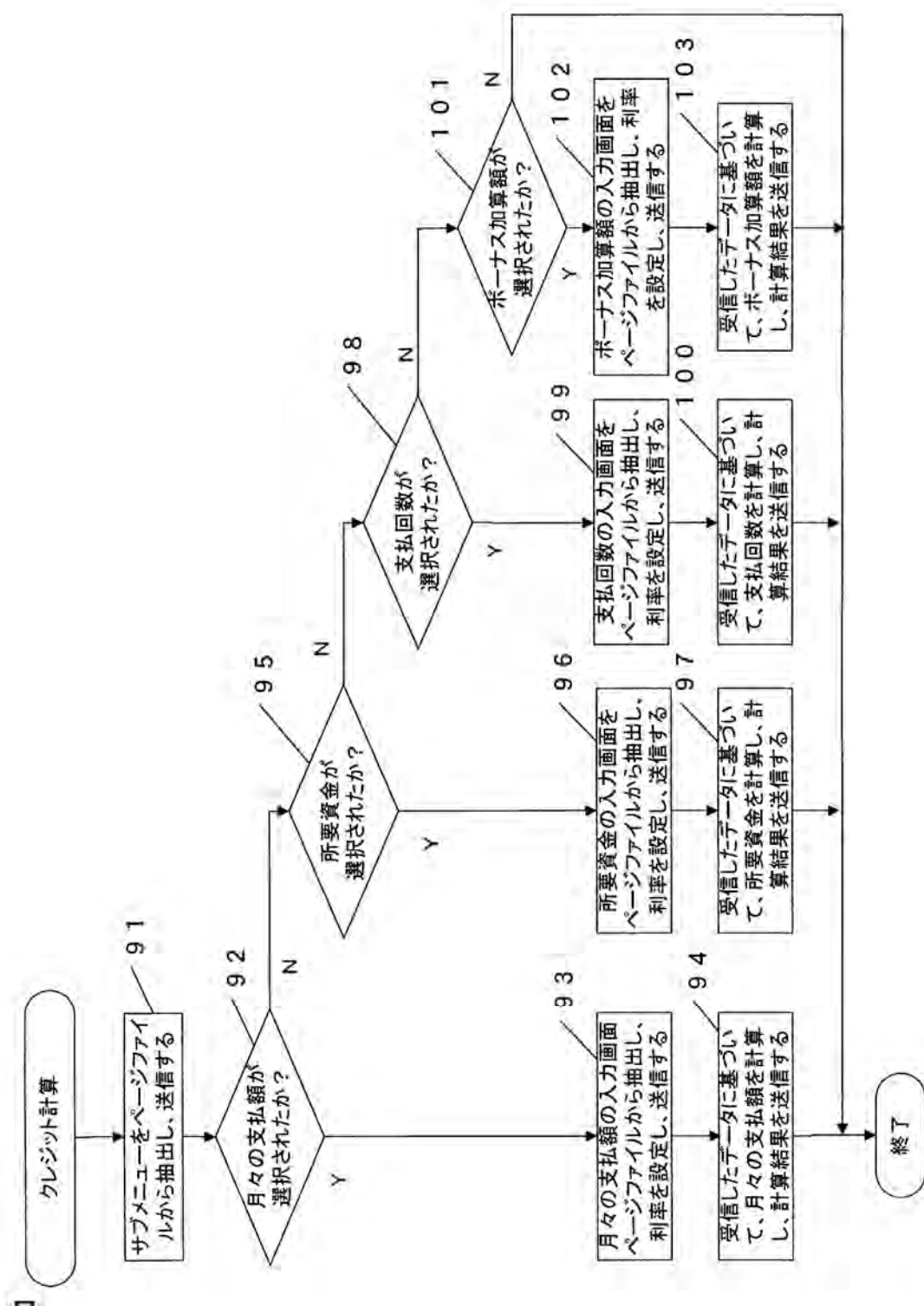
36回

4.6%

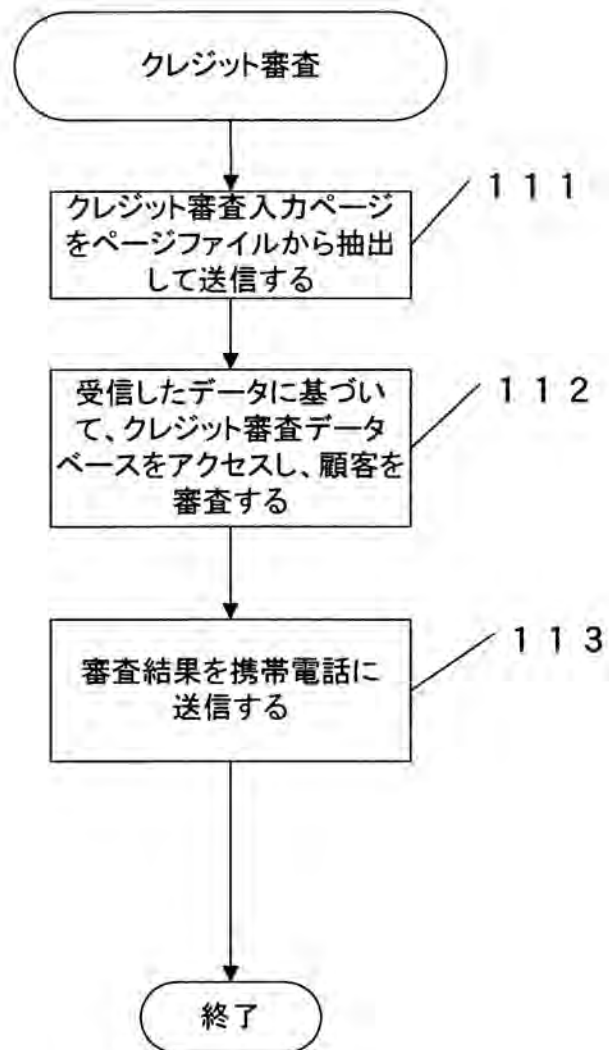
[Fig. 18]



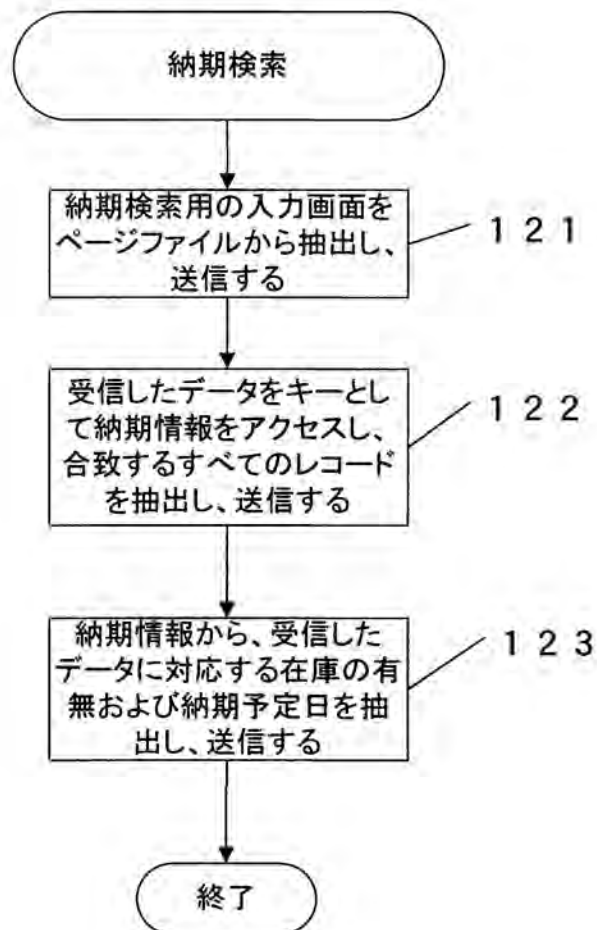
[Fig. 19]



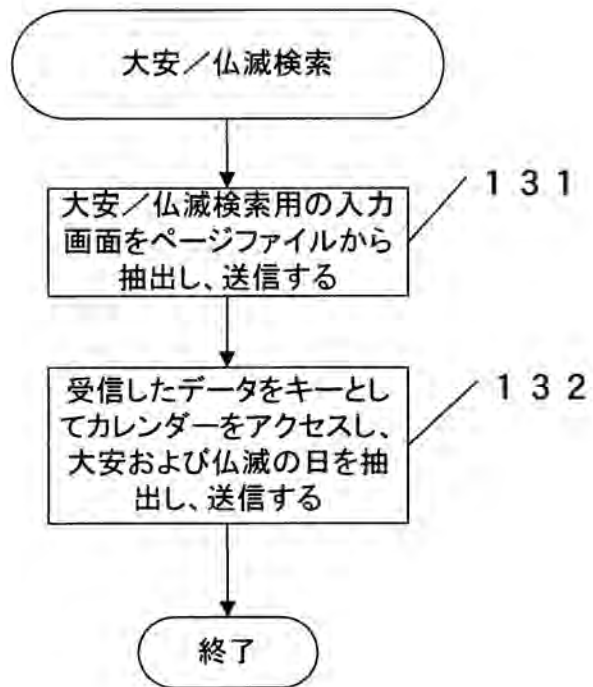
[Fig. 20]



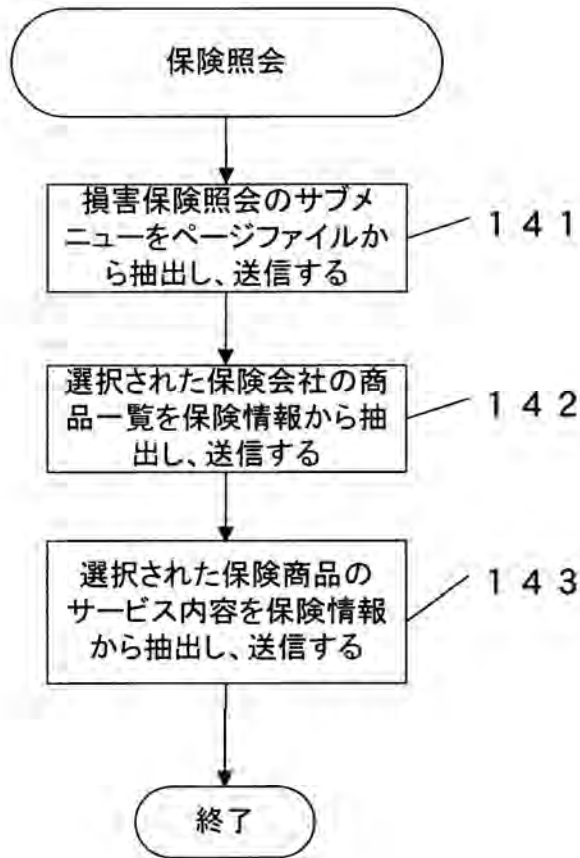
[Fig. 21]



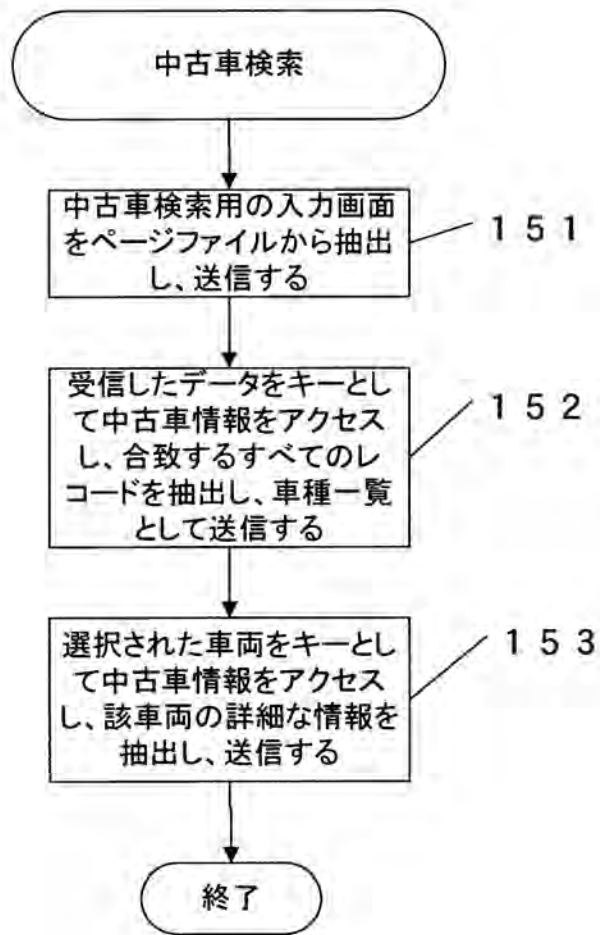
[Fig. 22]



[Fig. 23]



[Fig. 24]



[Document Name]Description

[Title of the invention]Business support system

[Claim(s)]

[Claim 1]A business support system implemented on a server that can be connected via the Internet to a mobile phone having a function of connecting to the Internet and a browser function of displaying information received via the Internet, the business support system comprising: A menu providing unit configured to provide a business support menu showing a list of business support functions to a browser of the mobile phone; a storage device configured to store a program for executing the business support function and data used by the program; and A business support function execution unit configured to, in response to selection of a business support function from the provided business support menu, start a program corresponding to the selected business support function and transmit a processing result of the program to the browser.

[Claim 2]The business support system according to claim 1, further comprising business support function distribution means for downloading a program corresponding to a selected function to the mobile phone in response to the selection of the business support function from the business support menu, wherein the program is operated on the mobile phone to execute the business support function.

[Detailed description of the invention]

[0001]

[Technical field to which the invention belongs]The present invention relates to a system for supporting a salesperson by using a portable terminal, and more specifically, to a system for supporting sales activities by providing various functions to a salesperson via a portable telephone and the Internet when the salesperson sells a product.

[0002]

[Prior art]When a salesperson visits a customer and develops a sales activity, conventionally, the salesperson carries a document in which know-how for sales prepared by a so-called experienced salesperson is described and other documents necessary for the sales activity to use the documents for the sales. Recently, information necessary for a portable electronic device such as a personal computer is stored as electronic data instead of a paper document. The electronic devices are referred to in business activities, or the electronic devices are connected to a server via a network to read data managed by the server or to download and use the data.

[0003]As a system for supporting such business activities, for example, Japanese Unexamined Patent Publication No. Hei 8 (1996) - 305747 discloses a system for extracting insurance products suitable for individual customers from a large number of insurance products. According to this system, an insurance product name, product information thereof, and narrowing-down conditions that do not match the product are stored in advance, and further, objective information such as the age of a customer

and subjective information such as the presence or absence of planning are stored in advance as narrowing-down conditions. When an insurance product is proposed to a customer, an insurance product excluding a product for which objective information and subjective information of the customer are narrowing conditions is extracted as a proposed product.

[0004]Japanese Patent Application Laid-Open No. Hei 8 (1996) - 194749 discloses a portable insurance design consulting apparatus as an apparatus for business support which can be carried by a salesperson. This device is provided with a touch pen, and further stores in advance information and screens necessary for insurance design. The salesperson selects a desired option from the screen with a touch pen and fills in characters or the like, thereby performing an insurance consultation while having an interview with the customer.

[0005]Further, Japanese Patent Application Laid-Open No. 231112 / 1994 (JP-A-6-29648) discloses a consulting support system applied to a business support system. According to this system, information on consulting is displayed as an explanation screen in response to selection of an item from the screen, and a reference explanation screen as detailed information is displayed in response to selection of an option in the explanation screen. When a predetermined function key is pressed in these screens, a screen for explaining terms is displayed.

[0006]

[Problem to be solved by the invention]In the development of business activities, a salesperson usually talks with a customer on a paper basis, enters necessary data from a terminal after returning to a business office, and prints necessary documents.

[0007]On the other hand, it is becoming popular to conduct business activities by introducing a system as disclosed in Japanese Patent Laid-Open No. 231112 / 1994 into a notebook personal computer, or to conduct business activities by using a portable terminal used exclusively for a predetermined business as disclosed in Japanese Patent Laid-Open No. 194749 / 1996. However, in order to perform business activities using these electronic devices, it is necessary to introduce programs and data necessary for the respective business activities into the respective electronic devices. Therefore, when changes are made to these programs and data, the programs and / or data must be reinstalled in all the electronic devices, which is a very laborious operation. In addition, as the types of sales target products and the contents of services increase in order to improve services, the amount of data to be stored in an electronic device increases, which puts pressure on the storage capacity of the electronic device. Further, a portable terminal as disclosed in Japanese Patent Application Laid-Open No. 194749 / 1996 (JP-A-8-27095) has no versatility, and in recent years when a portable telephone widespread, a salesperson has to carry a terminal for business support and a portable telephone.

[0008]It is also conceivable to connect devices such as those disclosed in Japanese Patent Laid-Open No. 231112 / 1994 and Japanese Patent Laid-Open No. 305747 / 1996 online and download data from a server as needed. In this case, it is necessary to connect the terminal device to the host server via a network or the Internet, which requires an infrastructure and communication software on the terminal side.

[0009]Therefore, there is a demand for a business support system in which a salesperson can execute a function necessary for business activities at any time while having an interview with a customer, and costs can be reduced.

[0010]

[Means for solving the problem]In order to achieve the above object, according to a first aspect of the present invention, there is provided a business support system implemented on a server that can be connected via the Internet to a mobile phone having a function of connecting to the Internet and a browser function of displaying information received via the Internet, the business support system comprising: A menu providing unit configured to provide a business support menu showing a list of business support functions to a browser of a mobile phone; a storage device configured to store a program for executing a business support function and data used by the program; and And a business support function execution means for starting a program corresponding to the selected business support function in response to the selection of the business support function from the provided business support menu and transmitting the processing result of the program to the browser.

[0011]According to the present invention, since a salesperson can use various functions for business support using an existing mobile phone and the Internet without carrying a terminal as a dedicated business support tool, the salesperson can acquire various information in real time in response to a request of a customer and present the information to the customer.

[0012]According to a second aspect of the present invention, in the sales support system according to the first aspect, in response to selection of a sales support function from the sales support menu The system is provided with a business support function distribution means for downloading a program corresponding to the selected function to the portable telephone and the program is operated on the portable telephone to execute the business support function.

[0013]According to the present invention, various business support functions are activated in a server by accessing the server from a mobile phone. Since not only the data of the server can be referred to but also the program for realizing the business support function can be downloaded to the portable telephone, the business support function can be executed even on the portable telephone as required.

[0014]

[Embodiment of the invention]The embodiment of the sales support system according to the present invention, which will be described in detail below, is premised on sales activities related to automobiles, but can be widely applied to a sales support system when a salesperson performs sales activities for various products and services.

[0015]Embodiments of the present invention will be described with reference to the drawings. FIG. 1 is an overall view of a network connection configuration including a business support system according to the present invention. A cellular phone 1 carried by a salesperson of a company X has a communication function capable of connecting to the Internet 2 and a browser function for displaying information received via the Internet in addition to a normal telephone function. Therefore, the salesperson can exchange e-mails via the Internet and can access various WEB pages by specifying a URL.

[0016]A system 11 is an in-house network system of the company X. In this example, a plurality of personal computers 13 of company X are connected to an intranet 12 constituted by an in-house LAN, and each personal computer 13 can access an

internally installed server 14. The in-house system 11 of the company X is connected to the WEB server 4 of the company X via a dedicated line 15 and a firewall (FW) 16. The firewall is a router having a packet selection function, and selects a packet using information such as a transmission source host address, a destination host address, and a protocol type included in a packet header. In this embodiment, the firewall 16 is configured to pass transmissions directed from the WEB server 4 to the internally located server 14 of the in-house system 11 and to reject other incoming communications.

[0017]The WEB server 4 is a server provided outside the company X, and is connected to the Internet 2 and the system 11 of the company X. The WEB server 4 includes a business support system 10. A business support system 10 is provided with storage devices 6 and 7, the storage device 6 stores a program and data required for executing business support, and the storage device 7 stores a WEB page which can be displayed on a browser of a portable telephone 1 and is prepared for the business support system. Specifically, these WEB pages are stored as HTML documents.

[0018]The other WEB server 21 is a server different from the WEB server 4 of the company X, and is connected to the Internet 2. The other WEB server 21 includes a server of a different company and a server of a company X different from the server 4 provided with the sales support system 10. By linking the address (URL) of the WEB server 21 to the WEB page stored in the storage device 7, the program / data 22 of the WEB server 21 can be referred to from the WEB page.

[0019]In this way, the mobile phone 1 can access the business support system 10 of the WEB server 4, and the business support system 10 can provide various WEB pages 7 to the browser of the mobile phone 1. The mobile phone 1 can refer to data stored in the storage device 6 of the business support system 10 and start a program stored in the storage device 6 via the provided WEB page. When the WEB page provided to the browser of the mobile phone 1 is linked to another WEB server 21, the program / data 22 of the WEB server 21 is referred to. When the WEB page provided to the browser of the mobile phone 1 is linked to the internal server 14 of the in-house system 11, the program / data of the server 14 can be referred to. The data in the server 4, 21 or 14 can also be downloaded to the mobile telephone 1 and stored in the memory of the mobile telephone 1.

[0020]In addition, it is possible to download the application of the WEB server 4 to the mobile phone 1 and activate the business support function on the mobile phone 1. This is realized, for example, by installing a Java virtual machine that does not depend on hardware in the mobile phone 1. In this case, when a desired business support function is executed, a corresponding application is downloaded from the server to the mobile phone. Since the application is downloaded at the time of execution, it is not necessary to install the application in the mobile phone in advance.

[0021]On the other hand, like the mobile phone 1, the personal computer 13 of the company X can access the business support system 10 of the WEB server 4 to refer to data stored in the storage device 6 of the WEB server 4 or start a program. Further, the personal computer 13 of the company X can create / update a program / data / page used in the business support system 10 of the WEB server 4 and upload the program / data / page from the internally installed server 14 to the WEB server 4. The uploaded program / data is stored in the storage device 6, and the page is stored in the storage device 7.

[0022]In this embodiment, the business support system 10 is provided in the WEB server 4 of the company X installed outside the in-house system 11 of the company X. The present invention is not limited to this embodiment, and only the WEB page 7 of the business support system 10 may be provided in the WEB server 4, and the other programs and data 6 may be provided in the in-house system 11 of the company X.

[0023]As shown in FIG. 1, the programs and data necessary for the business support system 10 are not stored in the mobile phone 1 carried by the salesperson, but are all stored in the business support system 10 of the WEB server 4 of the company X, the internal server 14 of the in-house system 11, or the server 21 of another company. The salesperson can execute a necessary function when necessary, for example, starting a program of any server to refer to data, downloading data of any server, or the like, only by selecting from the sales support menu displayed on the browser of the mobile phone 1. Further, it is also possible to download the program of the server and execute the business support function on the cellular phone 1 as necessary. Since the business support function can be executed anytime and anywhere by using the Internet which is an existing network and a portable telephone having high versatility, the cost can be suppressed low as compared with a dedicated terminal and the convenience is high. Further, since the programs and data required for the business support are managed in a centralized manner by the server, it is possible to reduce the time and effort for maintenance when a change occurs in these programs and data.

[0024]FIG. 2 is a block diagram showing a more detailed configuration of the business support system 10. The browser 8 corresponds to the browser of the mobile phone 1 shown in FIG. 1. However, as described with reference to FIG. 1, the business support system 10 of FIG. 2 can also be applied to the browser of the personal computer 13 of the in-house system 11 of the company X. The browser 8 is connected to the business support system 10 via the Internet 2.

[0025]The transmission / reception unit 9 controls reception of data transmitted from the browser 8 and transmission of data from the business support system 10 to the browser 8. The authentication unit 31 executes authentication when the salesperson logs on to the sales support system 10. A map retrieval part 32 retrieves a map by using a customer name, an address or the like as a key. The credit calculation unit 33 performs credit calculation from various viewpoints in order to respond to a credit request of a customer. A credit examination part 34 inquires the credit information of the customer and examines the credit. The delivery date searching unit 35 searches for the delivery date of the vehicle purchased by the customer. The Daian and Buddha search 36 searches for dates corresponding to Daian and Buddha. The insurance inquiry unit 37 inquires about various damage insurance products and service contents of the products. The used car search unit 38 searches for used cars handled by Company X.

[0026]The business support system 10 includes a page file 40. In the page file 40, each WEB page provided to the browser 8 of the mobile phone 1 by the business support system 10 is stored as a file, and each page is typically described in HTML.

[0027]The authentication database 41 stores logon information for the salesperson to enter the sales support system 10. FIG. 3 shows an example of a record of the authentication database 41, and the record has fields of a store code, a site code, a business code, and a password. The store code is a code for identifying a store to which the salesperson belongs, and has a code system in which, for example, two digits indicate a prefecture, the next two digits indicate a city group, and the

remaining three digits indicate a serial number. The site code indicates a code for identifying the site of the sales office to which the salesperson belongs. The sales code and the password indicate codes uniquely assigned to the salesperson.

[0028]The customer database 42 stores information about customers. Fig.4 shows the example of the record of the customer database 42, and the record has the field of a customer code, a customer name, a furigana, sex, a date of birth, a zip code, an address, an address furigana, a telephone number, an occupation, office, an office address, an office telephone number, purchase vehicle information, and parking area information. The purchased vehicle information field actually has a plurality of fields, and stores, for example, the vehicle name, model, chassis number, vehicle number, and the like of the purchased vehicle. The parking lot information field also actually has a plurality of fields, and stores a parking lot address, a name of a parking lot owner, an address and a telephone number, a parking lot contract period, a parking lot contract date, and the like.

[0029]The map information 43 is a database arranged in another WEB server 21, and stores not only a wide-area map (for example, at the level of $\times \times$ 1-chome, 0 0 Ku, Tokyo) but also a narrow-area map (for example, at the level of Δ No. Δ , $\times \times$ 1-chome, 0 0 Ku, Tokyo) obtained by further subdividing the wide-area map.

[0030]The interest rate table 44 stores the real annual rate to be applied when the credit is calculated. FIG. 5 shows an example of the interest rate table 44. The default value of the actual annual rate is 5.6%, and the type of vehicle, the number of payments, and the actual annual rate to be applied are stored in association with each other. Thus, when set to the kind of vehicles, and the value from which it pays and an annualized rate in real terms differs according to the number of times etc., the interest rate table 44 is provided and it enables it to search an operating member.

[0031]The examination information 45 is arranged in another server 21 in this embodiment, and stores various kinds of information related to examination when a customer applies for a credit. For example, the examination information 45 stores information owned by the credit company and information provided by the credit company from other specialized credit information organizations.

[0032]The types of fields included in the database are merely examples, and the inclusion of other fields is optional. The locations where the respective databases are arranged are not limited to those in the embodiment of FIG. 2, and the databases may be arranged in different servers.

[0033]The delivery date information 46 stores information on the due date of the vehicle. The calendar 47 stores a calendar and six day information such as Daian and Buddha for each date. The insurance service information 48 stores information on products of Voluntary Insurance of vehicles. The used car information 48 stores information about used cars handled by Company X.

[0034]FIG. 6 is a flowchart showing an authentication process of the sales support system, which is executed by the authentication unit 31. The salesperson first specifies the URL of the home page of the sales support system 10 and connects to the Internet. The URL can be registered in the mobile phone in advance. In response to an access request from a portable telephone, an authentication part 31 of a business support system 10 extracts a log-on screen from a page file 40 and transmits it to a browser 8 of a portable telephone 1 (71, 72). An example of the logon screen is shown

in FIG. 7 a. On the logon screen, four items of a store code, a site code, a sales code, and a password are displayed, and the salesperson can select and input these one by one. For example, since a store code input screen is displayed by selecting a store code, a 7-digit store code is input. After all the four items are input, the authentication information is transmitted to the sales support system 10 by pressing the transmission button.

[0035]The authentication unit 31 receives the authentication information (73), and determines whether or not the received authentication information matches the information stored in the authentication database 41 (74). If they match, it is determined that the authentication is OK, and the authentication unit 31 extracts the main menu from the page file 40 and transmits it to the browser 8 (75). If they do not match, it is determined that the authentication has been rejected, and a page for a notification message to that effect is extracted from the page file 40 and transmitted to the browser 8 (76). FIG. 7 b shows a display example of the main menu.

[0036]FIG. 8 shows a menu system of the business support system 10. The main menu includes menu items of map search 52, credit calculation 53, credit examination 54, due date search 55, Daian / Buddha search 56, damage insurance 57, used car search 58, and auxiliary functions 59, and the menus 52 to 58 correspond to the functional blocks 32 to 38 in FIG. 2, respectively. Further, in this embodiment, the map search 52 is associated with submenus 61 of a customer name search, an address search, a telephone number search, a postal code search, and a station name search. The credit calculation 53 is associated with a submenu 62 of monthly payment, required funds, the number of times of payment, and bonus additional amount. Several damage insurance company names are associated with the damage insurance 57 as a submenu 63. Further, submenus 64 of consumption tax calculation, rate conversion, and interest rate search are associated with the auxiliary function 59.

[0037]When a desired function is selected from these menu items of the main menu 50, a program corresponding to the selected function is started, and processing is executed in the server. The respective functions will be described below.

[0038]FIG. 18 shows a flowchart executed by the map search unit 32. When the salesperson desires to search for a map, the salesperson selects "map search" from the main menu and transmits the selected "map search". In response to this, the map search unit 32 is activated. The map search unit 32 transmits a submenu as shown in FIG. 9 a to the browser 8 (8

1). As is apparent from the submenu, the salesperson can search the map by the customer name, address, telephone number, postal code, and station name. Further, by selecting "other", the salesperson can also search for a map from, for example, a target (city office, police station, or the like).

[0039]The salesperson selects and transmits the customer name search from the submenu in order to check the customer address on the map when visiting the customer. In response to this, the map search unit 32 extracts the "customer input" screen from the page file 40 and transmits the "customer input" screen to the browser 8 (82 83). An example of this screen is shown in FIG. 9 b. The salesperson inputs and transmits a desired customer name. The customer's name does not have to be entered in full name, only the Hiragana, Katakana or Kanji initials can be entered. The map search unit 32 receives the input customer name, extracts all records corresponding to the received customer name from the customer database 42, and transmits the extracted records to the browser 8 (84). FIG. 9 c shows an example of a screen showing a list of the transmitted customer names. The salesperson selects a desired

customer from the list of the transmitted customer names and transmits it.

[0040]The map search unit 32 accesses the customer database 42 using the selected customer name as a key, and extracts the address of the customer (85). Next, the map search unit 32 accesses the map information 43 using the extracted address of the customer as a key, extracts map data in the vicinity of the address of the customer, and transmits the map data (86). Thus, as shown in FIG. 9 (d), a map of the vicinity of the address of the customer is displayed on the browser 8. The salesperson can visit the customer while referring to the map displayed on the browser. At this time, the salesperson can switch the scale of the map and move the map to north, south, east, and west by operating the keys of the mobile phone.

[0041]FIG. 19 shows a flowchart executed by the credit calculation unit 33. Customers often want to know immediately what the monthly payment will be when they credit to purchase a vehicle, and what the total payment will be. In such a case, the salesperson selects and sends the credit calculation from the main menu. In response to this, the credit calculation unit 33 is activated. The credit calculation unit 33 extracts a submenu as shown in FIG. 10 from the page file, and transmits the submenu to the browser 8 (91). As shown in this submenu, the salesperson can calculate the credit from various viewpoints such as the monthly payment amount, the required fund, the number of payments, and the bonus addition amount.

[0042]When it is desired to calculate the amount of monthly payment from the fund, the number of times of payment, and the bonus additional amount, "monthly payment amount" is selected from the submenu and transmitted. In response to this, the credit calculation unit 33 extracts the input screen for the monthly payment amount from the page file 40, and sets the interest rate of the default value extracted from the interest rate table 44 in the real annual rate field of the input screen. Thereafter, the input screen in which the interest rate of the default value is set is transmitted to the browser 8 (92, 93). FIG. 11 a shows an example of the input screen. In the real annual rate input field, the real annual rate of the default value extracted from the interest rate table 44 is displayed. The salesperson inputs data in each input field and transmits the data. If the actual annual rate to be applied is different from that of the default value, the salesperson may enter a different actual annual rate. The credit calculation unit 33 obtains the monthly payment amount based on the received input data, and transmits the calculation result to the browser 8 (94). An example of a screen showing the calculation result is shown in FIG. 11 b.

[0043]When it is desired to calculate the total payment fund from the monthly payment amount, the bonus additional amount, and the number of payments, "required fund" is selected from the submenu shown in FIG. 10 and transmitted. In response to this, the credit calculation unit 33 extracts an input screen for required funds from the page file 40, and sets the interest rate of the default value in the real annual rate field of the input screen with reference to the interest rate table 44. Thereafter, the input screen is transmitted to the browser 8 (95, 96). FIG. 11 c shows an example of the input screen. The salesperson inputs data in each input field and transmits the data. The credit calculation unit 33 calculates the required fund based on the received input data, and transmits the calculated result to the browser 8 (97). An example of a screen showing the calculation result is shown in FIG. 11 d.

[0044]When it is desired to calculate the number of times of payment from the required fund, the monthly payment amount, and the bonus additional amount, "the number of times of payment" is selected from the submenu shown in FIG. 10 and

transmitted. In response to this, the credit calculation unit 33 extracts the input screen for the number of payments from the page file 40, sets the interest rate of the default value in the real annual rate field of the input screen with reference to the interest rate table 44, and then transmits the input screen to the browser 8 (98, 99). FIG. 11 e shows an example of the input screen. The salesperson inputs data in each input field and transmits the data. The credit calculation unit 33 calculates the number of payments based on the received input data, and transmits the result to the browser 8 (100). An example of a screen showing the calculation result is shown in FIG. 11 f.

[0045]When it is desired to calculate the bonus addition amount from the required fund, the monthly payment amount, and the number of payments, "bonus addition amount" is selected from the submenu shown in FIG. 10 and transmitted. In response to this, the credit calculation unit 33 extracts the input screen for the bonus additional amount from the page file 40, sets the interest rate of the default value in the real annual rate field with reference to the interest rate table 44, and then transmits the input screen to the browser 8 (101, 102). FIG. 11 g shows an example of the input screen. The salesperson inputs data in each input field and transmits the data. The credit calculation unit 33 calculates the bonus payment amount based on the received input data, and transmits the result to the browser 8 (103). An example of a screen showing the calculation result is shown in FIG. 11 h.

[0046]FIG. 20 shows a flowchart executed by the credit examination section 34. The salesperson can perform an examination of the customer on the spot if the customer desires credit. This is an examination performed to determine whether the customer can credit. In this embodiment, the examination is executed based on the information stored in the examination information 44 and held by the credit company and the information held by are stored in the examination information 44. The examination can be performed from various points of view, and it is optional to add other examination information.

[0047]The salesperson selects "credit examination" from the main menu and transmits it. In response to this, the credit examination unit 34 is activated. The credit examination unit 34 extracts an input screen for credit examination from the page file 40 and transmits the input screen to the browser 8. FIG. 12 shows an example of the input screen. The salesperson inputs data in each input field and transmits the data. Since the examination takes some time, by inputting a telephone number in the reply destination Tel field of the input screen, the examination result can be called to the telephone number later. Alternatively, an e-mail field may be provided on the input screen so that the examination result can be received by e-mail.

[0048]The credit examination unit 34 accesses the examination information 44 based on the received input data and identifies the customer. Thereafter, it is determined whether or not the required funds and the number of payments of the received input data are permitted on the basis of information such as the desired borrowing amount, the company, the number of continuous years, the age, the repayment ratio, the transaction content, and the credit information of the customer included in the examination information 44. The credit examination unit 34 transmits the examination result to the mobile phone 1. The transmission can be done in any manner, using email or other messaging techniques. A person in charge of the credit company may confirm the examination result and call the mobile phone. Since the information on the credit examination is personal information, the exchange of information via the Internet is performed with security such as encryption.

[0049]Thus, the credit examination can be executed on the spot, so that the credit plan of the customer can be efficiently examined. The credit calculation and examination embodiments described above can also be applied to other loan and lease calculations.

[0050]FIG. 20 shows a flowchart executed by the due date searching unit 35. When the salesperson wants to check the delivery date of the vehicle to be purchased by the customer, the salesperson selects the delivery date search from the main menu. The delivery date is a date on which the product can be delivered from the factory to the sales office. In response to this, the due date searching unit 35 is activated. The due date searching unit 35 extracts an input screen for searching for a due date from the page file 40 and transmits the input screen to the browser 8 (121). An example of the input screen is shown in FIG. 13 a. The salesperson inputs and transmits the vehicle name, the model, the mission, and the vehicle body color from the input screen. It is not necessary to enter data in all of these input fields, nor does it need to be entered in full spelling. The due date searching unit 35 receives the input data, extracts all records corresponding to the received data from the due date information 46, and transmits the extracted records to the browser 8 (122). FIG. 13 (b) shows an example of a screen showing the transmitted corresponding vehicle list. The salesperson selects a desired vehicle type from the transmitted vehicle list and transmits it. The delivery date searching unit 35 accesses the delivery date information 46 by using the selected vehicle type as a key, extracts the presence or absence of the stock of the vehicle type and the scheduled delivery date, and transmits them to the browser 8 (123). An example of the delivery date search result screen is shown in FIG. 13 c.

[0051]Thus, the salesperson can immediately know the delivery date of the vehicle to be purchased by the customer. By linking the delivery time information 46 with the production system of the company X, highly accurate delivery time information can be obtained.

[0052]Daian / Buddha Search Fig. 21 shows a flowchart executed by the Daian / Buddha search unit 36. When vehicles are delivered to customers, Daian (or otherwise friendly) days are preferred, and especially Buddha days should be avoided. Therefore, the salesperson selects and transmits "Daian / Buddha Search" from the main menu in order to search for the date of Daian or friendship after the scheduled delivery date. In response to this, the Daian / Buddha search unit 36 is activated. The Daian / Buddha search unit 36 extracts an input screen for Daian / Buddha search from the page file 40, and transmits the input screen to the browser 8 (131). An example of the input screen is shown in FIG. 14 a. The salesperson inputs and transmits, for example, the year and month of the scheduled due date extracted by the due date search. In response to this, the Daian / Buddha search unit 36 accesses the calendar information 47, extracts the Daian date and the Buddha date of the input year / month, and transmits the extracted dates to the browser 8 (132). An example of the search result screen is shown in FIG. 14 b. In this way, the salesperson can immediately select a date convenient for the customer from the Daian dates after the scheduled delivery date while visiting the customer.

[0053]FIG. 22 shows a flowchart executed by the insurance inquiry unit 37. When a user purchases a vehicle, the user often subscribes to a Voluntary Insurance damage insurance in addition to the mandatory vehicle liability insurance. Various damage insurance products are sold by respective insurance companies, and the respective insurance products are different in service and insurance amount. Therefore, it is preferable to select an insurance product suitable for the needs of the customer from

these insurance products.

[0054]When the salesperson wants to refer to the type of insurance, the service content, and the insurance amount, the salesperson selects "damage insurance" from the main menu and transmits it. In response to this, the insurance inquiry unit 37 is activated, and the insurance inquiry unit 37 extracts a page corresponding to the submenu of the damage insurance from the page file 40 and transmits the page to the browser 8 (141). An example of the picture of the submenu is shown in FIG. 15 a.

[0055]By selecting each insurance company, the salesperson can refer to the product list of the damage insurance of the selected insurance company. For example, when "XX company" is selected and transmitted, the insurance inquiry unit 37 extracts a list of insurance products of 0 0 company from the insurance information 48, and transmits the list to the browser 8 (142). FIG. 15 (b) shows an example of the insurance product list screen transmitted in this manner. The salesperson can refer to the service content of each insurance product by selecting each insurance product (143). FIG. 15 c shows an example of a screen transmitted to the browser 8 in response to the selection of the product A in FIG. 15 b. On this screen, by selecting and transmitting the interpersonal compensation, the objective compensation, the A special order, the B special order, and the like displayed together with the underline, it is possible to see the details of the respective compensation contents and special order contents. In response to this, the insurance inquiry unit 37 transmits a screen (not shown) for calculating an insurance premium to the browser 8. The salesperson can estimate the insurance premium of the customer on the screen. In this way, it is possible to introduce appropriate Voluntary Insurance to the customer while listening to the customer's needs.

[0056]In another embodiment, instead of displaying a list of insurance companies first, a list of product names of each insurance company may be displayed for, for example, PAP (private automobile insurance) or SAP (vehicle insurance).

[0057]FIG. 23 shows a flowchart executed by the used car search unit 38. When the salesperson wants to search for the used car desired by the customer, the salesperson selects the used car search from the main menu. In response to this, the used car search unit 38 is activated. The used car search unit 38 extracts an input screen for a used car search from the page file 40 and transmits the input screen to the browser 8 (151). An example of the input screen is shown in FIG. 16 a. The salesperson inputs and transmits the vehicle name, the type (distinction of four door sedan, two door, hatchback, commercial vehicle, light, and the like), and the displacement from the input screen. By selecting a button on the right side of the input field, selection items of a vehicle name, a type, and a displacement are displayed, and by selecting them, data can be input to the input field. Also, it is not necessary to enter data into all of these input fields.

[0058]The used car search unit 37 receives the input data, extracts all records that match the received data from the used car information 49, and transmits the records to the browser 8 (15

2). FIG. 16 b shows an example of used car list is shown in FIG. 16 b. The salesperson selects a desired vehicle from the transmitted used car list and transmits it. The used car search unit 38 accesses the used car information 49 using the selected vehicle as a key, extracts detailed information of the vehicle, and transmits the information to the browser 8 (153). FIG. 16 c shows an example of a screen for detailed information on a used car. Thus, the salesperson can search for the used car desired by the customer from the browser of the mobile phone while

visiting the customer.

[0059]The sales person can select "auxiliary function" from the main menu. In response to this, the auxiliary function unit 39 is activated, and the auxiliary function unit 39 extracts the submenu of "auxiliary function" from the page file 40 and transmits it to the browser 8. An example of the submenu screen is shown in FIG. 17 a.

[0060]When the consumption tax calculation is executed, the consumption tax calculation is selected from the submenu. In response to this, the auxiliary function unit 39 extracts an input screen for consumption tax calculation from the page file 40, and transmits the input screen to the browser 8. An example of the input screen is shown in FIG. 17 b. An operating member inputs the amount of money of tax-inclusive price into the upside field, when a body price is computed from tax-inclusive price, inputs the amount of money of a body price into the lower field and transmits to it to compute tax-inclusive price from a body price on the other hand. In response to this, the auxiliary function unit 39 calculates the main body price or the price including the consumption tax, and transmits the result to the browser 8. FIG.

[0061]When the add-on rate is obtained from the real annual rate, the rate conversion is selected from the submenu. In response to this, the auxiliary function unit 39 extracts an input screen for rate conversion from the page file 40 and transmits it to the browser 8. An example of the input screen is shown in FIG. 17 d. The salesperson inputs and transmits the real annual rate and the number of payments. In response to this, the auxiliary function unit 39 converts the real annual rate into the add-on rate according to a predetermined conversion formula, and transmits the conversion result to the browser 8. FIG. 17 e illustrates an example of a screen of the conversion result.

[0062]When the interest rate table 44 is searched, the interest rate table search is selected from the submenu. In response to this, the auxiliary function unit 39 extracts an input screen for the interest rate table search from the page file 40, and transmits it to the browser 8. An example of the input screen is shown in FIG. 17 f. The salesperson enters and transmits the search word and / or the number of payments. As the search word, an arbitrary word such as a vehicle name or a customer name can be input. As for the number of payments, a predetermined selection item can be selected as input data by selecting a subscript button provided on the right side of the input field. Only one of the search word and the number of payments may be input. The auxiliary function part 39 searches the interest rate table 44 based on the received data, extracts a corresponding record, and transmits the record to the browser 8. For example, when only "A" is input as the search word, the auxiliary function unit 39 extracts all records in which "A" is included in the item field of the interest rate table 44, and transmits the records to the browser 8. At this time, the actual annual rate of the present default value is also displayed. Thus, it can be determined whether the effective annual rate of the vehicle purchased by the customer is different from the default value, and if so, the retrieved effective annual rate is used to perform the credit calculation described above.

[0063]In this way, only by selecting a desired function from the business support menu, the salesperson can develop business activities such as examining a credit plan appropriate for the customer and inquiring insurance suitable for the customer's needs while visiting the customer. To present information to a customer on the spot requested by the customer without returning to a business office to acquire data or

making a telephone call to various places to confirm the information each time the customer requests it.

[0064]As described with reference to FIG. 1, an application corresponding to the business support function may be downloaded to the mobile phone as needed and executed on the mobile phone. For example, when the above-described credit calculation is performed, in response to selection of "credit calculation" from the main menu, credit calculation unit 33 downloads a corresponding program and data onto the mobile phone. The salesperson inputs data from the input screen as shown in FIG. 11 and selects a "calculation" button displayed on the browser, thereby executing the credit calculation on the mobile phone. In this case, since it is not necessary to connect to the server each time the calculation is performed, the performance of performing the credit calculation is improved, and a more efficient service can be provided to the customer.

[0065]

[Effect of the invention]According to the present invention, the salesperson can acquire various kinds of information in real time in response to the request of the customer and present the information to the customer.

[Brief description of the drawings]

FIG. 1 is a block diagram showing an entire network connection configuration of a business support system according to an embodiment of the present invention;

FIG. 2 is a block diagram showing the whole of a business support system in an embodiment of the present invention;

FIG. 3 is a diagram showing an example of a data structure of an authentication database in an embodiment of the present invention;

FIG. 4 is a diagram showing an example of a data structure of a customer database in the embodiment of the present invention;

FIG. 5 is a diagram showing an example of a data structure of an interest rate table in an embodiment of the present invention;

FIG. 6 is a flowchart showing an authentication process in the embodiment of the present invention;

FIGS. 7 (a) and 7 (b) are views showing examples of a log-on screen and a main menu screen, respectively, which are displayed on the browser of the portable telephone in the embodiment of the present invention;

FIG. 8 is a diagram showing a menu system of a business support function in an embodiment of the present invention;

FIG. 9 is a view showing an example of screens of (a) a submenu for map search, (b) a customer name input screen, (c) a list of customer names, and (d) a map corresponding to a customer address, which are displayed on the browser of the portable telephone in the embodiment of the present invention;

FIG. 10 is a view showing an example of a credit calculation submenu screen displayed

on the browser of the portable telephone in the embodiment of the present invention;

FIG. 11 is a diagram showing examples of (a, b) input and output screens of monthly payment, (c, d) input and output screens of required funds, (e, f) input and output screens of the number of payments, and (g, h) input and output screens of bonus addition amounts, which are displayed on the browser of the mobile phone in the embodiment of the present invention;

FIG. 12 is a view showing an example of a credit examination input screen displayed on the browser of the portable telephone in the embodiment of the present invention;

[Fig.13] The figure showing the example of the input screen of (a) delivery date search displayed on the browser of the mobile phone in one Example of this invention, the list screen of (b) cars-concerned kind, and (c) delivery date search-results screen.

FIG. 14 is a view showing an example of (a) a Daian / Buddha search input screen and (b) a Daian / Buddha search result screen, which are displayed on the browser of the portable telephone in the embodiment of the present invention;

FIG. 15 is a diagram showing an example of a screen of (a) a submenu of damage insurance, (b) a list of insurance products, and (c) details of insurance products, which are displayed on the browser of the portable telephone in the embodiment of the present invention;

FIG. 16 is a diagram showing an example of (a) an input screen for used car search, (b) a list of applicable cars, and (c) a detailed screen of used cars, which are displayed on the browser of the mobile phone in the embodiment of the present invention;

FIG. 17 is a diagram showing examples of (a) a submenu of an auxiliary function, (b, c) input and output screens of consumption tax calculation, (d, e) input and output screens of rate conversion, and (f, g) input and output screens of interest rate search, which are displayed on the browser of the portable telephone in the embodiment of the present invention;

FIG. 18 is a flowchart showing a map search function in the embodiment of the present invention;

FIG. 19 is a flowchart showing a credit calculation function in an embodiment of the present invention;

FIG. 20 is a flowchart showing a credit examination function in the embodiment of the present invention;

FIG. 21 is a flowchart showing a delivery date searching function in the embodiment of the present invention;

FIG. 22 is a flowchart showing a Daian / Buddha search function in the embodiment of the present invention;

FIG. 23 is a flowchart showing an insurance inquiry function in the embodiment of the present invention;

FIG. 24 is a flowchart showing a used car search function in the embodiment of the present invention;

[Explanation of letters or numerals]

1. Mobile phone 4 Web server 8 Browser 10 Business support system
42. Customer database 43 Map information 44 Interest rate table 45 Examination
information
46. Delivery Information 48 Insurance-Service Information