

[0074] For example, in Fig. 2 screen which is for the "sales entry," the following words can be sorted out:

OPGD
 Sales No.
 Sales Classification
 Sales Date
 Customer
 Payment Due Date
 Billing Destination
 Consumption Tax
 Staff in Charge
 Slip-base Order No.
 Delivery Location
 Phone Number
 Remarks
 Product Codes
 Quantity
 Unit Price
 Discount
 Amount
 Product Name
 Type of Machines/Media
 Article Number
 Sales Total
 Consumption Tax Total
 Discount Total
 Sum Total
 Execution
 F1
 F3
 F4
 F8,

and these are the determined words.

[0075] Also, in the above "customer code reference" screen of Fig. 3, although not illustrated, there are such words as follows:

No.
 Customer
 Customer (abbreviation)
 Customer Name
 Address
 Staff in Charge
 Selection No.
 Customer Name in katakana
 Old Code
 Execution
 F12

The determined words are what were sorted out from these words.

[0076] Also, in the above "arrival confirmation entry" screen of Fig. 4, although not illustrated, there are such words as follows:

OPGD
 Warehouse Codes
 H/S Classification
 Usher Classification
 Execution

F1
F3
F4

7 The determined words are what were sorted out from these words.

[0077] Also, in the above "arrival confirmation entry" screen of Fig. 5, the following words can be sorted out:

No.
Warehouse Code
Warehouse Name
Selection No.
Execution
F12

15 and these are the determined words.

[0078] Also, in the above "delivery request list" screen of Fig. 6, the following can be sorted out:

Delivery Request Date, Execution
F2
F3

and these are the determined words.

[0079] Also, with the vouchers of the above "delivery request list" of Fig. 7 and Fig. 8, the following can be sorted out:

25 Department
Delivery Destination
Billing Destination
Address 1
Address 2
30 Phone Number
Dept 1
Staff in Charge
Staff in Charge of Store
Delivery Request Date
35 Delivery No.
Product Code
Product Name
Quantity
Update
40 Order Receive Date
Order Receive No.
Line
Staff in Charge of Order Receiving
Article Number
45 Date
Your Company's Order No.
Inst.
City
Delivery
50 Sales

These are the determined words.

Method of the homogeneity map

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[0080] The homogeneity map is made based on the determined definitive (screens or vouchers) identifier. The homogeneity map may be made by a worker or be automated mechanically. On the homogeneity map, pallets (indicated with a box) corresponding to each screen and each voucher are connected each other with lines, and the connection

accords with the regulation of the pallet chain function. The line means the pallet chain function. If screens and vouchers have already been determined, the connections between pallets are to be necessarily determined.

[006] The Fig. 9 is a homogeneity map for the above "sales entry."

[0062] 81 is a menu screen. One can select "sales entry" from the menu screen.

[0063] 92 is the W04 pallet for the screen (Fig. 2) on which to enter sales data, whereas 93 is its W02 pallet.

[0064] 94 is the W03 pallet at the time when "execution" has been selected in the screen on which to enter sales data.

[0065] 95 is the W03 pallet at the time when "registration" has been selected in the screen on which to enter sales data. The WFL (Work File Area) 96 means to write data onto a file.

[0066] 97 is the W04 pallet for the screen (Fig. 3) at the time when "reference" of "the customer code" has been selected in the screen on which to enter sales data, whereas 98 is its W02 pallet.

[0067] When "end" is selected in the screen on which to enter sales data, it returns to the menu screen.

[0068] In each pallet, the following are described: the kind of pallet (in the upper part outside the box); the name of screen (in the upper part inside the box); the screen identifier (in the lower part inside the box); and the determined file name (discussed later) (in the dot-line box in the lower part outside the box).

[0069] Above the line connecting pallets, the name of buttons (such as "execution" and "registration") are described, and below the line is described, the absolute classification of the process (F0 - F6)(discussed later).

[0070] Fig. 10 is a homogeneity map for the above "arrival confirmation entry."

[0071] 101 means a menu screen, on which "arrival confirmation entry" can be selected.

[0072] 102 is the W04 pallet for the screen (Fig. 4) on which to enter arrival confirmation, whereas 103 is its W02 pallet.

[0073] 104 is the W04 pallet for the warehouse codes reference screen (Fig. 5) at the time when "reference" of the "warehouse codes" has been selected in the screen on which to enter arrival confirmation, whereas 105 is its W02 pallet.

[0074] When "execution" is selected in the screen on which to enter arrival confirmation, it returns to the screen on which to enter arrival confirmation.

[0075] When "registration" is selected in the screen on which to enter arrival confirmation, the data is written onto a file via the WFL (Work File Area) 106.

[0076] When the "end" is selected in the screen on which to enter arrival confirmation, it returns to the menu screen. Fig. 11 is a homogeneity map for the above "delivery request list."

[0077] 111 is a menu screen on which "delivery request list" can be selected.

[0078] 112 is the W04 pallet for the screen (Fig. 6) on which to output the delivery request list, whereas 113 is its W02 pallet.

[0079] When "print" is selected in the screen on which to output the delivery request list, the vouchers are output (printed) via the WFL (Work File Area) 114.

[0080] When "execution" is selected in the screen on which to output the delivery request list, it returns to the screen on which to output the delivery request list.

[0081] When "end" is selected in the screen on which to output the delivery request list, it returns to the menu screen.

[0082] In the homogeneity map, as explained above, for example, if a certain screen has been determined, the process to be followed (such as display of screen, output of voucher, writing onto file, reading from file, operation) will be inevitably determined based on the contents of process of the screen (control words such as execution and registration), so that definitions such as screens are connected with lines in accordance with the above-mentioned contents of the process.

Determination of the file

[0103] Necessary files are determined based on the homogeneity map made and the words determined. That is, a necessary file can be inevitably determined from the homogeneity map and the word. A determined file is described in the appropriate place such as the dot-line box in the lower part outside the box of the homogeneity map.

[0104] For example, in the W02 pallet indicated by the code 93 of Fig. 9, it is consequently known from the homogeneity map and the words, that the following files are necessary:

Employee M (master file)
Name M
Customer Information F (file)
Department M
W03-S/F
Product List F.

Creation of the Tense Control Vector A tense control vector (program) for each word is to be made. That is, a tense control vector for each word is to be created.

[0105] In the tense control vector, there are the following six kinds:

- W04 duplicate vector
- W04 homogeneity vector
- W02 duplicate vector
- W02 homogeneity vector
- W03 duplicate vector
- W03 homogeneity vector

These six kinds of the tense control vector (program) are to be created for every word. In some case, however, the W02 duplicate vector is not necessary.

[0106] For example, a sample for making the tense control vector is explained herein, focusing on the word "sales."

[0107] The W04 duplicate vector is to be made as shown in Fig. 12.

[0108] First, the vector should have the logic to make judgment whether a sales value exists or not in the address having the item "sales data" in the corresponding W02 of file (step 1201). If it exists, the vector should have the logic to set the sales value to the address having the item of "sales data" in the W04 (step 1202), thereby ending a process.

[0109] If the sales value does not exist there, the vector should have the logic to judge whether the sales value exists or not in the address having the item of "sales data" in the W03 (step 1203). If it exists, the vector should have the logic to set the sales value to the address having the item of "sales data" in the W04 (step 1204), thereby ending a process. If the sales value does not exist there, the vector should have the logic to end the process without doing anything.

[0110] Furthermore, the vector should have a step, after the step 1204, to confirm if an aimed process is accomplished or not, and if the aimed process is not accomplished, to set a flag to reactivate the pallet.

[0111] What is important is that for any words, programs are to be made with always the same structure as the one stated above, which also applies to the following programs.

[0112] The W04 homogeneity vector is to be made as shown in Fig. 13.

[0113] First, the vector should have the logic to make judgment whether the sales value has already been input into the address having the item of "sales data" in the W04 (step 1301). If it has already been input, the vector should put an end to the process.

[0114] If the sales value has not been entered yet, the vector should have the logic to judge whether a "sales value" for the address having the item of "sales data" of the W04 can be computed or not by the internal data of the W04 (step 1302). That is, for example, assuming that the sales value is "the price" \times "the number of pieces", the vector should judge whether values already exist or not in address having the item of "price" in the W04 and in the address having the item of "number of pieces" in the W04. If those values exist, the vector should, deciding that it is computable, compute a "sales value" (for example, the vector is to compute a sales data from the existing "price" data and "number of pieces" data) (step 1303), and set the computed result (for example, the obtained "sales value") into the address having the item of "sales data" in the W04 (step 1304).

[0115] When the "sales data" is not computable, the vector should have the logic, if necessary (step 1305), set a flag for reactivating the pallet (step 1306). That is, the determination of the sales value is once reserved: for the above-mentioned example, the determination of the sales value is reserved until the "price" data and the "number of pieces" data are input. This means nothing but that the program stated in the present invention can automatically determine the size of language.

[0116] The W02 homogeneity vector is to be made as shown in Fig. 14.

[0117] First, the vector should have the logic to make judgment whether a sales value is already input or not (that is, whether it is already set into the address having the item of the W04 "sales data" in the W04) (step 1401). If it is not input, the vector should put an end to the process.

[0118] If the sales value already input, the vector should have the logic to set the input sales value into the address having the item of "sales data" in the W02 (step 1402), and to put an end to the process.

[0119] For some words, if necessary, the vector should have, before step 1401, a step for confirming whether the execution is necessary or not. Also, the vector should have, after step 1402, a step for confirming whether the aimed process is accomplished or not, and, if the aimed process has not been accomplished to set a flag for reactivating the pallet.

[0120] Further, for example in the case of the control words such as the "escape key," the above-mentioned step 1402 will become a process for setting a homogeneity map flag. The homogeneity map flag ($H = 0 - 6$, however, $H = 0$ is exceptional) is determined by the homogeneity map. By this homogeneity map flag it becomes possible to process distributing the homogeneity routes in the pallet chain function, as will be discussed later.

[0121] The W03 homogeneity vector is to be made as shown in Fig. 15.

[0122] First, the vector should have the logic to make judgment whether a sales value is already input or not into the address having the item of "sales data" in the W02 (step 1601). If it is already input, the vector should set the sales value into the address having the item of the "sales data" in the W03 (step 1602), and to put an end to the process.

[0123] If the sales value does not exist, the vector should put an end to the process without doing anything.

[0124] For words, if necessary, the vector should have, before step 1601, a step for confirming whether the execution is necessary or not. Also, the vector should have, after step 1602, a step for confirming whether the aimed process is accomplished or not, and if the aimed process is not accomplished, to set a flag for reactivating the pallet.

[0125] The W03 homogeneity vector is to be made as shown in Fig. 17.

[0126] First, the vector should have the logic to make judgment whether a sales value is already input or not into the address having the item of "sales data" in the W00 (step 1701). If it is already input, the vector should put an end to the process.

[0127] If the sales value is not input, the vector should have the logic to make judgment whether the sales value for the address having the item of "sales data" in the W03 can be induced or not (step 1702). If it is not inducible, the vector should put an end to the process. If the sales value is inducible, the vector should have the logic to make judgment whether the calculation is possible or not (step 1703). That is, for example, assuming that the "sales value" is the "price" \times the "number of pieces" as is the same as the step 1302 above, the vector should judge whether values already exist or not in the address having the item of the "price" in the W06 and the "number of pieces" in the W08. Then, if it is inducible, the vector should calculate (for example, the vector should obtain the sales data from the existing "price" data and the "number of pieces" data) (step 1704), and to set the calculated result (for example, the obtained sales value) into the address having the item of the "sales data" in the W03 (step 1705).

[0128] When the calculation cannot be executed, if necessary (step 1706), the vector should set a flag for reactivating the pallet (step 1707). That is, also in this case, as the same as above, the determination of the sales value is once reserved: for the above-mentioned example, the determination of the sales value will be reserved until the "price" data and the "number of pieces" data are input. This means nothing but that the program stated in the present invention autonomously determines the significance.

Making of the pallet function

[0129] The pallet function for W04, W02 and W03 should be made. Fig. 18 shows the structure paradigm of the pallet function. The pallet function (program) having such structure may as well be made for each of W04, W02 and W03, as will be set forth in the following.

[0130] First, the pallet function should have a logic to open a file (step 1801). That is, for example, the pallet function concerned with the W04 should have a logic to open a file of one predetermined W04 out of a plurality of W04 pallets, and then to execute each duplicate vector and homogeneity vector in the consecutive order (step 1802, step 1803).

[0131] Thereafter, in the case that the pallet activating flag has been set (step 1804), the function should reset the flag (step 1805), as well as execute each duplicate vector and homogeneity vector in the consecutive order (step 1802, step 1803). That is, the pallet function in co-operation with the pallet activating flag of each pallet, enables the determination of the autonomous significance of the program.

[0132] On the other hand, when the pallet activating flag has not been set, the function should close the file (step 1806) and put an end to the process.

Assembling into the Pallet Chain Function

[0133] The structure of the pallet chain function is identical in any software. Accordingly, the tense control vector and the pallet function made as explained above simply needs to be assembled into the pre-made pallet chain function.

[0134] The structure paradigm of the pallet chain function is shown in Fig. 19.

[0135] That is, the pallet chain function should have a logic to determine information to be transmitted (step 1901). The information to be transmitted is meant to be a screen to display. In the case of the homogeneity map shown in Fig. 9, for example, when the "reference" of the "customer code" in the sales data entry screen (ref. Fig. 2) is selected (which means that a homogeneity map flag of R = 3 has been valid in the W02 pallet of "customer code"), the pallet chain function should determine the customer code reference screen (Fig. 2) as the information to be transmitted.

[0136] When the information to be transmitted contains the information for closing the system (step 1902), the function should have the logic to close the system (step 1903). The information for closing the system is that, explaining by referring to the homogeneity map shown in Fig. 9, for example, the "F3" has been selected in the sales data entry screen (Fig. 2) (which means that a homogeneity map flag of R=0 has been valid in the F3's W02 pallet). To close the system is, speaking of the above example, to return to the menu screen.

[0137] Next, the function should to make judgment whether to continue or not inside the W (Walk-Through) unit (step 1904). This step is concerned with exceptional process. That is, the WT unit is, as shown in Fig. 20, for example, one

unit made up by binding the entry screen used for data entry and the reference screen used for the reference to data upon entering the data. For example, by explaining in reference to the homogeneity map shown in Fig. 8, the WT unit is one unit made up by binding the sales data entry screen (ref. Fig. 2) and the customer code reference screen (ref. Fig. 3). However, when screens of other homogeneity maps, for example the arrival confirmation entry screen (ref. Fig. 10 and Fig. 4.), are needed, the confirmation entry screen must be unit-linked with these screens stated above. Thereupon, as shown in Fig. 20, if necessary, the pallet chain should perform the scenario chain, or the chain with the other WT (step 1905, 1906). This will become particularly effective, when coping with a huge program.

[0138] In the case of the continuation inside the WT unit, the pallet chain function should set all pallets of the WT unit (step 1907). For example, in the case of the homogeneity map shown in Fig. 8, the function should set all the pallets concerned with this whole homogeneity map (W02 - W09) in the working memory, respectively.

[0139] Then, the function should execute the corresponding W04 pallet at first (step 1908). That is, the function should execute the W04 pallet in whose pallet function as shown in Fig. 18 all W04 duplicate vectors and W04 homogeneity vectors have been set. By this step, data concerned with the screen to display will be determined.

[0140] Then, the pallet chain function should execute the transmission function (step 1909). That is, the function should transmit a screen in which all the data have been set to a display means, for example, a CRT.

[0141] Thereafter, the function should have the logic to execute the receiving function (step 1910). That is, the function should receive the screen, in which all the data have been input from display means, for example, a CRT.

[0142] Then, the pallet chain function should make judgment whether the received data is normal or not (step 1911). If abnormal, the function should resume the procedure from the beginning. That is, the function should make judgment if the data violating the regulation exists or not.

[0143] Next, the function should execute the corresponding W02 pallet (step 1912). That is, the function should execute the W02 pallet in whose pallet function as shown in Fig. 15 all W02 homogeneity vectors have been set. By this step, the input data will be determined.

[0144] Next, a homogeneity map will be determined (step 1913, step 1914). As explained above, the homogeneity map is judged by the homogeneity map flag (R = 1 to 5) contained in the W02 homogeneity vector.

[0145] When the homogeneity map flag R = 1, the function should execute the corresponding W03 pallet (the W03 pallet which is not accompanied by a recording onto a file) (step 1915). For example, the line of the W03 pallet 94 shown in Fig. 9 is executed. Then, the function should have a logic to return to the first step (step 1901). That is, the homogeneity map in the case of R = 1 only performs data processing (ref. Fig. 9).

[0146] When the homogeneity map flag R = 2, the function should execute the corresponding W03 pallet (the pallet W03 accompanied by the recording onto a file) (step 1916). For example, the line of the W03 pallet 95 and the line of the WFL 88 are executed. Then the function should have a logic to return to the first process (step 1901). That is the homogeneity map in the case of R = 2 executes data processing as well as a recording data onto a file (ref. Fig. 9).

[0147] When the homogeneity map flag R = 3 to 5, the function should return to the first process (step 1901) as it is.

[0148] In this connection, the homogeneity map as shown by R = 3 performs processing to return to the W04 pallet (both homogeneous and heterogeneous, without doing anything farther (ref. Fig. 9).

[0149] The homogeneity map as shown by R = 4 performs recording data in a file as it is (ref. Fig. 10).

[0150] The homogeneity map as shown by R = 5 performs taking out data from a file as it is (ref. Fig. 11).

[0151] To be noted, the pallet chain function shown in Fig. 19 is for on-line use. The pallet chain function for off-line use is as shown in Fig. 15.

In summary,

[0152] At first, the pallet chain function should have the logic to determine a screen to display (step 2101) and to activate the W04 pallet (step 2102). By this, screen data is edited and the edited screen is displayed (step 2103).

[0153] When the user's operation is done to this displayed screen, the function should have the logic to receive the screen (step 2104) and to activate the W02 pallet (step 2105). By this a homogeneity map route and the next screen to be displayed is judged.

[0154] Then, the function should have the logic to judge the homogeneity map (step 2106), and in the case of the homogeneity map 1 or 2 (step 2107), the function should activate the W03 pallet. By this, the data operation processing is done.

[0155] When the data operation processing is finished or in the case of other than the homogeneity map 1 or 2 above, the function returns to step 2101.

[0156] Fig. 22 shows the structure inside the pallet.

[0157] As shown by the Fig. 22, for the items A - J on the screen 2201, duplicate vector A - J and homogeneity vector A - J exist as a pallet function inside the W04 pallet, as well as homogeneity vector A - J of the homogeneity vector PF1 and the homogeneity vector A - J of the homogeneity vector PFn exist as a pallet function inside the W02 pallet. Inside the W03 pallet, duplicate vector A - X and homogeneity vector A - X exist as a pallet function (A - X: all items).

[0168] A logic paradigm of the fence control vector is shown in Fig. 23. As shown in the Fig. 23, in the pallet chain function (accessrio) 2301, when data is input and a screen/message is received, W02 pallet, W03 pallet and W04 pallet are activated in their order. When the W02 pallet is activated, the process shown by the code 2302 is executed. When the W03 pallet is activated, the process shown by the code 2303 is executed. When the W04 pallet is activated, the process shown by the code 2304 is executed.

[0169] Fig. 24 is a diagram showing characteristics of the logic in Lye.

[0168] Suppose the program logic is Lc, and the logic being a base for causing actions in accordance with the information sent out by the program, which humans cannot be aware of but can instantly conduct is Lm, in the traditional way of making software, the logic Lm (impossible to be realized) being a base for causing human actions has been forced to be fabricated, a process (procedure) and a function both binding human actions have been fixed as specifications (fabricated by SE with his or her experience or knowledge), thereby a program based thereupon has been made. That is, Lc = Lm was its provision.

[0167] Lye's software, contrary to the traditional method of making software, does not contain Lm, and the program to be made works in accordance with human's capricious conducts.

[0168] Fig. 25 and Fig. 26 show the structure of the traditional-type programs, and Fig. 27 shows the module configuration of the traditional-type programs.

[0168] As understood from these figures, the traditional-type programs can be referred to as process transaction of functional division type. For this reason, the structural condition is complicated, as well as the arrangement of the module configuration is also extremely difficult.

[0164] Fig. 28 shows the structure of the Lye-type program.

[0164] As understood from this figure, the Lye-type program features the followings: the configuration is simple; the element unit is processed by the unit of word; the element content is simple and independent; the program logic does not contain composition conditions (handling procedure) like traditional-type programs.

[0166] In the following, how to grasp business expertise and function as well as the resulting effects from the stand point of Lye will be explained.

(1) There is no need for business expertise

[0167] Fig. 29 shows the W03 homogeneity vector.

[0166] In step 2901, the vector should have the logic to confirm whether the field's value is "space" or "zero". (Judging from the item definition document). The judgment of this logic does not require business expertise; knowing the rule of Lye is only needed.

[0169] In step 2902, the vector should have the logic to confirm whether the item in the right side (Starting point) of the corresponding item's expression (judging from the item definition document) exist or not in the W03 area. The judgment of this logic does not require business expertise; knowing the rule of Lye is only required.

[0170] In step 2903, the vector should have the logic to confirm whether the value of the item of the right side (Starting point) of the corresponding item's expression (judging from the item definition document) is calculable ("space" or "zero") or not. The judgment of this logic does not require business expertise; knowing the rule of Lye is only requested.

[0171] The step 2904 is a schema which guarantees the operational order of the fence control vector. The judgment of this logic does not require business expertise; knowing the rule of Lye is only necessary.

[0172] In step 2905, the vector will calculate the items from the item definition document (such as expressions, etc.) users have confirmed.

[0173] Accordingly, in order to assemble Lye's logic, the "item definition document such as expressions" is necessary, but the sequence of the process (which is called "business expertise") is not required.

(2) Lye deals with only synchronous data and denies a process (handling of asynchronous data).

[0174] In Lye, by introducing the "duplicate vector," it is possible to handle only the synchronous data. That is, in Lye, as shown in Fig. 30, there is no need of considering the examination of the logic for the operational procedure conditions, by handling only the synchronous data, whereas in the traditional methodology, much time was spent on examining the operational procedure, which results in worsening the productivity and the maintainability.

(3) The only one W03 pallet will do.

[0176] When realizing the logicalization of humans (i.e., to think communicable sentences, to take actions,....), it can be said from a biological point of view that all one's will and muscles (as represented by all brain cells) is intertwined

each other. And, the right-side brain or the left-side brain primarily works in accordance with an object area to be logicalized. The logic of software (the logicalization), by nature, must be the same as this [because the software logic is nothing but the logic made by humans].

[0176] As shown in Fig. 31, the W03 pallet of Lyee is an area assuming the role of "logicalization," so that the W03 pallet logicalizes all the words in a system, which is equivalent to all one's will and muscles, in one area as synchronous data. In the case of Lyee, tense control vectors corresponding to all words are all intertwined each other (All tense control vectors work once, and as a result only the tense control vectors with significance execute their aimed process).

[0177] That is, traditionally, words (data) necessary for the function aimed at have to be examined and analyzed in advance before the data definition part is to be designed. On the contrary, in the case of Lyee, all needs to be done is that all words be defined as they are and that the individual tense control vectors be assembled into the logic as explained above.

(4) There are two kinds of the logic.

[0178] In the traditional software, the automatic logic was composed of the combination of an operational logic and an automatically self-run logic. On the other part, in the case of software made by Lyee method, as shown in Fig. 32, the automatically self-run logic and the operational logic are separated. That is, the automatically self-run logic exists in the W03 pallet, and the operational logic exists in the logic in a human brain.

(5) Checking

[0179] The traditional software, as shown in Fig. 33 (a), has been structured to be of a flow of checking against the input, performing a normal process in case of "OK", or performing an error transaction in case of "NG." Accordingly, all error conditions of multiple items must be examined beforehand.

[0180] On the other hand, in Lyee software, as shown in Fig. 33 (b), the only homogeneity map is determined without executing the input check in the W02 pallet. In the W03 pallet, the selection is done concerning whether the process to be directed can be accomplished or not, and if the process to be directed cannot be executed, an error transaction is performed in the W04 pallet.

[0181] Explained next is the application range of Lyee in the system development step.

[0182] Fig. 34 (a) shows the traditional software development method. Traditionally, software has been developed through the following steps: scheme planning, job analysis and basic design, detail design, programming design, coding, and tests. Traditionally, development from the "job analysis and basic design" step to the "programming design" step has been performed depending upon SE's experience and expertise and human's abilities in coordinating meetings with users.

[0183] Fig. 34 (b) shows the Lyee's software development methodology. In Lyee, software is developed through the following steps: scheme planning, development into a homogeneity map, making of tense control vector specifications, coding of tense control vectors, and confirmation of movements. In Lyee, during the development process from the "development into a homogeneity map" step to the "confirmation of movements" step, the work is implemented plainly in accordance with the rule induced from the theory of Lyee, and the requirement which has been traditionally determined by human's abilities such as experience and expertise of SEs is elicited to enter in the process of making users confirm the result, thereby bringing about the result that the system, by the users' responding to the soliciting, is to be made reality. So to speak, in the traditional method, the upper-stream requirement and the lower-stream source have been linked up each other by the SE's ability. On the other hand, in Lyee, the upper-stream requirement and the lower-stream source are linked by the theory of Lyee.

[0184] In the following, the working steps for the development of the Lyee-applied software is more specifically explained.

[0185] Fig. 35 (a) shows a hand-over document given by users to the development side. What are to be handed over to the development side includes screens, files, vouchers, and code tables. In this regard, as shown in Fig. 35 (b), the development side makes screen definition document, file definition document, voucher definition document, table of words, homogeneity maps, and tense control vectors specifications based on the discussion with users. Then, as shown in Fig. 36 (c), the source program is made based on these documents.

[0186] Fig. 36 shows an example of the screen definition document. Fig. 37 shows an example of the voucher definition document. Fig. 38 shows an example of the file definition document. Fig. 39 shows an example of the homogeneity map.

[0187] Fig. 40 shows the method of making the homogeneity map.

(1) One shall confirm a screen for the menu to shift to at first, and make a framed space for the screen in the left-upper corner on the homogeneity map sheet.

(2) One shall make unconditionally a frame for W04 and W02 into this frame.

(3) One shall confirm the function key (button) on the screen, as well as distinguish between the screen to shift to upon pressing the key (button) and the function to be kept until the shift to the screen ("1: simple data hand-over/

"2: file making & updating/ "3: operation & confirmation without file making or updating has been completed).

"1: Simple data hand-over → Specifying the functional key, Homogeneity map (H) = 3, the frame of next screen's frame

"2: File making & updating → Specifying the functional key, Homogeneity map (H) = 2, the frame of W03

However, when a file to be made is other than the basic terms, homogeneity map (H) = 4, the frame of WFL

"3: Simple operation & confirmation → Specifying the functional key, Homogeneity map (H) = 1, the frame of W02 (5) Hereafter, one shall repeat the above (2) to (4) for all screens inside the unit of the homogeneity map.

In the following, the method of making the tense control vector specifications is explained based on Fig. 41. Fig. 41 indicates the homogeneity vector.

The condition for determining the "input done" of step 4101 can be judged with the attribute and the initial value (known from the definitions definition document), and the others are all regulations in the course of realization by Lysa. Thus, no documents are required.

The condition for determining the "inducibility" of step 4102 is whether the operational expression/editing expression is clear or not. Thus, no documents are required.

The condition for determining the "operability" of step 4103 is whether the value of the right side of the operational expression/editing expression may be used for the calculation or not, which is a condition that can be determined from the operational expression. Thus, no documents are required.

In step 4104, for example the following:

an expression like " $Y = aX - bZ + cW$ " and,

The range of possible values and particular conditions taken by a, b, c, X, Z, W

and, The conditions to executing this computational formula (Multiple computational formulas are possible for one word), are to be questioned to users for each word and the answers are to be taken as a memo.

Fig. 42 and Fig. 43 show examples of the tense control vector specifications.

Fig. 44 shows an example of the programming based on the tense control vector specifications.

In this program, (1) to (4) are made from the rule of Lysa. That is, these are the particular conditions of Lysa, so interacting with users are not necessary.

(5) is to be made from the operational significant conditions of the tense control vector and the code table.

(6) is to be made from the operational expression of the tense control vector. (5) and (6) are to be determined and made in the documentation through interaction with the users, a handover document, "code table".

[0188] Hereinafter, the sample the program made by Lysa is illustrated.

1. Drawings Specifications (Order Entry (Distribution))

1 KE201E Received Order Entry (Distribution) DD/DD/DE TT:TT:TT
 2 O P C D * Received Order Distribution BB 00000000
 3 * Customer BBBBBBBB DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD TEL 00000000000000
 4 * Delivery Definition BBBBBBBB DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD FAX 00000000000000
 5 * Inventory JB 0000000000 * Even to Days BBBBBBBB DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD * Retail Order No. 0000000000
 6 NO Product Code Product Name Quantity * Retail Unit Price * Retail Price Wholesale Rate Delivery Location
 7 * Retail Price * Retail Unit Price
 8 1 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0000 0.000 000 0.000 000
 9 0 00000000000 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0.000 0.000 000 0.000 000
 10 2 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0000 0.000 000 0.000 000
 11 0 00000000000 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0.000 0.000 000 0.000 000
 12 3 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0000 0.000 000 0.000 000
 13 0 00000000000 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0.000 0.000 000 0.000 000
 14 4 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0000 0.000 000 0.000 000
 15 0 00000000000 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0.000 0.000 000 0.000 000
 16 5 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0000 0.000 000 0.000 000
 17 0 00000000000 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0.000 0.000 000 0.000 000
 18 6 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0000 0.000 000 0.000 000
 19 0 00000000000 BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB 0.000 0.000 000 0.000 000
 20 Wholesale Cost No. B88
 21 Order-Dependent Price BBBBBBBB Mr./Mrs. Remarks BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB BBBBBBBBBB
 22 * Direct Support Classification B Delivery Location B999999 Customer Order No. BBBBBBBB * Dispatch B 00000000000000
 23 F1 - Registry F1 - Reference F5 - Credit Inquiry F10/F11 - Product Entry (S/H) F12 - Cancel F8
 24

2-1. HDR

PW1 9283M0 931105

SELU Origin List

File CTM010/QDBSSMC

Bar K0528P01

R#... 1... 2... 3... 4... 5... 6... 7...

```

*****
A# System Name      = Ontario New Sales/Distribution Management System
A# File Name       = Receive Transaction File HDR
A# DDB Type       = PF
A#
A# Entry Date      = 85/ 8/24
A# Change Date    = 85/ 9/05
*****
    
```

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R#	R#	R#	TEXT (' Receive Transaction File HDR R')
A	KD1520	18A	COLHDR (' RKT Mgt. SH')
A	KD0325	8S 0	COLHDR (' Recvd. Date')
A	KD0324	8S 0	COLHDR (' Recvd. Time')
A	KD0308	1A	COLHDR (' Delete Status')
A	KD1084	7A	COLHDR (' Person in Charge Code')
A	KD1535	5A	COLHDR (' Person in Charge Dept. Code')
A	KD1179	7A	COLHDR (' Reg. Pwr. Code')
A	KD1181	5A	COLHDR (' Reg. Pwr. Dept. Code')
A	KD0975	18A	COLHDR (' Origin Orig. Mgt. SH')
A	KD1836	1A	COLHDR (' HS CL')
A	KD0377	1A	COLHDR (' Sales CL')
A	KD1838	1A	COLHDR (' Mode of Transaction')
A	KD1839	2A	COLHDR (' Shipments Reason')
A	KD1840	2A	COLHDR (' Arrival Reason')
A	KD8429	1A	COLHDR (' Trn. F. CL. S')
A	KD1843	8S 0	COLHDR (' Entry Date')
A	KD1844	8S 0	COLHDR (' Trn. No.')
A	KDCT86	7A	COLHDR (' BS Report No.')
A	KD1847	6A	COLHDR (' Receiver Code')
A	KD1848	23D	COLHDR (' Name of Customer Person in Charge')
A	KD4044	20A	COLHDR (' Name (Last) of Customer Person in Charge')
A	KD4000	42D	COLHDR (' Trn. Name')
A	KD1849	28D	COLHDR (' Trn. Valid Period')
A	KD1850	23 0	COLHDR (' No. of TXT Lines')
A	KD1851	8S 0	COLHDR (' Trn. End Date Sched.')
A	KD1852	18A	COLHDR (' HDR Mgt. SH')
A	KD1854	13P 0	COLHDR (' Trn. Total Amount')
A	KD1855	13P 0	COLHDR (' Trn. Total Amt. Includes of Consumption Tax')
A	KD1856	13P 0	COLHDR (' Qty. Pr. Total Amt.')
A	KD1857	13P 0	COLHDR (' Qty. Unit Price Total Amt.')
A	KD1858	13P 0	COLHDR (' Qty. Unit Price Disc. Total Amt.')
A	KD1859	13P 0	COLHDR (' G. Tax Total Amt.')
A	KD0380	1A	COLHDR (' Disc. CL')
A	KD0901	4S 2	COLHDR (' Sales Unit Price Disc. Rate')
A	KD1860	13P 0	COLHDR (' Disc. Total Amt.')
A	KD1865	8P 2	COLHDR (' Total No. of Prod. Transacted')
A	KD0470	7P 0	COLHDR (' Total No. of Prod. Returned')
A	KD1860	7P 0	COLHDR (' No. of Families Security Prod.')
A	KD1867	7P 0	COLHDR (' No. of Inexplicable Security Prod.')
A	KD0429	7S 0	COLHDR (' Settlement Bank Code')
A	KD1877	1S 0	COLHDR (' Credit Sales Incomplete FLG')
A	KD0819	13P 0	COLHDR (' Credit Sales Total Amt.')

PW1 V22340 931105 SEU Origin List

File CYN010/QMSSRC

Bar K0638P01

8	1	2	3	4	5	6	7
A		KD0020	13P 0		COLBDC	Credit Sales Paid-in Amt.)
A		KD0021	88 0		COLBDC	Credit Sales Strike-out Date)
A		KD0022	13P 0		COLBDC	Credit Sales Mt. Strike-out)
A		KD1878	19 0		COLBDC	Credit Purchase Acct. FLD)
10		KD0023	13P 0		COLBDC	Credit Purchase Total Amt.)
A		KD0024	13P 0		COLBDC	Credit Purchase Payment Amt.)
A		KD0025	88 0		COLBDC	Credit Purchase Strike-out Date)
A		KD0026	13P 0		COLBDC	Credit Purchase Strike-out Reason)
A		KD1415	1A		COLBDC	Display CL)
A		KD4045	2A		COLBDC	Display Date)
15		KD4046	1A		COLBDC	Group Position CL No.)
A		KD0056	1A		COLBDC	Delivery Note Insurance FLD)
A		KD9228	1A		COLBDC	KD9210 Insurance Intran. FLD)
A		KD9229	1A		COLBDC	KD9220 Insurance Intran. FLD)
A		KD9230	1A		COLBDC	KD9230 Insurance Intran. FLD)
A		KD9231	1A		COLBDC	KD9230 Insurance Intran. FLD)
20		KD9232	1A		COLBDC	Reserve 1)
A		KD9233	1A		COLBDC	Reserve 2)
A		KD9400	1A		COLBDC	Reserve 3)
A		KD9401	1A		COLBDC	Reserve 4)
A		KD9402	1A		COLBDC	Order Appl. Order Person in Charge CL)
25	1??						
A		KD9403	1A		COLBDC	Change Screen CL)
	1??						
	1??						
	1??						
	1??						
30	A	KD9404	1A		COLBDC	Reserve 7)
A		KD9405	1A		COLBDC	Acct. V/P Date FLD)
A		KD9406	1A		COLBDC	Reserve 0-99 CL)
A		KD9407	1A		COLBDC	Over Credit Limit Amt. FLD)
A		KD9408	1A		COLBDC	Next Trm. Int. FLD)
35	A	KD9409	1A		COLBDC	Trm. Completion Date FLD)
A		KD4028	88 0		COLBDC	Estimate No.)
A		KD4029	88 0		COLBDC	Rec. Order No.)
A		KD4452	28 0		COLBDC	Rec. Order Line No.)
A		KD4030	88 0		COLBDC	Physical Order No.)
A		KD4453	28 0		COLBDC	Physical Order Line No.)
40	A	KD4031	88 0		COLBDC	Buying-in No.)
A		KD4434	28 0		COLBDC	Buying-in Line No.)
A		KD4032	88 0		COLBDC	Shipping No.)
A		KD4455	28 0		COLBDC	Ship. Line No.)
A		KD4033	88 0		COLBDC	Payment No.)
A		KD4034	88 0		COLBDC	Pay-in No.)
45	A	KD4035	88 0		COLBDC	Sales No.)
A		KD4456	28 0		COLBDC	Sales Line No.)
A		KD4036	88 0		COLBDC	Issue No.)
A		KD4457	28 0		COLBDC	Issue Line No.)
A		KD4289	88 0		COLBDC	Sales Return Appl. No.)
50	A	KD4458	28 0		COLBDC	Sales Return Appl. Line)
A		KD0290	88 0		COLBDC	Buying-in Return Appl. No.)
A		KD4459	28 0		COLBDC	Buying-in Return Appl. Line)
A		KD9568	88 0		COLBDC	Facsim. No.)

PW1 V2R3MD 081105 SEU Origin List

File CTN010/QDSSRC

Bar I063BP01

0	1	2	3	4	5	6	7
A	ED1457	88	0	COLHDC	Loar No.		
A	ED0930	29	0	COLHDC	Loar Line No.		
A	ED0937	88	0	COLHDC	Loar Return No.		
A	ED0938	29	0	COLHDC	Loar Return Line No.		
A	ED0944	7A		COLHDC	SN No.		
A	ED0511	2A		COLHDC	Account Cl.		
A	ED0512	7A		COLHDC	Account #		
A	ED1786	420		COLHDC	Remarks 1		
A	ED1787	420		COLHDC	Remarks 2		
A	EDS410	420		COLHDC	Remarks 3		
A	EDS411	420		COLHDC	Remarks 4		
A	EDS412	420		COLHDC	Remarks 5		
A	ED4937	200		COLHDC	Customer Trm. No.		
A	ED8564	1A		COLHDC	Customer Sign. Expires/Term. Cl.		
A	ED8565	1A		COLHDC	Inventory Security Desc FLD		
A	ED0859	8A		COLHDC	ESig Code		
A	ED1971	2A		COLHDC	Return Reason Code		
A	ED1447	2A		COLHDC	Rate Cl.		
A	EDU309	1A		COLHDC	Consumption Tax Y/N Cl.		
A	EDU364	1A		COLHDC	Sales Start-up Cl.		
A	ED0201	1A		COLHDC	Install Cl.		
A	ED0602	1A		COLHDC	Inst. Shipping Cl.		
A	ED8566	1A		COLHDC	Partial Delivery Feasibility Cl.		
A	ED0121	8A		COLHDC	EM Customer Code		
A	ED8587	1A		COLHDC	Maker's Direct Distribution Cl.		
A	ED8588	1A		COLHDC	Customer Direct Distribution Cl.		
A	ED9027	8A		COLHDC	Acct. Customer Code		
A	ED0464	1A		COLHDC	Designated Sig Cl.		
A	EDV201	11A		COLHDC	Customer Designated Trm. No.		
A	ED1261	10A		COLHDC	Customer name (name)		
A	EDV320	1A		COLHDC	BOB Cl.		
A	EDV321	1A		COLHDC	Reserve Cl. 2		
A	ED1771	10A		COLHDC	Delivery Destination Code		
A	ED1772	10A		COLHDC	Reserve 2		
A	ED1773	10A		COLHDC	Reserve 3		
A*							
A	E ED1452						
A*							

*** End of Origin Specification ***

2 - 2. DTL
 391 V228MD 831105 SELU Origin List

File CTM010/QROSSNC
 Bar R052BP02

10...+... 1 ...+... 2 ...+... 3 ...+... 4 ...+... 5 ...+... 6 ...+... 7 ...+...

```

+++++
++ System Name      = Cabana New Sales/Distributor Management System.
++ File Name       = Receive Transaction File DTL.
++ DDS Type PF    = PF
++
++ Entry Date      = 95/ 8/30
++ Change Date     = 95/ 8/30
+++++

```

	R X852RC		UNIQUE TBRT(	Receive Transaction File DTL
	KB4001	18A	COLHDG(	TXI Mgt. SN (Serial No.)
	KB1879	2S 0	COLHDG(	TXI No.
	KB9208	1A	COLHDG(	Reserve Cl (Date)
	KB1084	7A	COLHDG(	Person in Charge Code
	KB1535	5A	COLHDG(	Person in Charge Dept. Code
	KB0277	1A	COLHDG(	Sales Cl
	KB1838	1A	COLHDG(	Kind of Transaction
	KB1839	2A	COLHDG(	Shipment Reason
	KB1840	2A	COLHDG(	Arrival Reason
	KB1848	8S 0	COLHDG(	F Entry Date
	KB1849	8S 0	COLHDG(	Tran. No.
	KB1847	8A	COLHDG(	Customer Code
	KB1447	2A	COLHDG(	Sales Cl
	KB8587	1A	COLHDG(	Motor's Direct Distribution Cl
	KB8588	1A	COLHDG(	Customer Direct Distribution Cl
	KB1836	1A	COLHDG(	HS Cl
	KB4101	12A	COLHDG(	Product Code
	KB0027	800	COLHDG(	Product Code Product Name
	KB0130	13A	COLHDG(	JAN Code
	KB4301	260	COLHDG(	Product Name (Abbrev.) 1
	KB4851	12A	COLHDG(	Type Name (Abbrev.) 1
	KB4401	10A	COLHDG(	Media Name 1
	KB4451	16A	COLHDG(	Product No. 1
	KB4042	13A	COLHDG(	Customer Product Code
	KB5001	7P 2	COLHDG(	No. of Transacted Products
	KB5413	5P 0	COLHDG(	Estimated No. of Transacted Products
	KB9471	5P 0	COLHDG(	Balance of Transacted Products
	KB5351	1S 0	COLHDG(	Frac. of Security
	KB5051	200	COLHDG(	Customer Trn. No.
	KB0747	1A	COLHDG(	Agency Cl
	KB5101	1A	COLHDG(	Inventory Cl 1
	KB5151	8A	COLHDG(	Inventory Location Code 1
	KB5201	1A	COLHDG(	Security Method 1
	KB1070	5A	COLHDG(	Shel? No. 1
	KB5251	1A	COLHDG(	Product Status-Cl 1
	KB5301	7P 0	COLHDG(	No. of Inventory Location Stock 1
	KB5203	7P 0	COLHDG(	Inventory Location Security No. 1
	KB5102	1A	COLHDG(	Inventory Cl 2
	KB5152	9P	COLHDG(	Inventory Location Code 2
	KB5202	1A	COLHDG(	Security Method 2
	KB1071	5A	COLHDG(	Shel? No. 2

PW1 V2R3M0 991105 SEU Origin List

File CTNOLC/QDDSSRC

Class K0522F02

0	1	2	3	4	5	6	7
A	KB5252	1A			COLHDG	Product Status Cl. 2	
A	KB5302	7P 0			COLHDG	No. of Inventory Location Stock 1	
A	KB5204	7P 0			COLHDG	Inventory Location Security No. 1	
A	KB5103	1A			COLHDG	Inventory Cl. 3	
A	KB5158	9A			COLHDG	Inventory Location Code 2	
A	KB5203	1A			COLHDG	Security Method 3	
A	KB1072	5A			COLHDG	Staff No. 3	
A	KB5253	1A			COLHDG	Product Status Cl. 2	
A	KB5303	7P 0			COLHDG	No. of Inventory Location Stock 1	
A	KB5205	7P 0			COLHDG	Inventory Location Security No. 1	
A	KB5104	1A			COLHDG	Inventory Cl. 4	
A	KB5154	9A			COLHDG	Inventory Location Code 4	
A	KB5204	1A			COLHDG	Security Method 4	
A	KB1073	5A			COLHDG	Staff No. 4	
A	KB5254	1A			COLHDG	Product Status Cl. 4	
A	KB5304	7P 0			COLHDG	No. of Inventory Location Stock 1	
A	KB5206	7P 0			COLHDG	Inventory Location Security No. 4	
A	KB5105	1A			COLHDG	Inventory Cl. 5	
A	KB5155	9A			COLHDG	Inventory Location Code 5	
A	KB5206	1A			COLHDG	Security Method 5	
A	KB5428	5A			COLHDG	Staff No. 5	
A	KB5255	1A			COLHDG	Product Status Cl. 5	
A	KB5305	7P 0			COLHDG	No. of Inventory Location Stock 5	
A	KB5207	7P 0			COLHDG	Inventory Location Security No. 7	
A	KB1904	7P 0			COLHDG	Product Security Total	
A	KB4430	820			COLHDG	Final Arrival Point Name 1	
A	KB5551	8A			COLHDG	Final Arrival Point Postal Code 1	
A	KB5801	420			COLHDG	Final Arrival Point Address 1-1	
A	KB5851	420			COLHDG	Final Arrival Point Address 2-1	
A	KB5701	420			COLHDG	Final Arrival Point Address 3-1	
A	KB5751	320			COLHDG	Final Arrival Point Department 1	
A	KB5801	220			COLHDG	Final Arrival Point Person In Charge 1	
A	KB5851	12A			COLHDG	Final Arrival Point TEL 1	
A	KB5901	12A			COLHDG	Final Arrival Point FAX 1	
A	KB4101	5P 0			COLHDG	No. of Arrival Products at Arrival-point 1	
A	KB5401	9A			COLHDG	Start Point Location Code 1	
A	KB5451	9A			COLHDG	Arrival Point Location Code 1	
A	KB5501	9A			COLHDG	Final Arrival Point Code 1	
A	KB5951	8S 0			COLHDG	Arrival-point Arrival Schedule 1	
A	KB6001	8S 0			COLHDG	Final Arrival-point Arrival Schedule 1	
A	KB6051	1A			COLHDG	Routing Judgment 1	
A	KB5569	1A			COLHDG	Early/Mid/Late of Month Sold Cl. 1	
A	KB0460	8S 0			COLHDG	Trans. Date No. 1	
A	KB4461	2S 0			COLHDG	Trans. Date Line No. 1	
A	KB9351	5P 0			COLHDG	No. of Arrival Products at Arrival-point 2	
A	KB6102	9A			COLHDG	Start Point Location Code 2	
A	KB6152	9A			COLHDG	Arrival Point Location Code 2	
A	KB6202	9A			COLHDG	Final Arrival Point Code 2	
A	KB6852	8S 0			COLHDG	Arrival-point Arrival Schedule 2	
A	KB6702	8S 0			COLHDG	Final Arrival-point Arrival Schedule 2	
A	KB6752	1A			COLHDG	Routing Judgment 2	
A	KB5570	1A			COLHDG	Early/Mid/Late of Month Sold Cl. 2	
A	KB7482	8S 0			COLHDG	Trans. Date No. 2	

PWL V2R3M0 931105 SEU Origin List

File CYN010/QDD33RC

Exp K0638702

R#	t	1	2	3	4	5	B	7
A			KB9002	9P	0	COLHDC	* Transaction on Consumption to Account	
A			KB1020	86	0	COLHDC	* Balance No.	
A			KB1029	86	0	COLHDC	* Rec. Order No.	
A			KB1452	28	0	COLHDC	* Rec. Order Line No.	
A			KB1030	89	0	COLHDC	* Planned Order No.	
A			KB1453	28	0	COLHDC	* Planned Order Line No.	
A			KB1031	86	0	COLHDC	* Buyer's No.	
A			KB1454	28	0	COLHDC	* Buyer's Line No.	
A			KB1082	88	D	COLHDC	* Shipping No.	
A			KB1455	28	D	COLHDC	* Ship. Line No.	
A			KB1033	89	0	COLHDC	* Payment No.	
A			KB1034	88	0	COLHDC	* Paid-to No.	
A			KB1035	88	0	COLHDC	* Sales No.	
A			KB1456	28	D	COLHDC	* Sales Line No.	
A			KB1086	88	0	COLHDC	* Move No.	
A			KB1457	28	D	COLHDC	* Move Line No.	
A			KB1280	86	0	COLHDC	* Sales Return Appl. No.	
A			KB1458	28	0	COLHDC	* Sales Return Appl. Line 0	
A			KB1290	89	0	COLHDC	* Buyer-in Return Appl. No.	
A			KB1459	28	0	COLHDC	* Buyer-in Return Appl. Line 0	
A			KB1563	88	0	COLHDC	* Recall No.	
A			KB1057	88	0	COLHDC	* Loan No.	
A			KB1836	28	0	COLHDC	* Loan Line No.	
A			KB1937	88	0	COLHDC	* Loan Return No.	
A			KB1088	28	0	COLHDC	* Loan Return Line No.	
A			KB0844	7A		COLHDC	* Bill No.	
A			KB1571	2A		COLHDC	* Finance Code	
A			KB1529	1A		COLHDC	* Payment Hold Cl.	
A			KEY013	10A		COLHDC	* Product Name Code	
A			KEY030	9A		COLHDC	* Reserve A	
A			KEY031	9A		COLHDC	* Reserve B	
A			KEY032	9A		COLHDC	* Reserve C	
A			KEY033	9A		COLHDC	* Reserve D	
A			KEY034	9A		COLHDC	* Reserve E	
A			KEY035	9A		COLHDC	* Reserve F	
A			KEY036	9A		COLHDC	* Reserve G	
A			KEY037	9A		COLHDC	* Registry-Time Mgt. SH Up 0	
A			KEY038	9A		COLHDC	* Registry-Time Mgt. SH Down 0	
A			KEY039	9A		COLHDC	* Product Buyer-in Parts Code	
A			KEY320	1A		COLHDC	* EOB Cl.	
A			KB9321	1A		COLHDC	* Reserve Cl. 2	
A			KB1771	7A		COLHDC	* Reserve 1	
A*								
A			E KE1001					
A			E KE1878					
A*								

*** End of Origin Specification ***

```

W02 Homogeneity Vector (Reference Key)
*****
* LP0004 P P 4 Reference
*****
LP0004-SEC SECTION.
LP0004-START
IF NOT ( PRESV NO OF W0204(PS) = 04 )
GO TO LP0004-EXIT
END-IF.
-----
10  L01540 Q P C D (LP0004)
-----
IF ERR-IMP NOT = "1"
IF A01540 OF KH201E(PS) = SPACE
MOVE 1 TO ERR-IMP
MOVE 2009 TO MSG-NO
MOVE 801 TO A01540-C OF W0204(PS)
MOVE SPACE TO A01580 OF KH201E(PS)
ELSE
* OPEN K213DL01
IF K213DL01-OPEN NOT = "1"
OPEN INPUT K213DL01
IF FLS1SI NOT = ZERO
MOVE 8800 TO MSG-NO
MOVE 1 TO ERR-IMP
GO TO MAIN-END
ELSE
MOVE "1" TO K213DL01-OPEN
END-IF
END-IF
*
MOVE A01540 OF KH201E(PS) TO W01540
MOVE 8800 TO SGLCODE
MOVE W01540 TO SK1084 OF K213DL01-REC
WRAB K213DL01
INVALID KEY
MOVE 100 TO SGLCODE
END-READ
IF SGLCODE = ZERO
MOVE SMD782 OF K213DL01-REC TO R-W01560
END-IF
*
IF SGLCODE = ZERO
MOVE R-W01560 TO INDATA
MOVE 16 TO CTRKATA
PERFORM CSLEXP00
MOVE OUTDATA TO A01580 OF KH201E(PS)
ELSE
MOVE "1" TO ERR-IMP
MOVE 2001 TO MSG-NO
MOVE 801 TO A01540-C OF W0204(PS)
MOVE SPACE TO A01580 OF KH201E(PS)
END-IF
END-IF.
*
45  * Determination of homogeneity rate and the next screen in the case of customer code
IF ERR-IMP NOT = "1"
IF CSR-LCKK OF W0204(PS) = "A12590"
MOVE 3 TO ROUTE-NO
MOVE "EH600Q" TO L-GAMER-NO
END-IF
*
50  * Determination of homogeneity rate and the next screen in the case of Delivery destination code
IF CSR-LCKK OF W0204(PS) = "A13610"
MOVE 3 TO ROUTE-NO
MOVE "EH600Q" TO L-GAMER-NO

```

W03: Duplicate Vector

W03KH201E

0
5
10
15
20
25
30
35
40
45
50
55

```

***** Beginning of Data *****
KH201E Received Order Entry (Distribution)
IF GAMER-NO OF CRTL-AREA = KH201E
*****
D DISPLAY KH201E LAY-PLG = LAYE-PLG
D DISPLAY KH201E LAY-PLG = LAYE-PLG
IF LAYE-PLG = 1

***** Reg. Per. Code YD1179KH201E:R
MOVE 401540 OF KH201E(STG1)
TO ED1179 OF BP-AREA

***** Shipment Reason YD1839KH201E:R
MOVE 407590 OF KH201E(STG1)
TO ED1839 OF BP-AREA

***** Customs Code YD1847KH201E:R
MOVE 412590 OF KH201E(STG1)
TO ED1847 OF BP-AREA

980424***** Transaction No. YD1844KH201E:R
***** IF 407590 OF KH201E(STG1) IS NUMERIC
***** MOVE 407590 OF KH201E(STG1)
***** TO ED1844 OF BP-AREA
***** BDU-IF

980513***** Received Order No. YD1844KH201E:R
***** IF 407590 OF KH201E(STG1) IS NUMERIC
***** MOVE 407590 OF KH201E(STG1)
***** TO ED4028 OF BP-AREA
***** BDM-IF

980513***** Estimate No. YD4028KH201E:R
***** IF 404800 OF KH201E(STG1) IS NUMERIC
***** MOVE 404800 OF KH201E(STG1)
***** TO ED4028 OF BP-AREA
***** RNB-IF

***** Time Total Amt. YD1854KH201E:R
MOVE 404300 OF KH201E(STG1)
TO ED1854 OF BP-AREA

***** Qty Unit Price Total Amt. YD1857KH201E:R
MOVE 404300 OF KH201E(STG1)
TO ED1857 OF BP-AREA

***** Name of Customer Person in Charge (Company) YD4044KH201E:R
MOVE 414800 OF KH201E(STG1)
TO ED4044 OF BP-AREA

***** Remarks 1 YD1789KH201E:R
MOVE 417860 OF KH201E(STG1)
TO ED1789 OF BP-AREA

***** Remarks 2 YD1787KH201E:R
MOVE 417870 OF KH201E(STG1)
TO ED1787 OF BP-AREA

***** Customer Term. No. YD4037KH201E:R
MOVE 412890 OF KH201E(STG1)
TO ED4037 OF BP-AREA

***** Distribution Of. YD1412KH201E:R
MOVE 414130 OF KH201E(STG1)
TO ED1412 OF BP-AREA

***** Person in Charge Code YD1034KH201E:R
MOVE 410840 OF KH201E(STG1)
TO ED1084 OF BP-AREA

***** Customer Direct Distribution Cl. YD3598KH201E:R
MOVE 411210 OF KH201E(STG1)
TO ED3598 OF BP-AREA

***** BDU-IF
***** ***** THIS
IF LAYE-PLG = 1
PREPDM VARYING SI FROM 1 BY 1
*****
***** LASTLINE CONTROL
MOVE SI TO TI
***** Final Arrival Point Code 1 YD6501KH201E:R
***** IF 411210 OF KH201E(STG1) NOT = 1

```


W03: Homogeneity Vector

```

5 IF ERR-INT = SPACE
6 MOVE 1 TO ERR-INT
7 MOVE 3019 TO MSG-NO
8 END-IF
9 END-COMPUTE
10 END-IF
11 END-IF
12 ***** Disc. Total Amount L10990
13 IF TRSN = CHS-BP
14 IF K01000 OF EF-AREA NOT = 0
15 AND K01000 OF EF-AREA IS NUMERIC
16 AND K0251 OF EF-AREA IS NUMERIC
17 IF K0251 = 1
18 MOVE ZERO TO K01000 OF EF-AREA
19 END-IF
20 IF (K0001 OF EF-AREA(PI) NOT = ZERO)
21 COMPUTE = K01000 OF EF-AREA
22 + K01000 OF EF-AREA
23 + K0251 OF EF-AREA(PI)
24 ON SIZE ERROR
25 MOVE ALL 0 TO K01000 OF EF-AREA
26 IF ERR-INT = SPACE
27 MOVE 1 TO ERR-INT
28 MOVE 3019 TO MSG-NO
29 END-IF
30 END-COMPUTE
31 END-IF
32 END-IF

```

```

33 ***** Transaction Total Amount L18540
34 IF TRSN = CHS-BP
35 IF K01854 OF EF-AREA IS NUMERIC
36 AND K01854 OF EF-AREA IS NUMERIC
37 AND K01854 OF EF-AREA IS NUMERIC
38 COMPUTE K01854 OF EF-AREA = K01854 OF EF-AREA
39 ON SIZE ERROR
40 MOVE ALL 0 TO K01854 OF EF-AREA
41 IF ERR-INT = SPACE
42 MOVE 1 TO ERR-INT
43 MOVE 3019 TO MSG-NO
44 END-IF
45 END-COMPUTE
46 END-IF
47 END-IF

```

```

48 ***** Trans. Total Amount including Consumption Tax L18550
49 IF TRSN = CHS-BP
50 IF K01855 OF EF-AREA IS NUMERIC
51 AND K01854 OF EF-AREA IS NUMERIC
52 AND K10903 IS NUMERIC
53 IF (K0001 OF EF-AREA = 1)
54 IF K01854 OF EF-AREA >= 1800
55 COMPUTE K01855 OF EF-AREA = K01854 OF EF-AREA + (1 + W10903) + 0.5
56 ON SIZE ERROR
57 MOVE ALL 0 TO K01855 OF EF-AREA
58 IF ERR-INT = SPACE
59 MOVE 1 TO ERR-INT
60 MOVE 3019 TO MSG-NO
61 END-IF
62 END-COMPUTE
63 ELSE
64 COMPUTE K01855 OF EF-AREA
65 = K01854 OF EF-AREA + (1 + W10903) - 0.5
66 ON SIZE ERROR
67 MOVE ALL 0 TO K01855 OF EF-AREA
68 IF ERR-INT = SPACE

```

W04: Duplicate Vector

Duplicate Vector Group 1 (Tail)

Y17990 Wholesale Cost No.

Y04360 Total Amount

Y04360-SEC SECTION.

Y04360-START.

IF HEX-IMP NOT = "1"

AND GAMER-NO OF W0204(PS2) = "KH2018"

IF PPAR1-NO OF W0204(PS2) = 1

OR PPAR2-NO OF W0204(PS2) = 12

MOVE ZERO TO A04360 OF KH2018(PS1)

ELSE

IF KD1857 OF W03-ED18 - IS NUMERIC

MOVE KD1857 OF W03-ED18
TO A04360 OF KH2018(PS1)

END-IF

END-IF

END-IF

Y04360-EXIT.

EXIT.

W04: Homogeneity Vector

L04380 Total Amount

L04380-SEC SECTION.

L04380-START.

MOVE ZERO TO WK-KINGAKU.

PERFORM VARYING PJ FROM 1 BY 1

UNTIL PJ > 8

IF A08311 OF KH2018(PS1 PJ) NOT = SPACE

AND A09221 OF KH2018(PS1 PJ) IS NUMERIC

AND A09221 OF KH2018(PS1 PJ) NOT = ZERO

AND A10781 OF KH2018(PS1 PJ) IS NUMERIC

AND A10781 OF KH2018(PS1 PJ) NOT = ZERO

AND A16721 OF KH2018(PS1 PJ) IS NUMERIC

AND A16721 OF KH2018(PS1 PJ) NOT = ZERO

COMPUTE WK-KINGAKU

= WK-KINGAKU + A16721 OF KH2018(PS1 PJ)

END-IF

END-PERFORM.

MOVE WK-KINGAKU TO A04360 OF KH2018(PS1).

L04380-EXIT.

EXIT.

Industrial Applicability

[0185] In the traditional software development the dependency on personal abilities is extremely high as well as having high personal ability is required for all staff involved, which has brought about fundamental problems. This invention has realized a development methodology, by theoretically grasping the consciousness action existing in the depths of the thinking method in relation to the cognitive action, and it is applicable to any fields including OB middle game, proc-

ees control and business software.

[0198] Since the software structure which is induced by the invention is determined theoretically, it is recurrent and becomes the one and only. As a result, the software developed is not a black box any more, thereby eliminating human errors from the quality viewpoint, so that the system becomes stiff with the clear structure. Therefore, not only an exact estimate of software development is made possible but also planning and the development management can be performed with ease.

[0199] Fig. 45 shows the effects. Compared with the traditional method, the development period is shortened by 1/2 to 1/3; the total development volume is compressed by 20% to 80%; the maintainability increases by 40 to 100 times; and the working efficiency is enhanced by 40 to 100 times.

[0200] In the traditional software, definitives comprised of screens, vouchers and files take up 50% and their logic takes up 70% of the whole software developed, thereby necessitating a document respectively. However, in this invention, the homogeneity map which is corresponding to the above-mentioned logic in the traditional method does not require a document, so that it can cut the volume of documents by 70% compared with that of the traditional method.

15 Claims

1. The software production method comprising the following steps

the step to determine a definitive identifier which is a screen necessary to the software to be produced;
 the step to sort out words existing in said definitive identifier;
 the step to create the homogeneity map in which all pellets necessary to the software have been plotted in accordance with the process flow based on the definitive identifier;
 the step to determine necessary files based on the sorted-out words and the created homogeneity map;
 the step to create first tense control vectors which execute screen editing or file editing, second tense control vectors which determine the homogeneity route, and third tense control vectors which execute file updating for all the sorted-out words;
 the step to create three kinds of the pellets which are made by binding the first, second and the third tense control vectors per screen unit, respectively, and to create pallet functions which execute each of the tense control vectors with autonomous significance inside each of the pellets; and
 the step to assemble the three kinds of the pallet functions into a pallet chain function having the structure of transmitting a screen based on the pallet function concerned with the first tense control vector, receiving the screen to execute the pallet function concerned with the second tense control vector, and determining, in accordance with this execution result, one homogeneity route from the plural homogeneity routes taking at least one homogeneity route for executing the pallet function concerned with the third tense control vector.

2. The processing apparatus comprising:

first means for possessing a first tense control vector to execute screen editing or file editing which is to be created for all words existing in the screen necessary to the software to be produced, a second tense control vector to determine the homogeneity route, and a third tense control vector to execute file updating;
 second means for executing each of the tense control vectors with autonomous significance inside each of three kinds of pellets which are made by binding the first, the second and the third tense control vectors per screen unit, respectively; and
 third means for transmitting a screen based on the execution of the second means concerned with the first tense control vector, receiving the screen to execute the second means concerned with the second tense control vector, and determining in accordance with this execution result, one homogeneity route from the plural homogeneity routes taking at least one homogeneity route for executing the second means concerned with the third tense control vector.

3. The recording medium on which a program is recorded, said program comprising:

first means for possessing a first tense control vector to execute screen editing or file editing which is to be created for all words existing in the screen necessary to the software to be produced, a second tense control vector to determine the homogeneity route, and a third tense control vector to execute file updating;
 second means for executing each of the tense control vectors with autonomous significance inside each of three kinds of pellets which are made by binding the first, the second and the third tense control vectors per screen unit, respectively; and
 third means for transmitting a screen based on the execution of the second means concerned with the first

tense control vector, receiving the screen to execute the second means concerned with the second tense control vector, and determining, in accordance with this execution result, one homogeneity route from the plural homogeneity routes taking at least one homogeneity route for executing the second means concerned with the third tense control vector.

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4. The process method comprising the following steps:

the step to determine a screen to be displayed;
 the step to activate a first tense control vector (W04 pallet) for implementing screen editing or file editing;
 the step to display the screen edited based on the first tense control vector (W04 pallet);
 the step to receive the operational contents on the screen displayed;
 the step to activate a second tense control vector (W02 pallet) for determining, the homogeneity route based on the operational contents;
 the step to judge the homogeneity route in accordance with the homogeneity route determined by the second tense control vector (W02 pallet); and
 the step to activate a third tense control vector (W03 pallet) for implementing file updating based on the judging results of the homogeneity route.

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5. The processing apparatus comprising:

the means for determining a screen to be displayed,
 the means for activating a first tense control vector (W04 pallet) for implementing screen editing or file editing;
 the means for displaying the screen edited based on the first tense control vector (W04 pallet);
 the means for receiving the operational contents on the screen displayed;
 the means for activating a second tense control vector (W02 pallet) for determining the homogeneity route based on the operational contents;
 the means for judging the homogeneity route in accordance with the homogeneity route determined by the second tense control vector (W02 pallet); and
 the means for activating a third tense control vector (W03 pallet) for implementing file updating based on the judging results of the homogeneity route.

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6. The recording medium on which a program is recorded, said program comprising,

the means for determining a screen to be displayed;
 the means for activating a first tense control vector (W04 pallet) for implementing screen editing or file editing;
 the means for displaying the screen edited based on the first tense control vector (W04 pallet);
 the means for receiving the operational contents on the screen displayed;
 the means for activating a second tense control vector (W02 pallet) for determining the homogeneity route based on the operational contents;
 the means for judging the homogeneity route in accordance with the homogeneity route determined by the second tense control vector (W02 pallet); and
 the means for activating a third tense control vector (W03 pallet) for implementing file updating based on the judging results of the homogeneity route.

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50

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FIG. 1

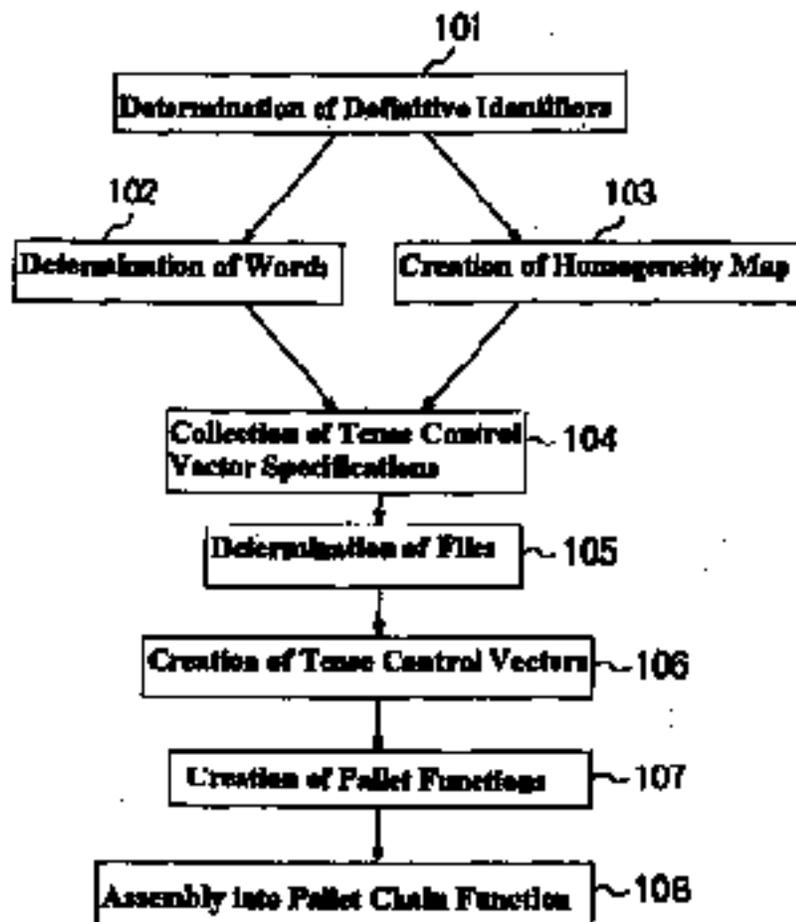


FIG. 8

行	130-140			141-150			151-160			161-170			180-190											
	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6
1	Date																							
2	Year Order No.																							
3	Inst. City																							
4	Inst. City																							
5	Inst. City																							
6	Inst. City																							
7	Inst. City																							
8	Inst. City																							
9	Inst. City																							
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12	Inst. City																							
13	Inst. City																							
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16	Inst. City																							
17	Inst. City																							
18	Inst. City																							
19	Inst. City																							
20	Inst. City																							

FIG. 9

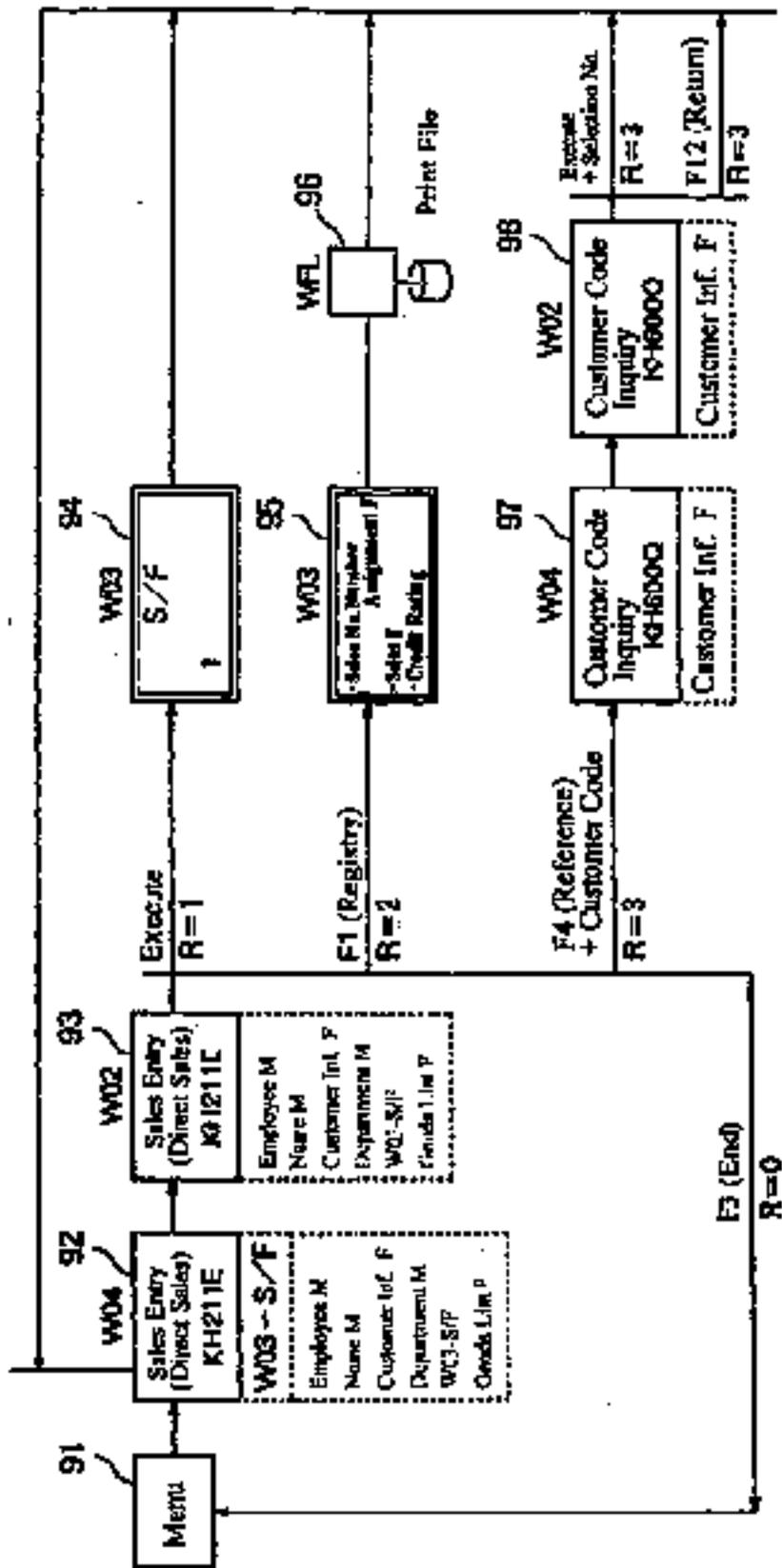


FIG. 10

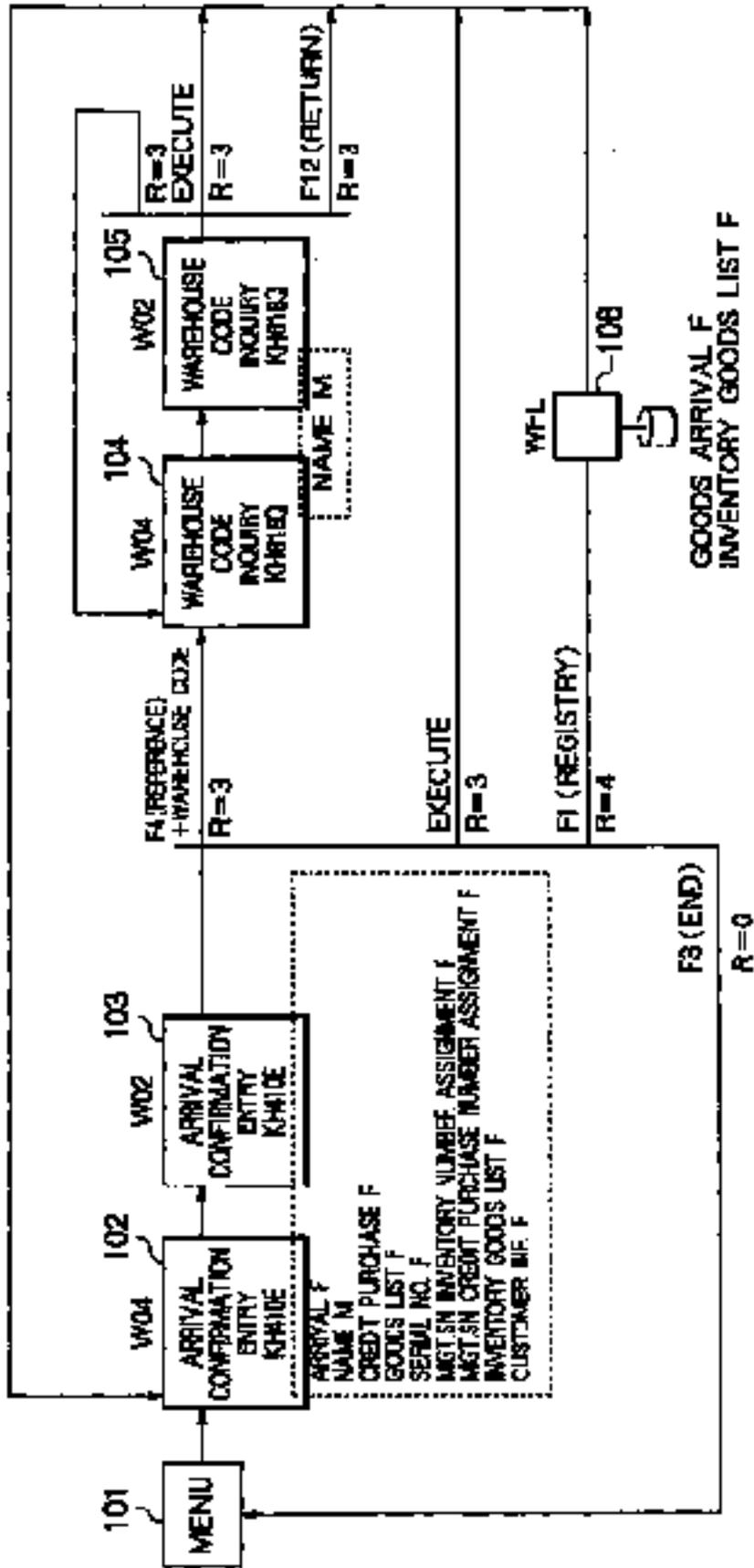


FIG. 11

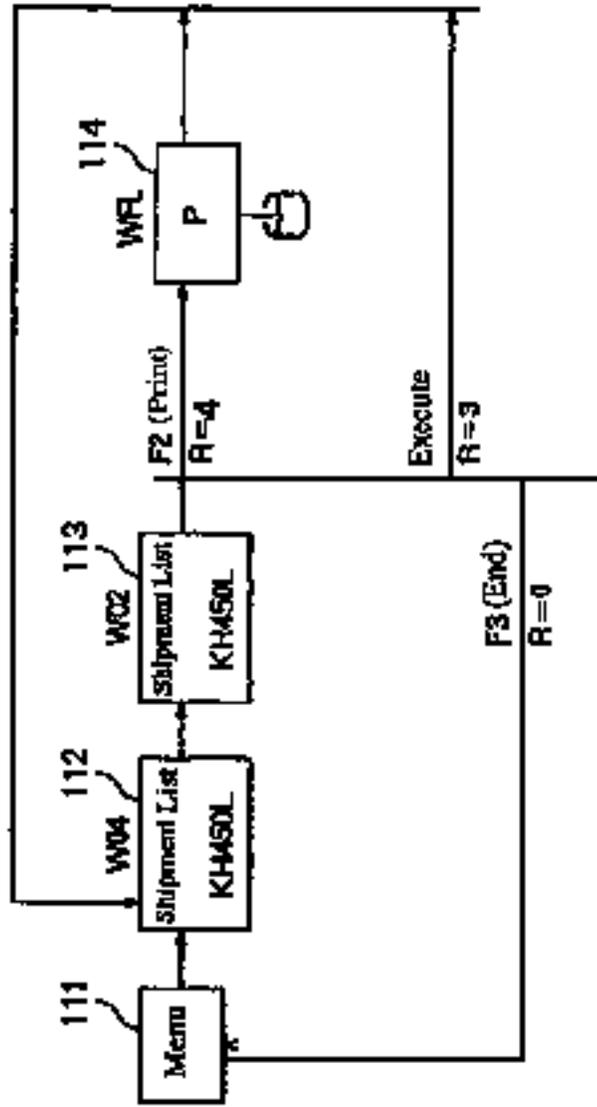


FIG. 12

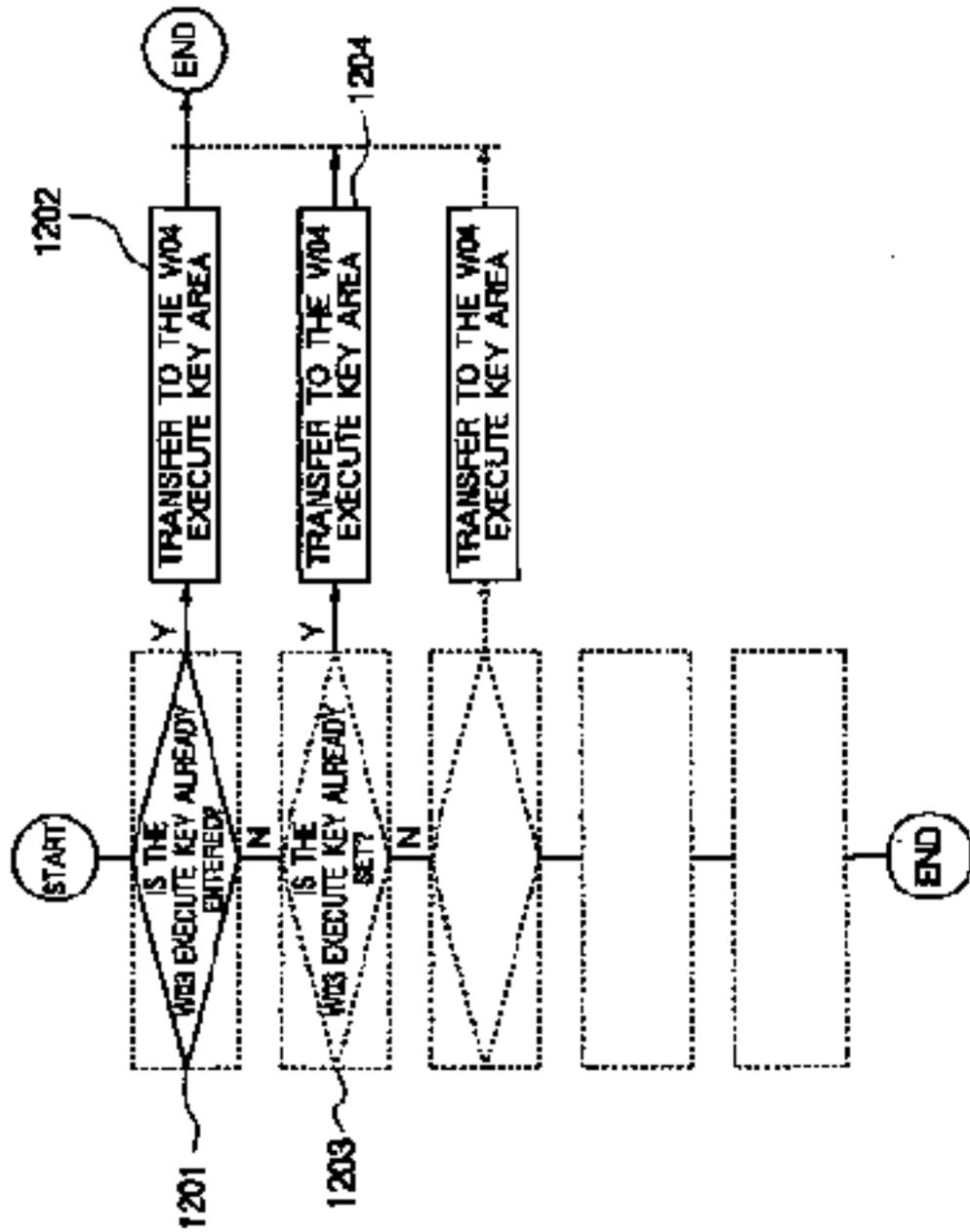


FIG. 13

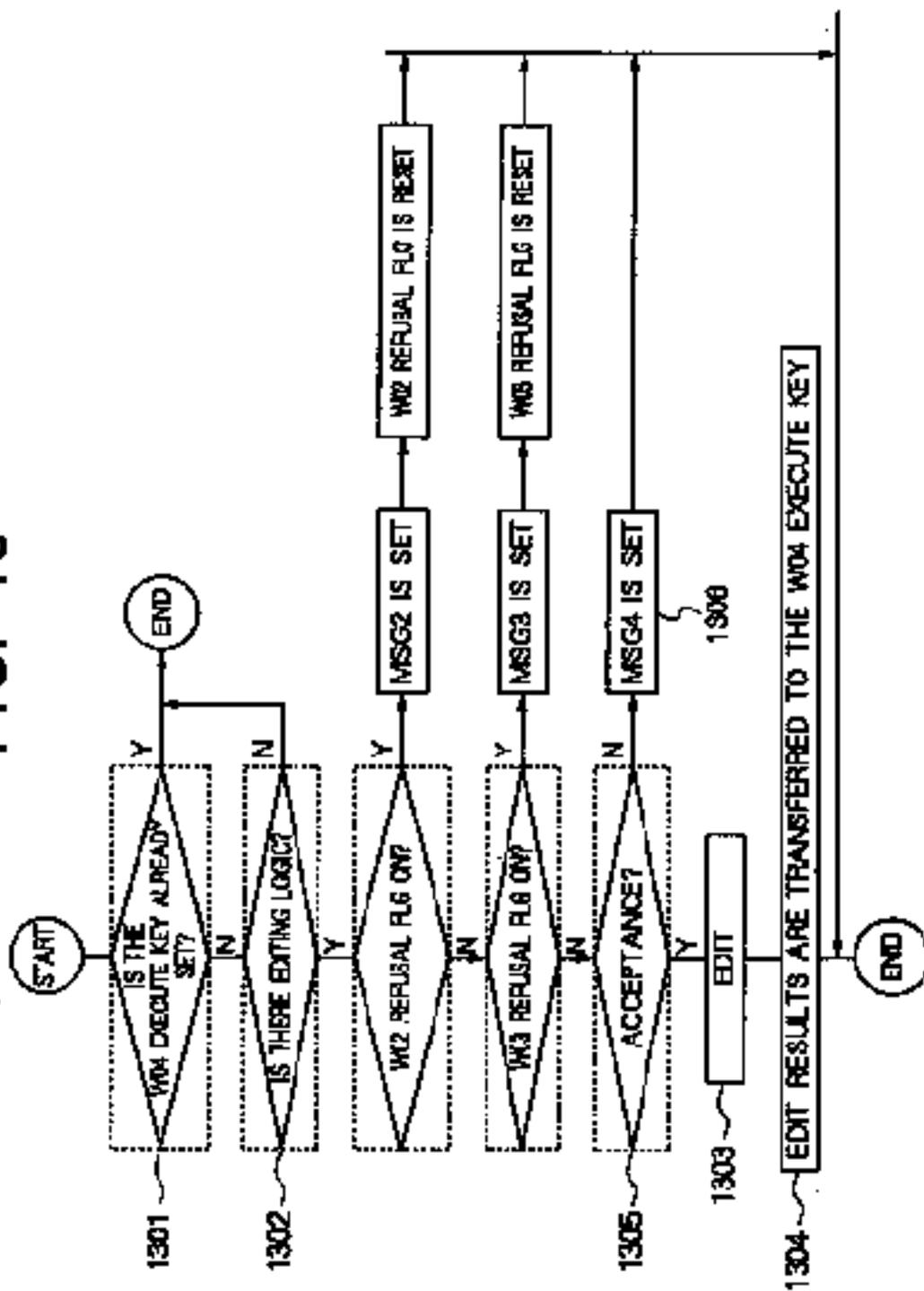


FIG. 14

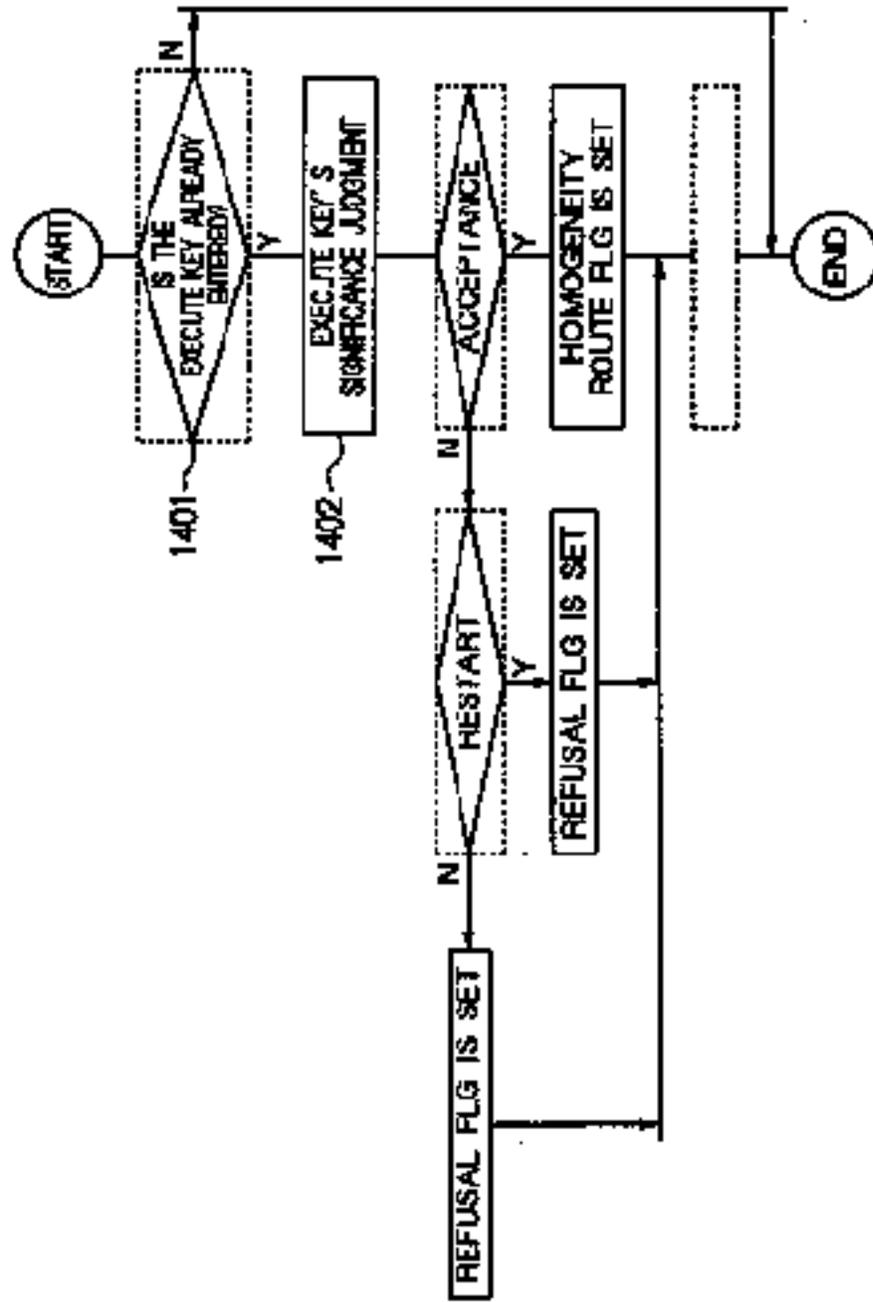


FIG. 15

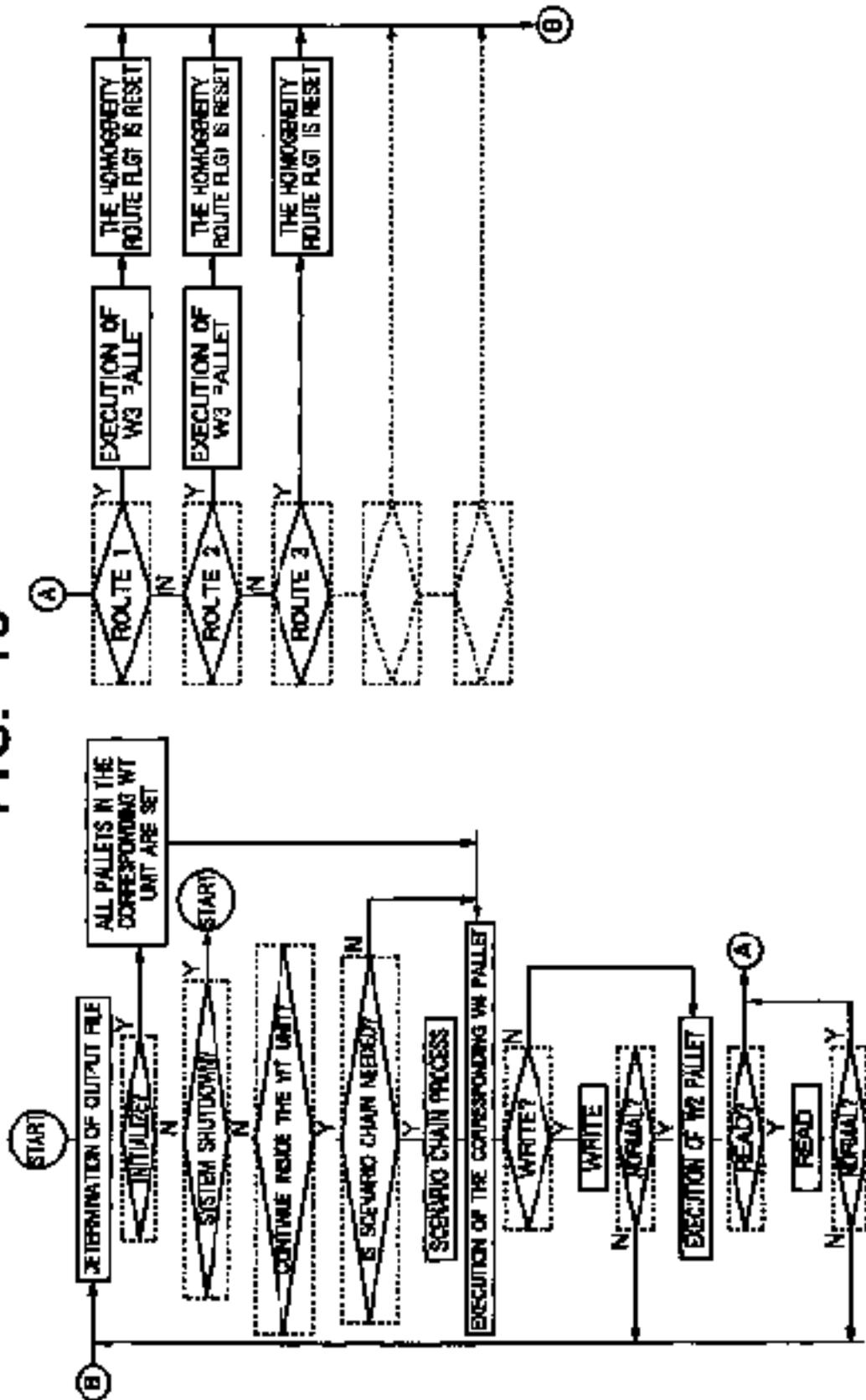


FIG. 16

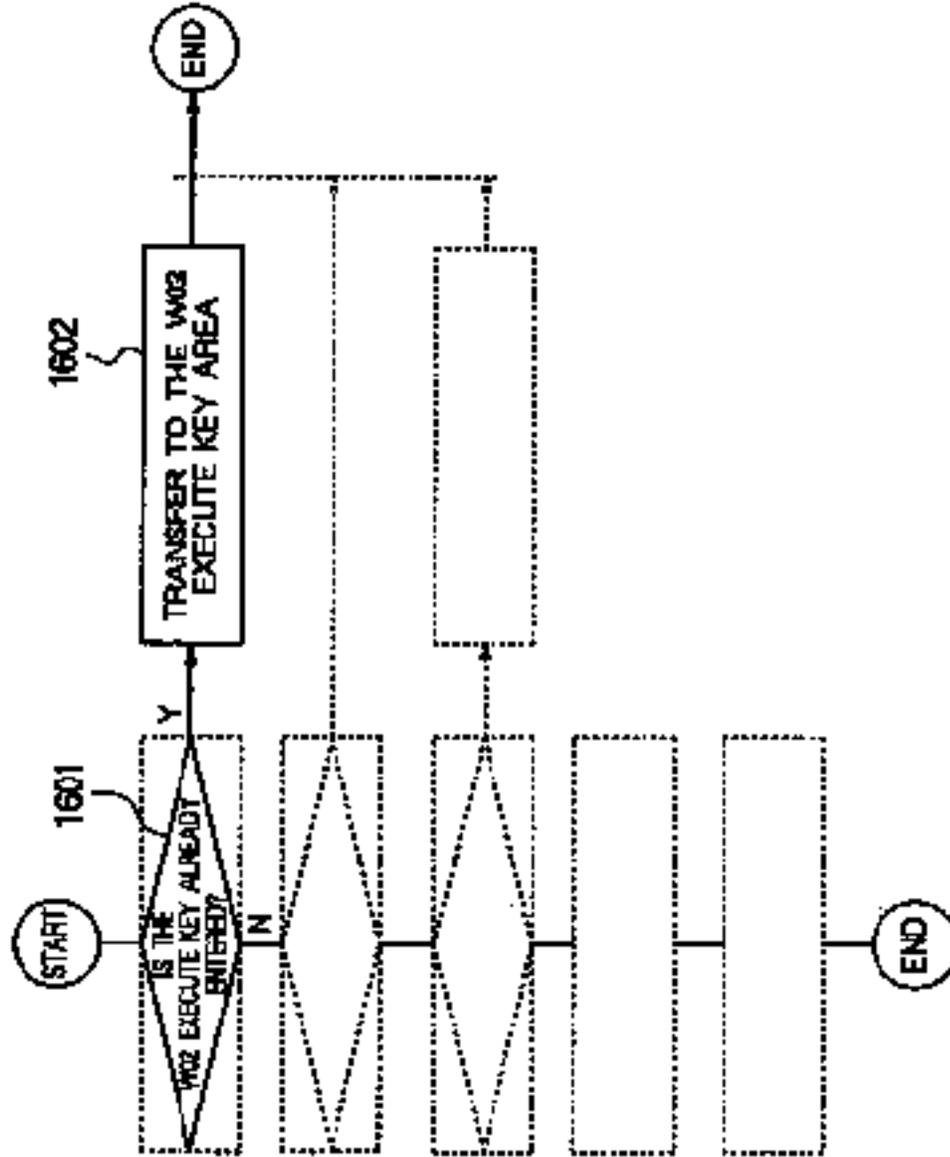


FIG. 17

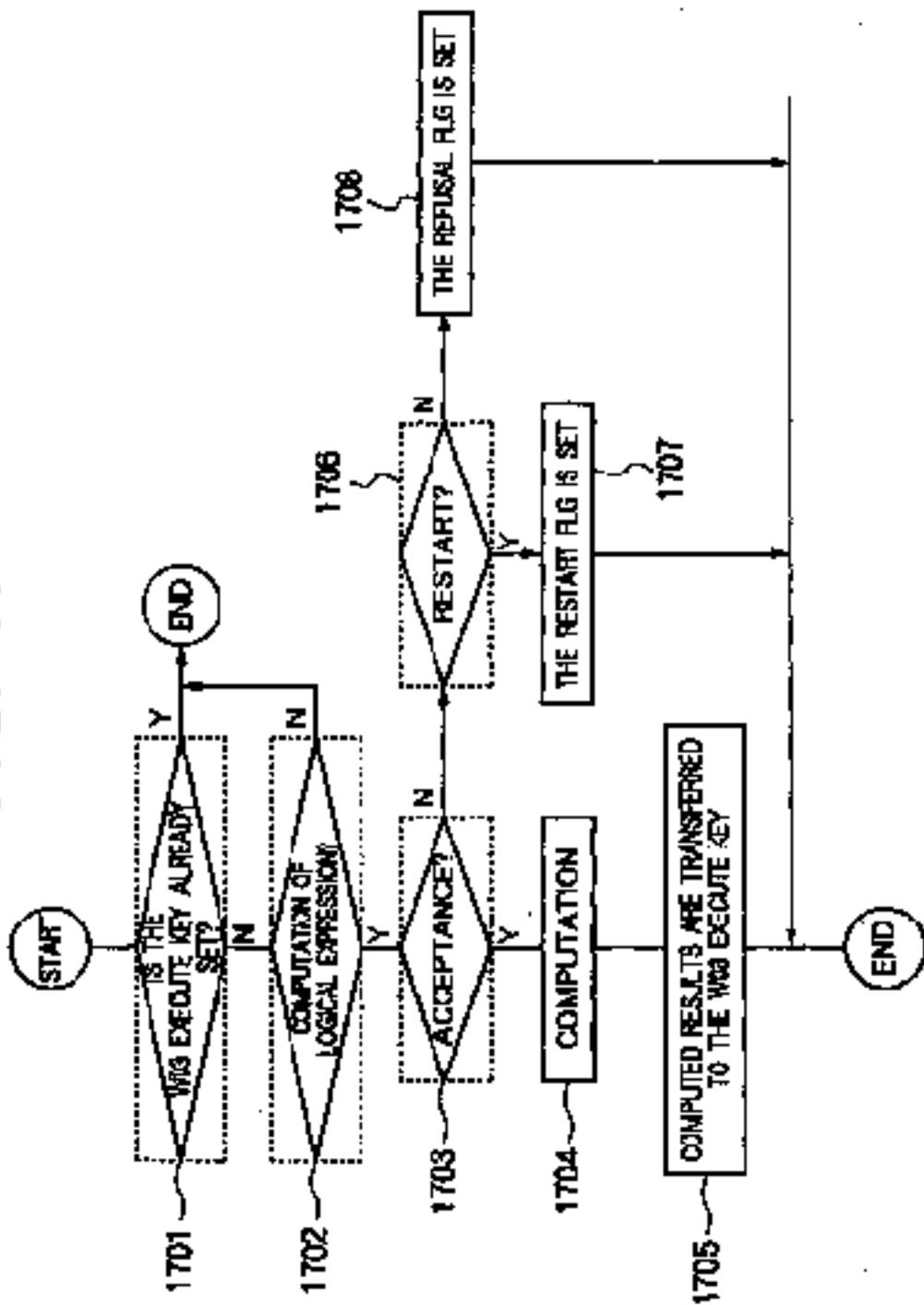


FIG. 18

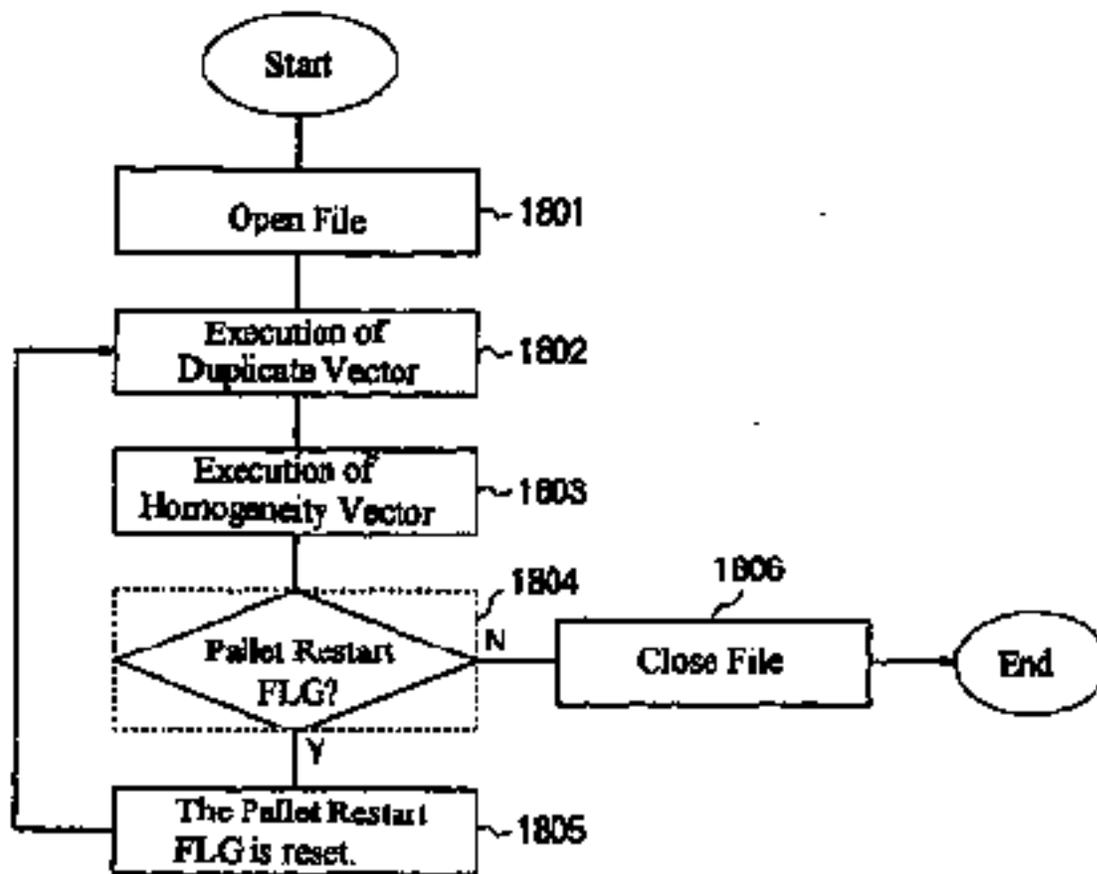


FIG. 19

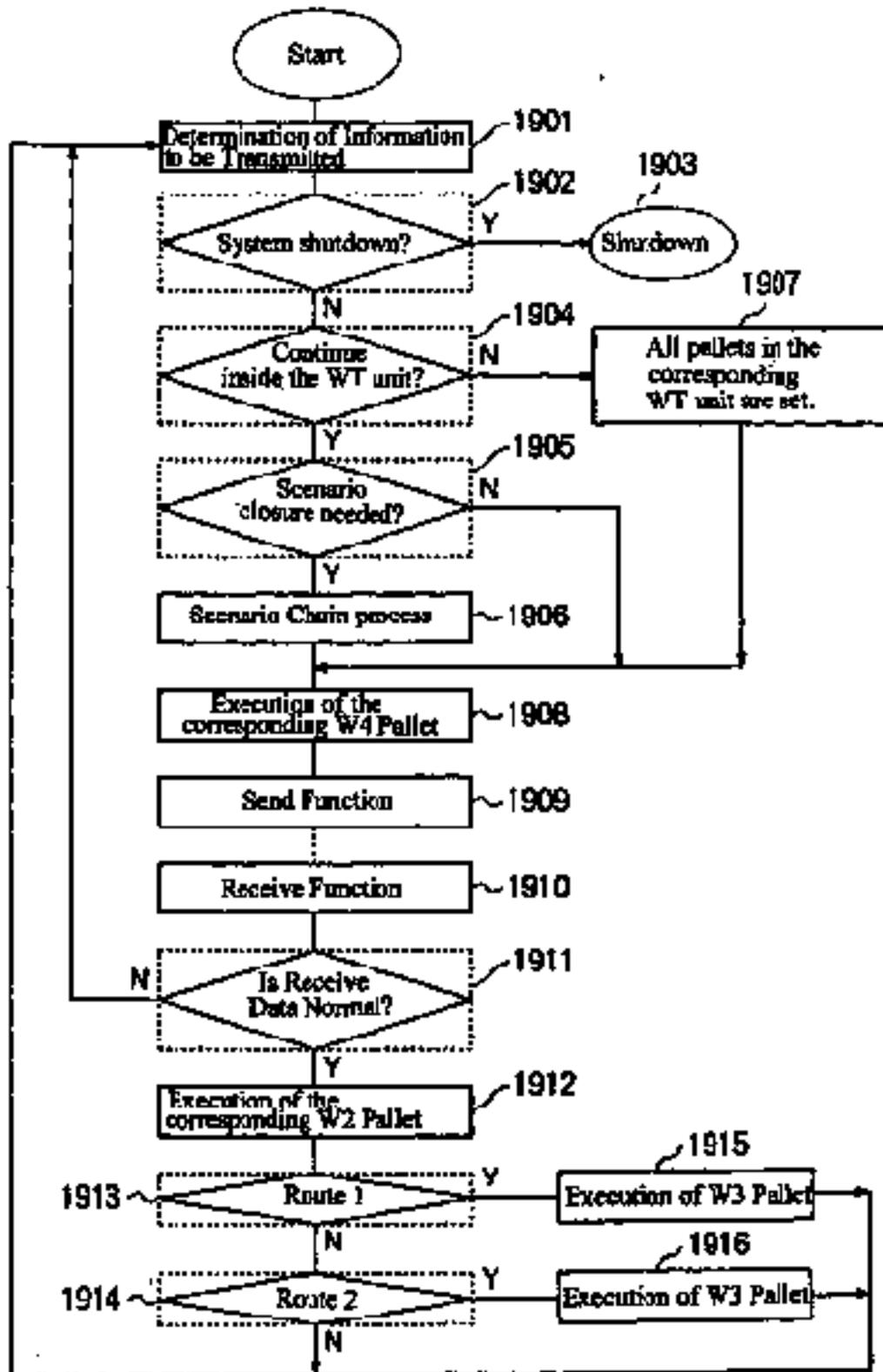


FIG. 20

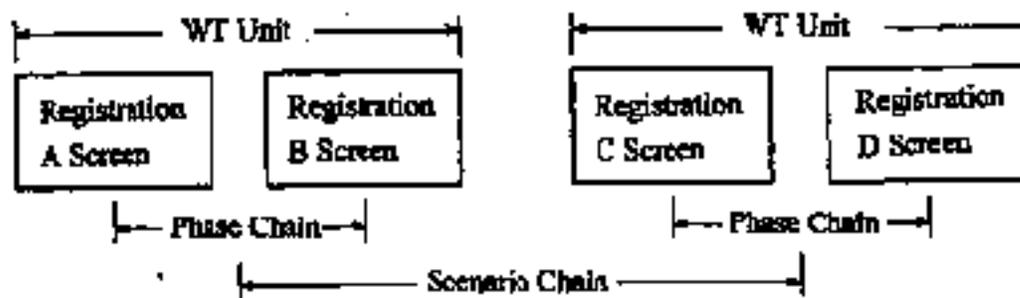


FIG. 21

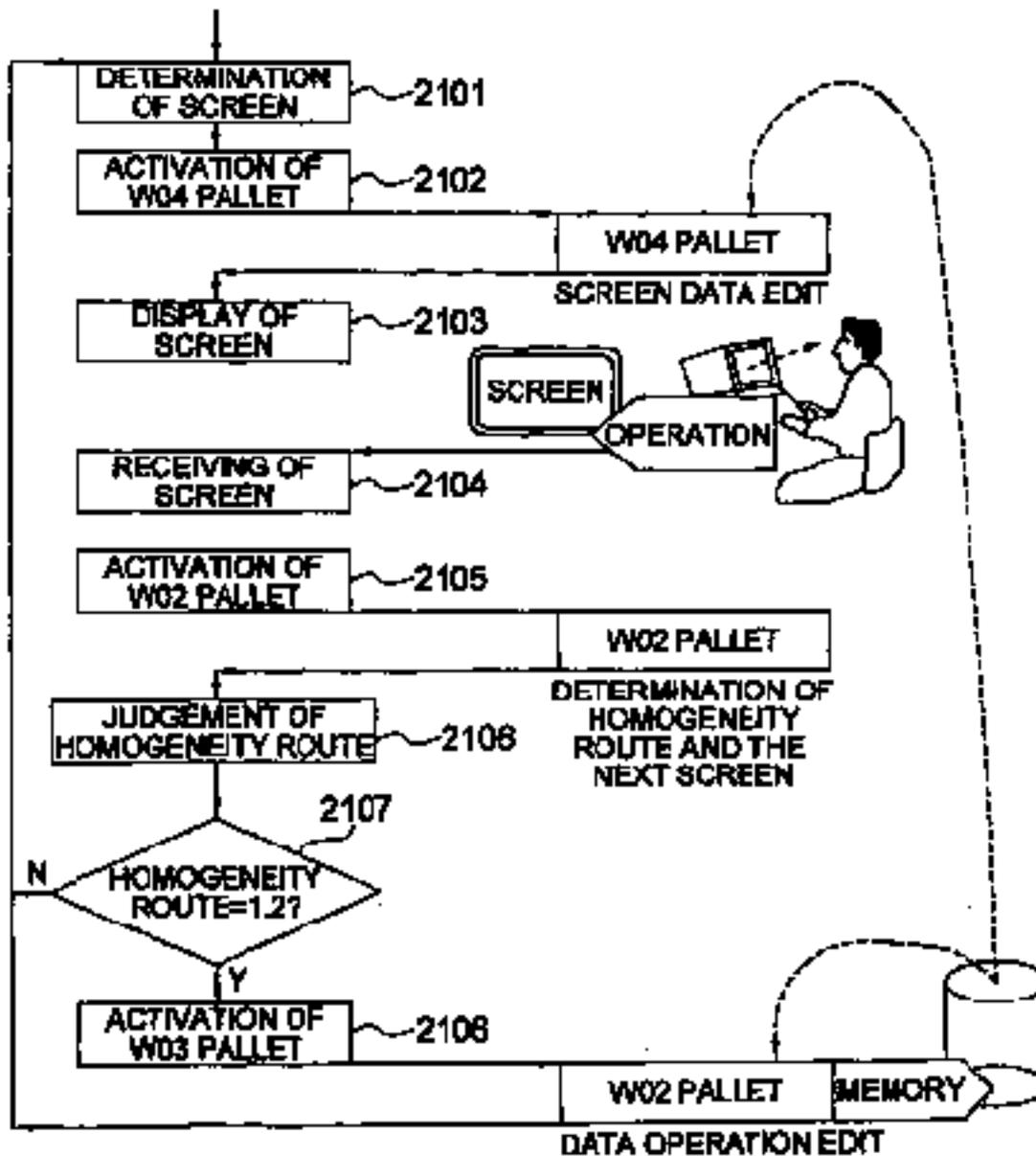


FIG. 22

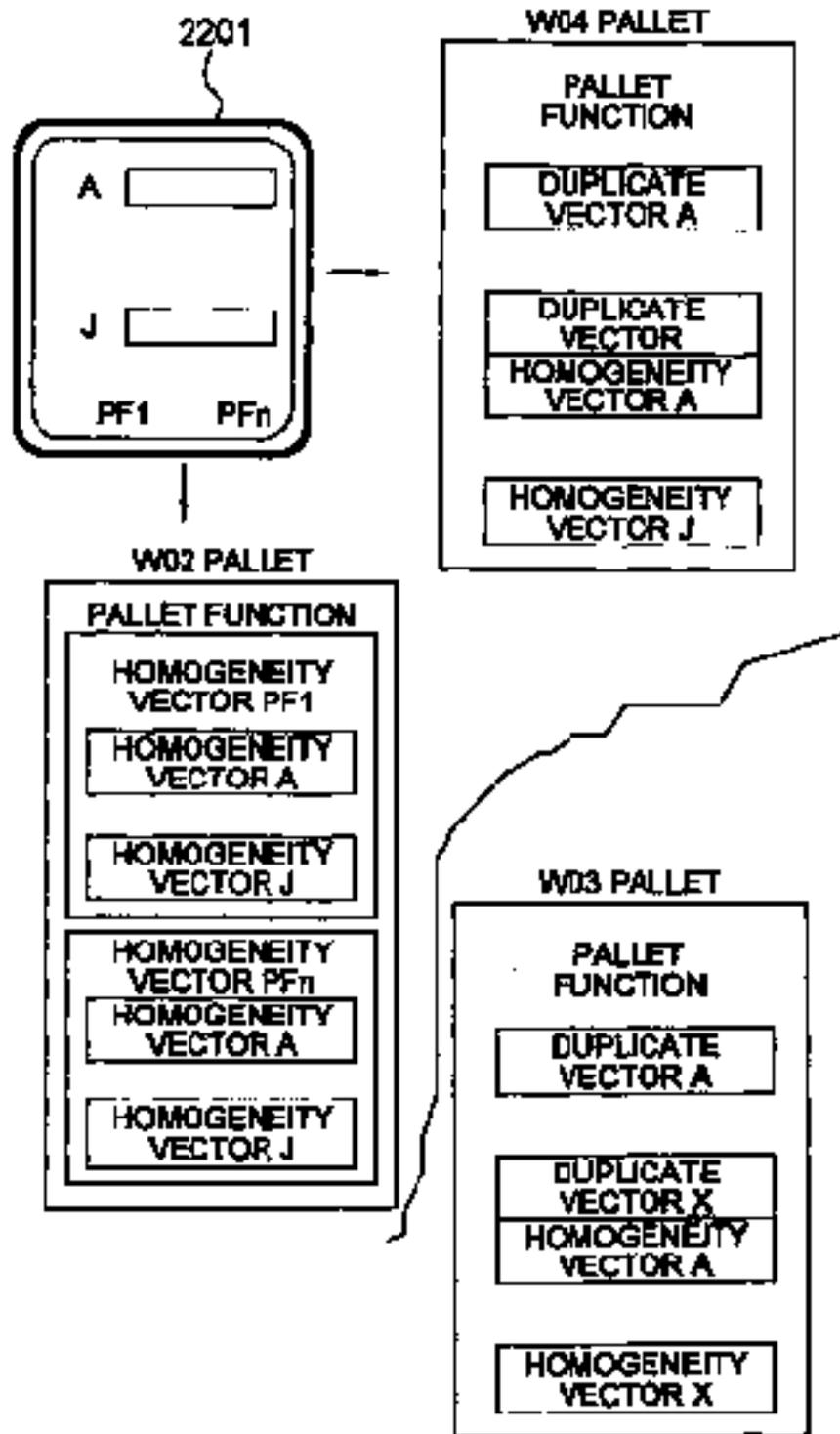


FIG. 23

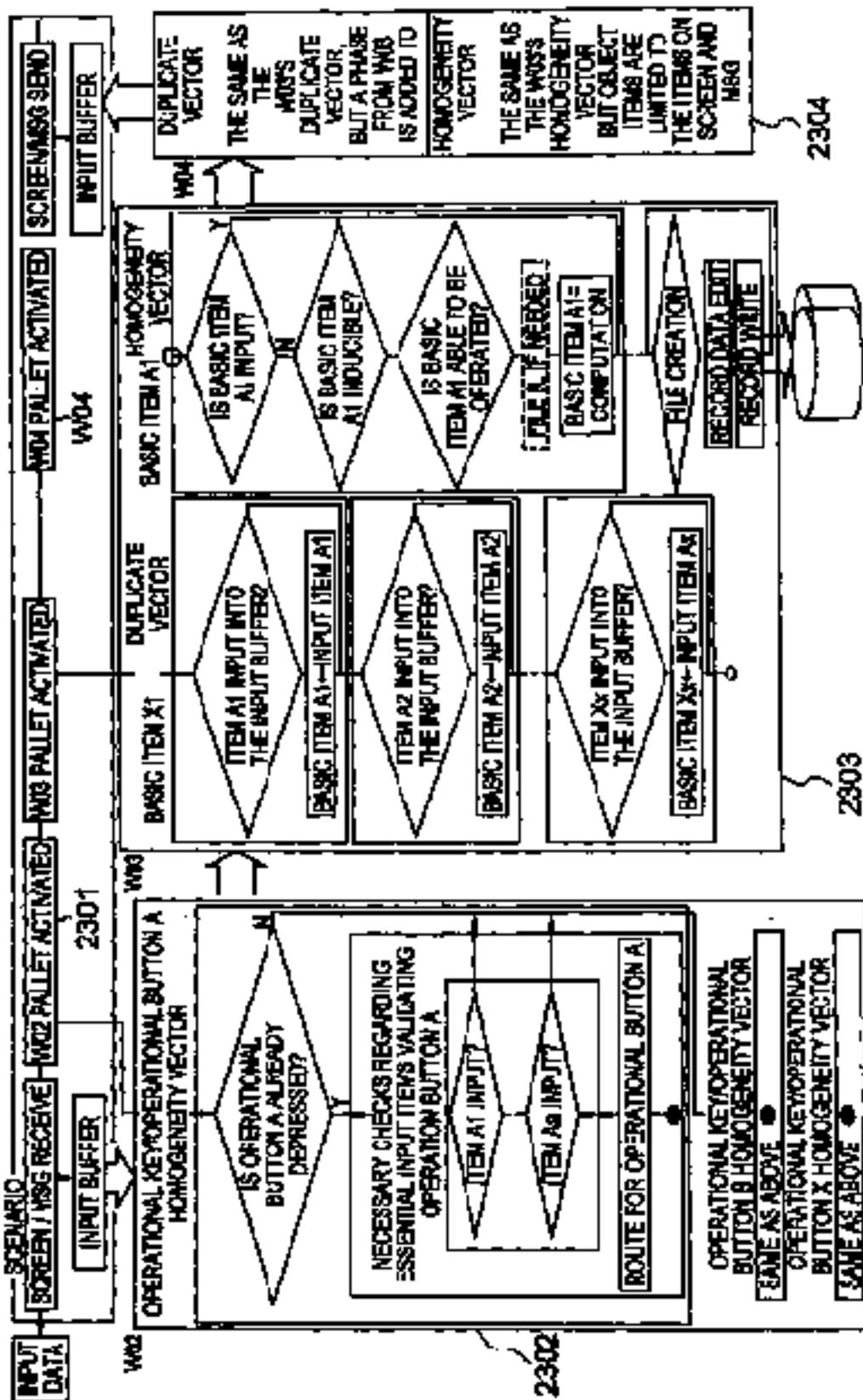


FIG. 24

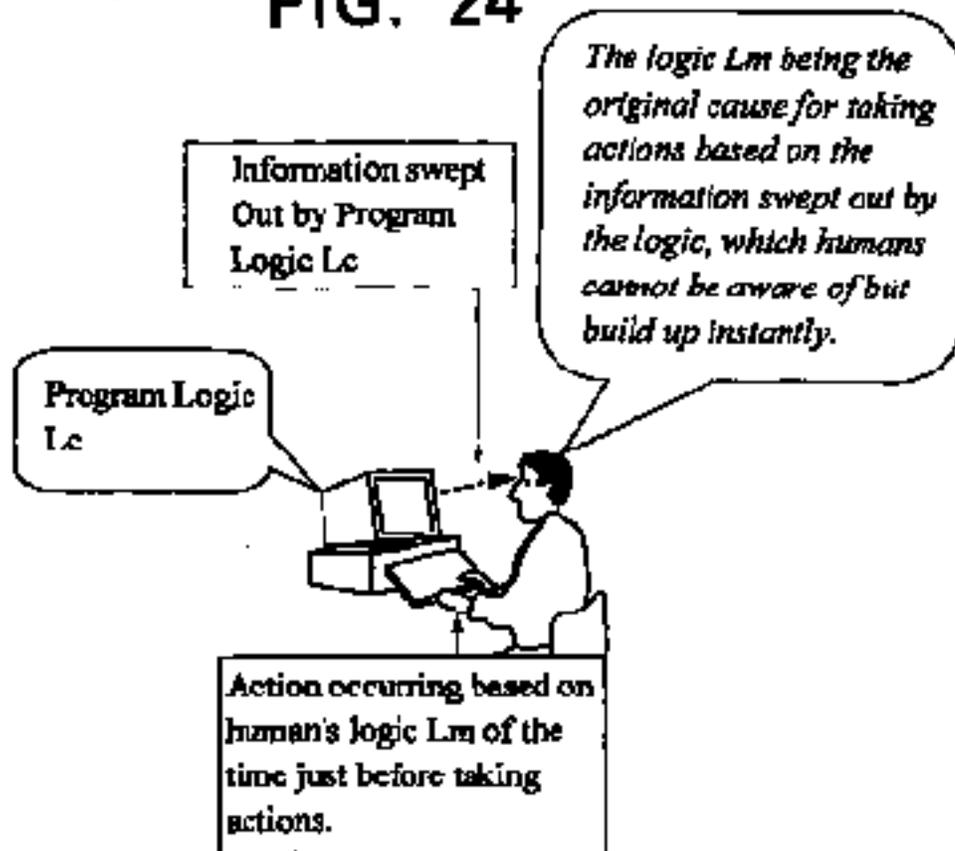


FIG. 25

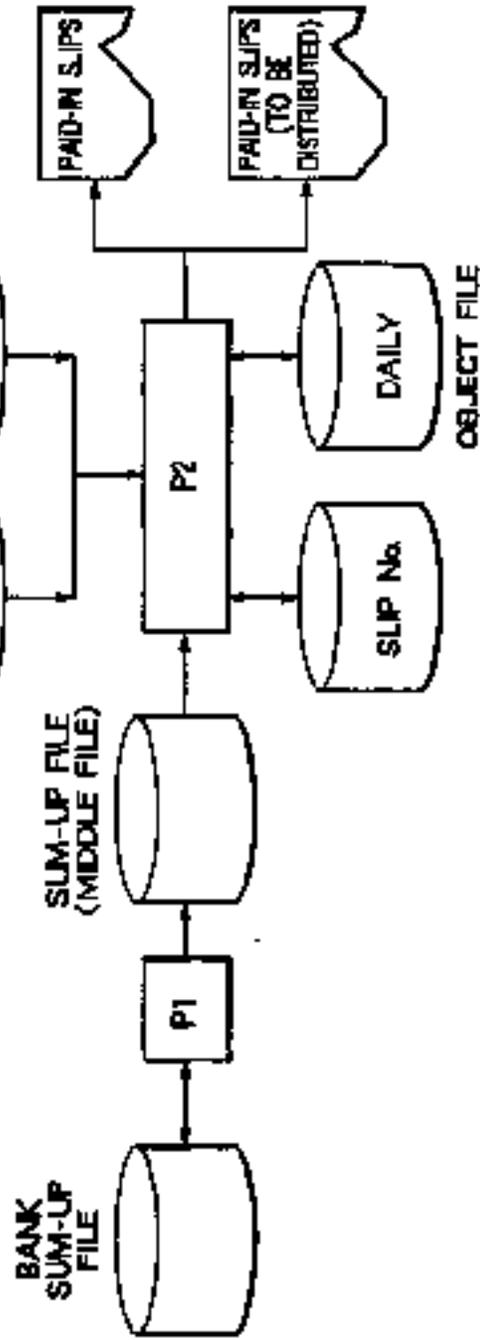


FIG. 26

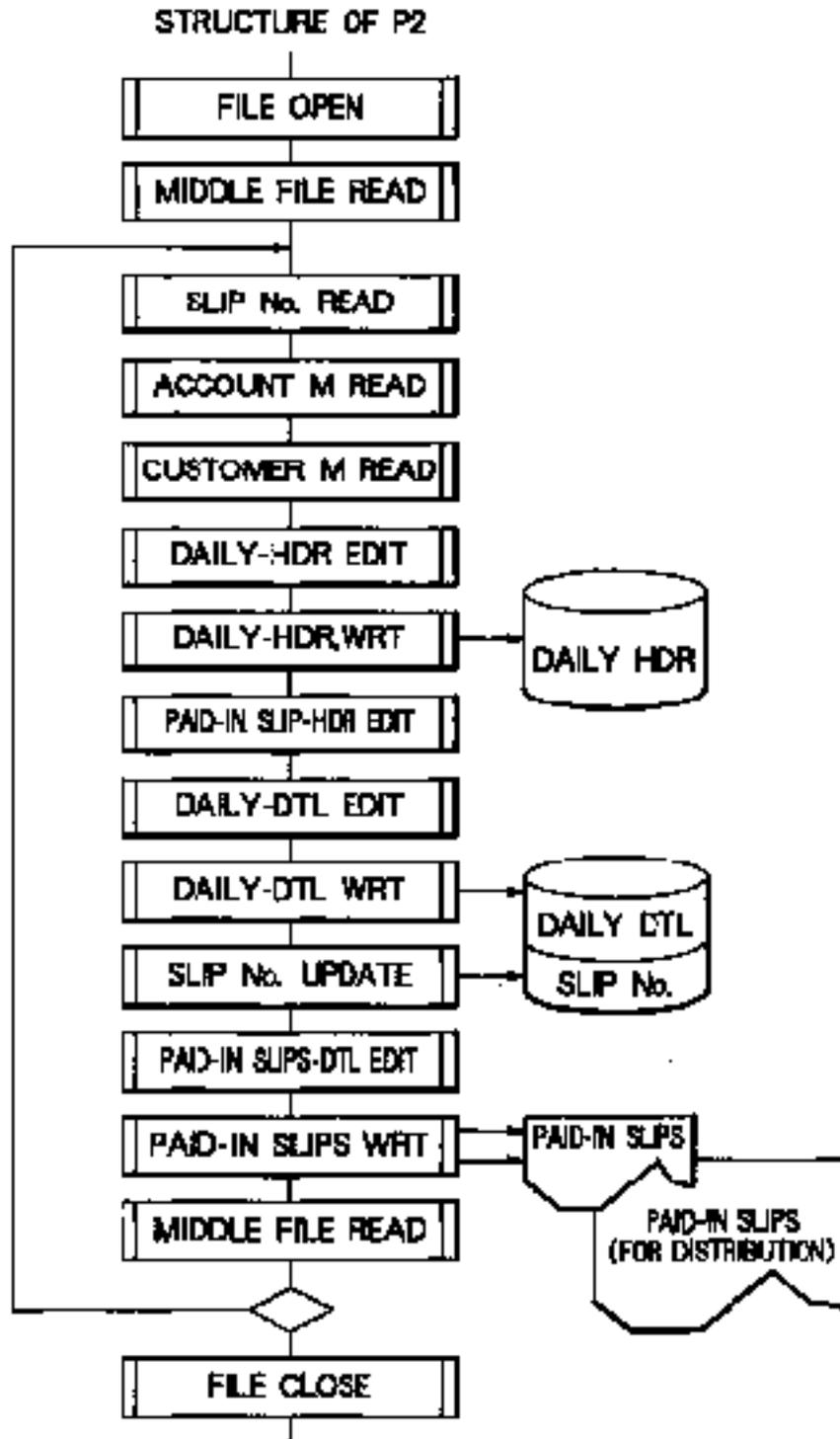


FIG. 27

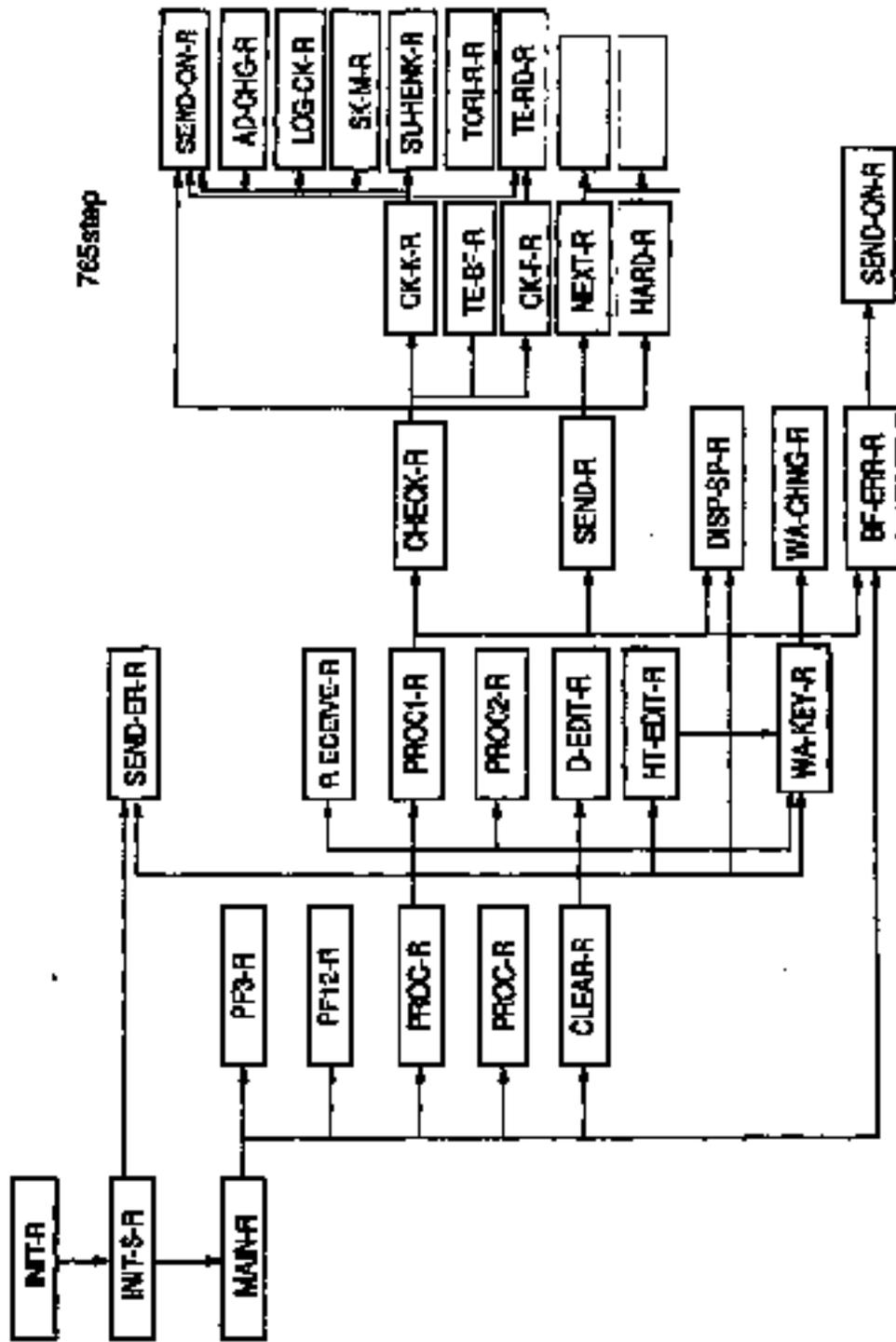


FIG. 28

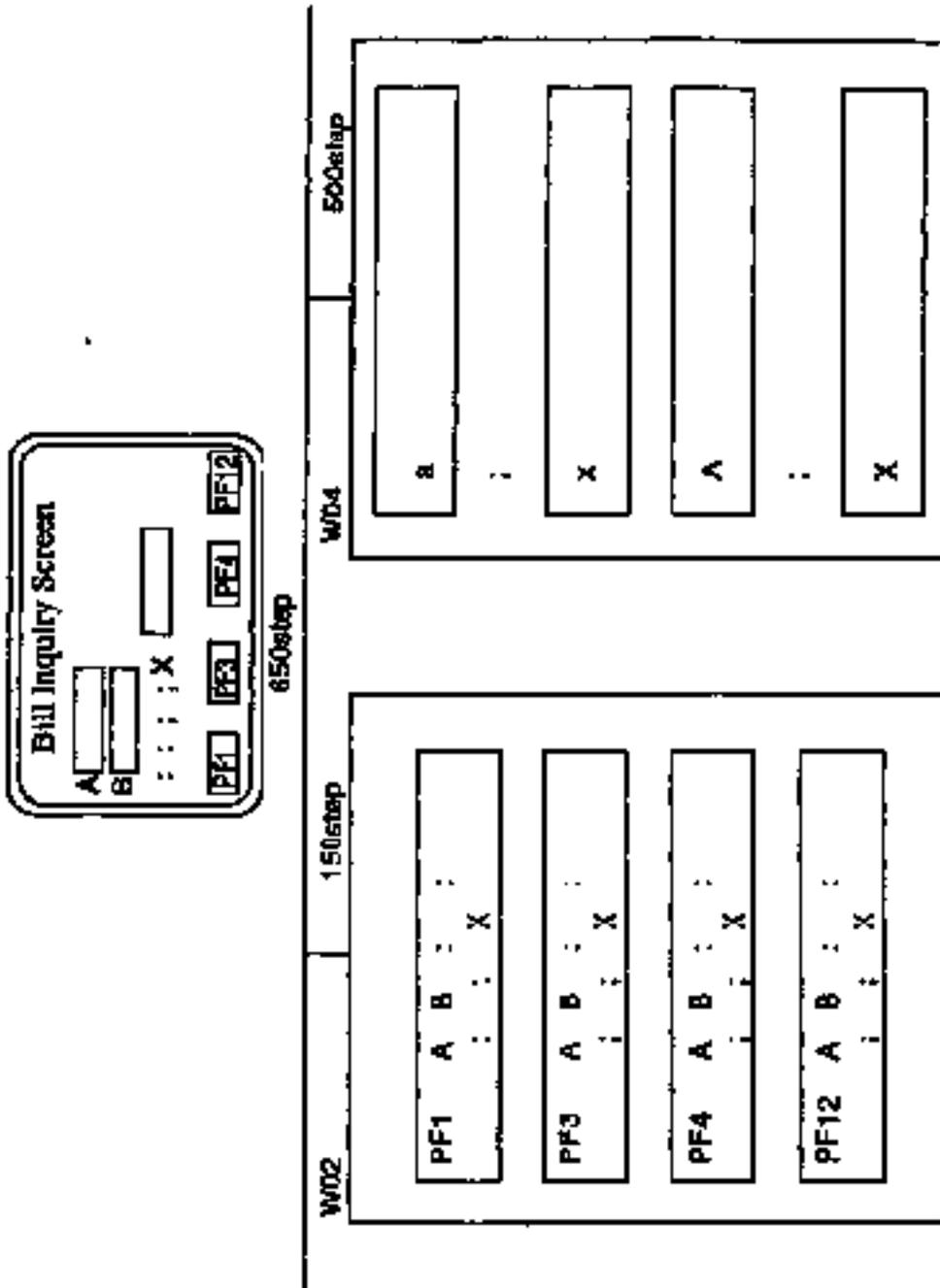


FIG. 29

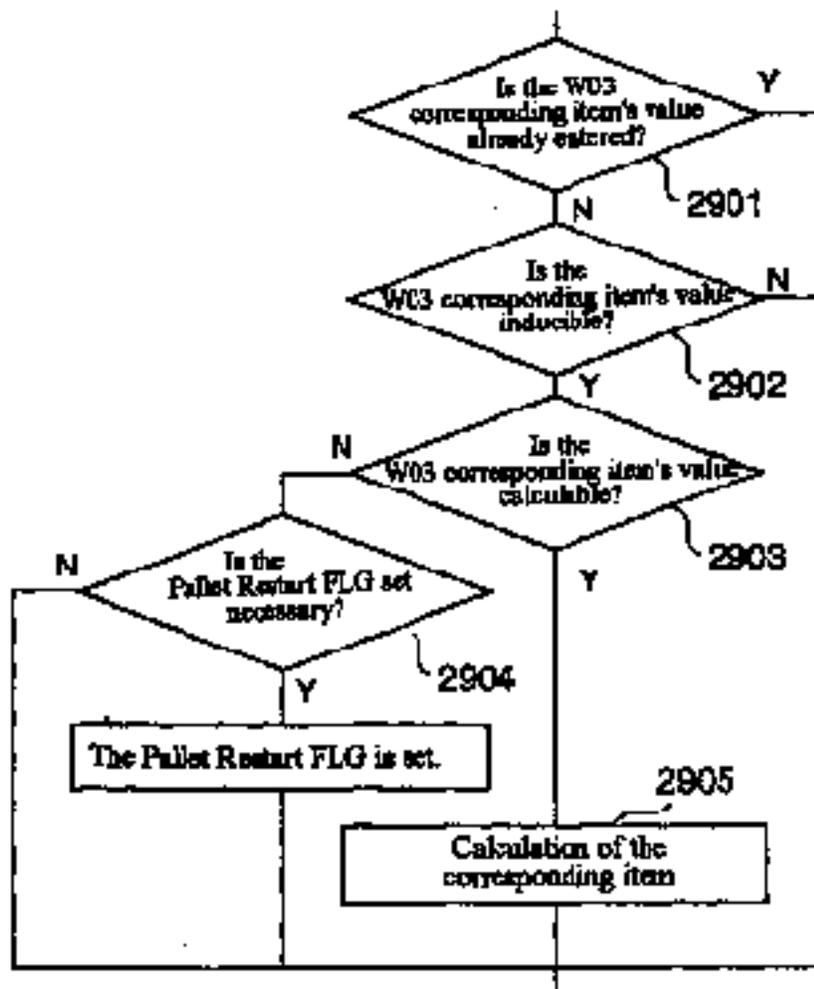


FIG. 30

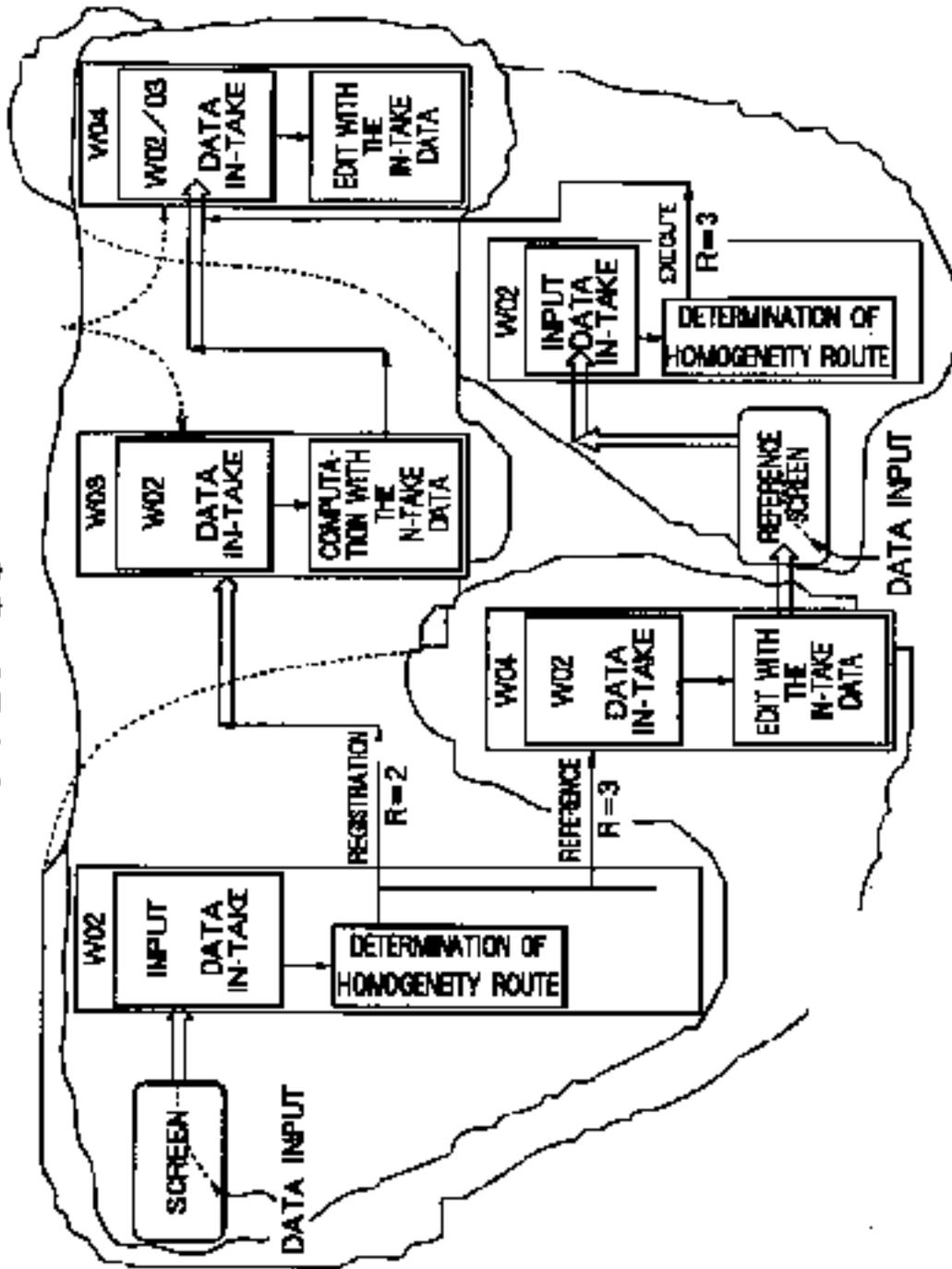


FIG. 31

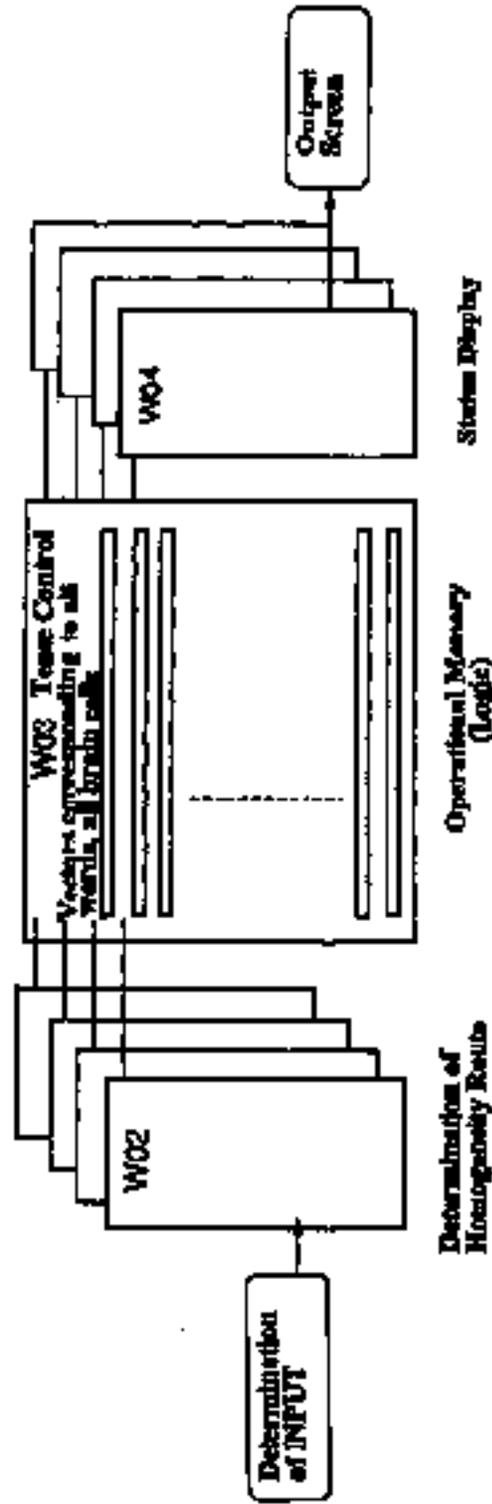


FIG. 32

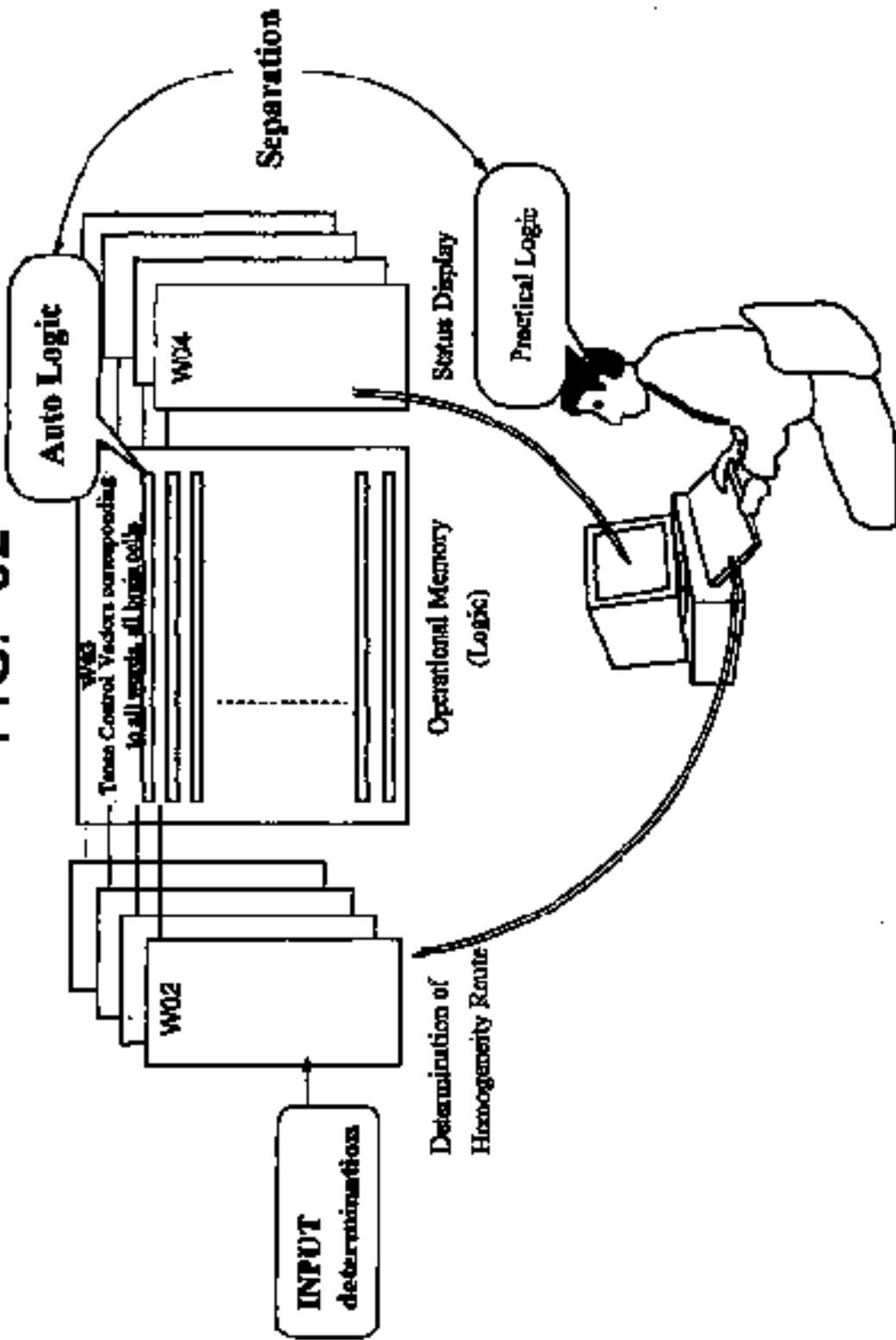


FIG. 33

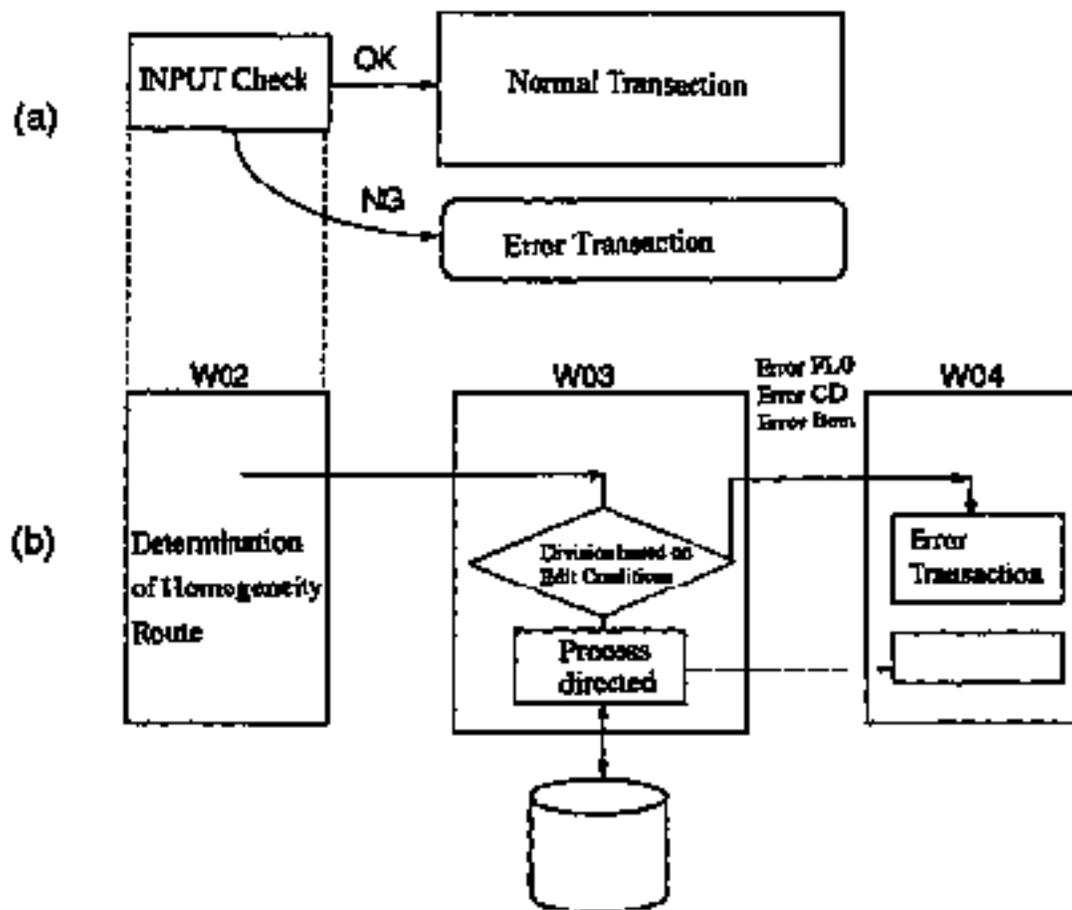


FIG. 34

(a)

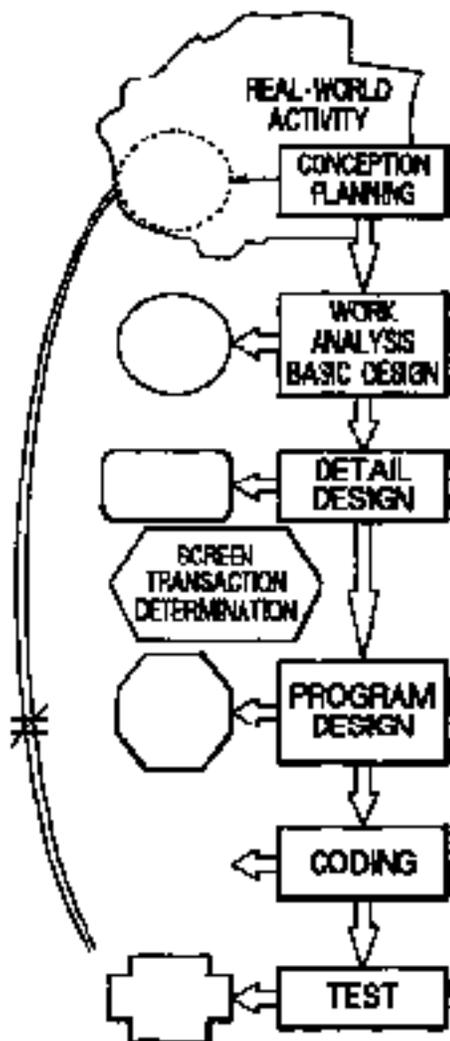


FIG. 34

(a)

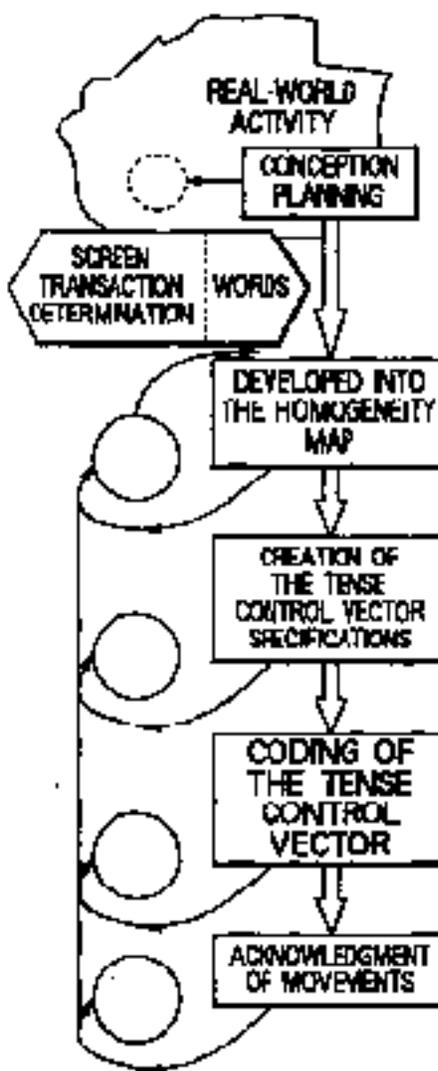


FIG. 35

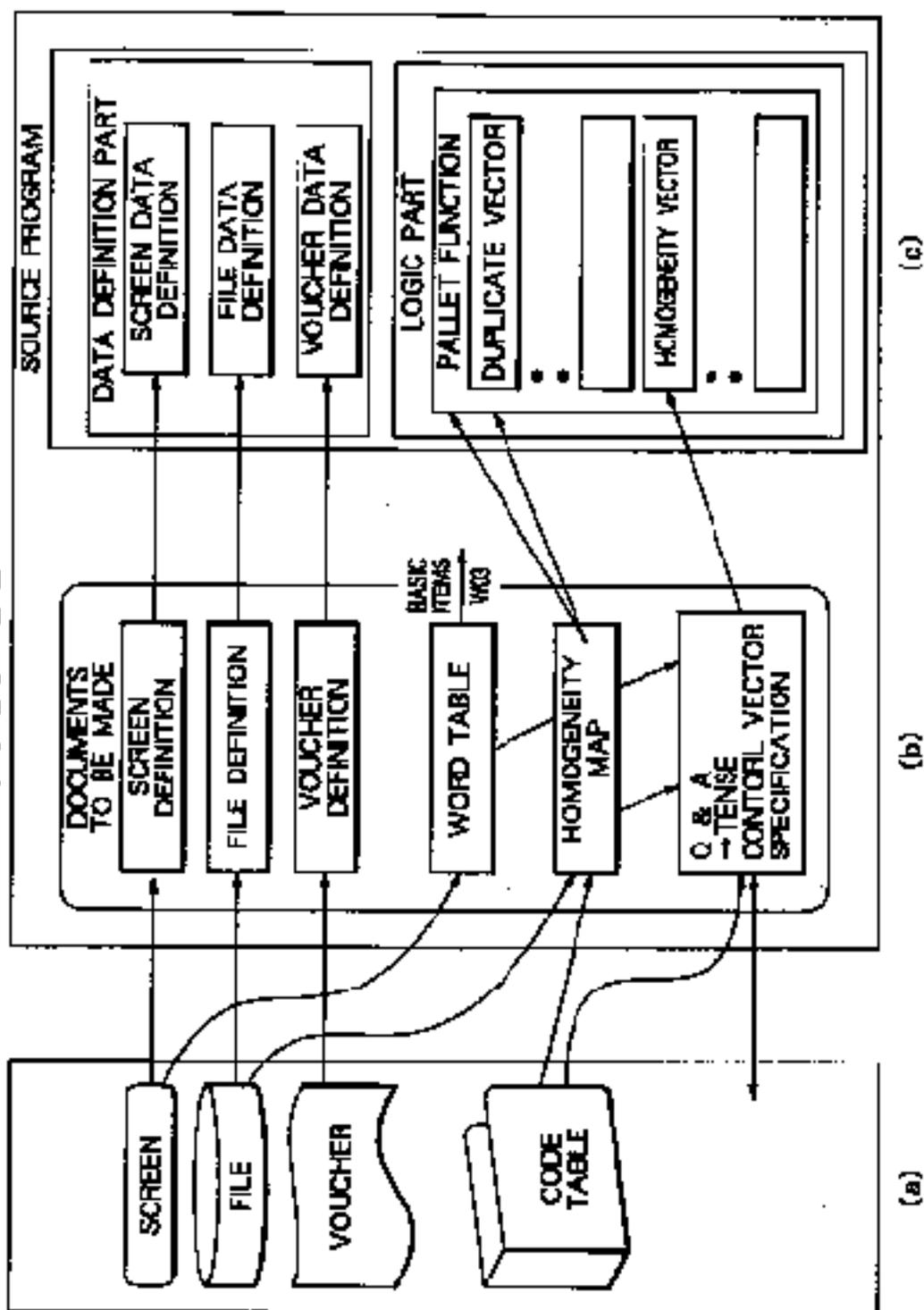


FIG. 37

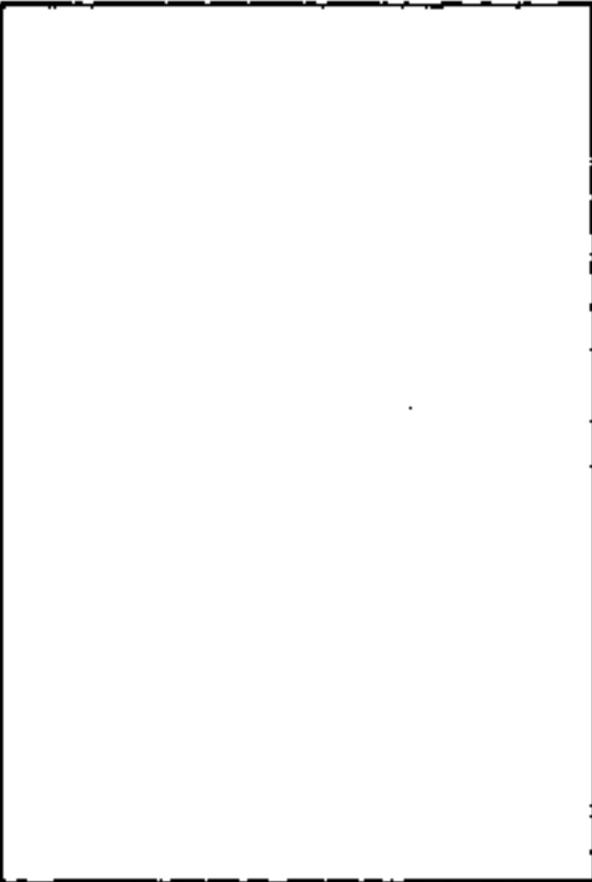
VOUCHER NAME: _____ IDENTIFIER: _____ WORD PLACEMENT DIAGRAM (LAYOUT) 010203040506 01828384858687	OUTPUT CONTROL METHOD (NEW LINE, NEW PAGE ETC.)
	OUTPUT POINT OUTPUT LOCATION OUTPUT DEVICE KINDS OF FORM OUTPUT TIME
REMARKS	VOUCHER OUTPUT CONDITIONS

FIG. 38

FILE NAME		IDENTIFIER		FILE CLASSIFICATION	alby	BELONGING AREA	Y002/W03
No	ITEM NAME	ITEM ID	ATTRIBUTE	CONTENTS/MEANING/OTHERS (TRANSACTION CONDITIONS PART)			REMARKS

FIG. 40

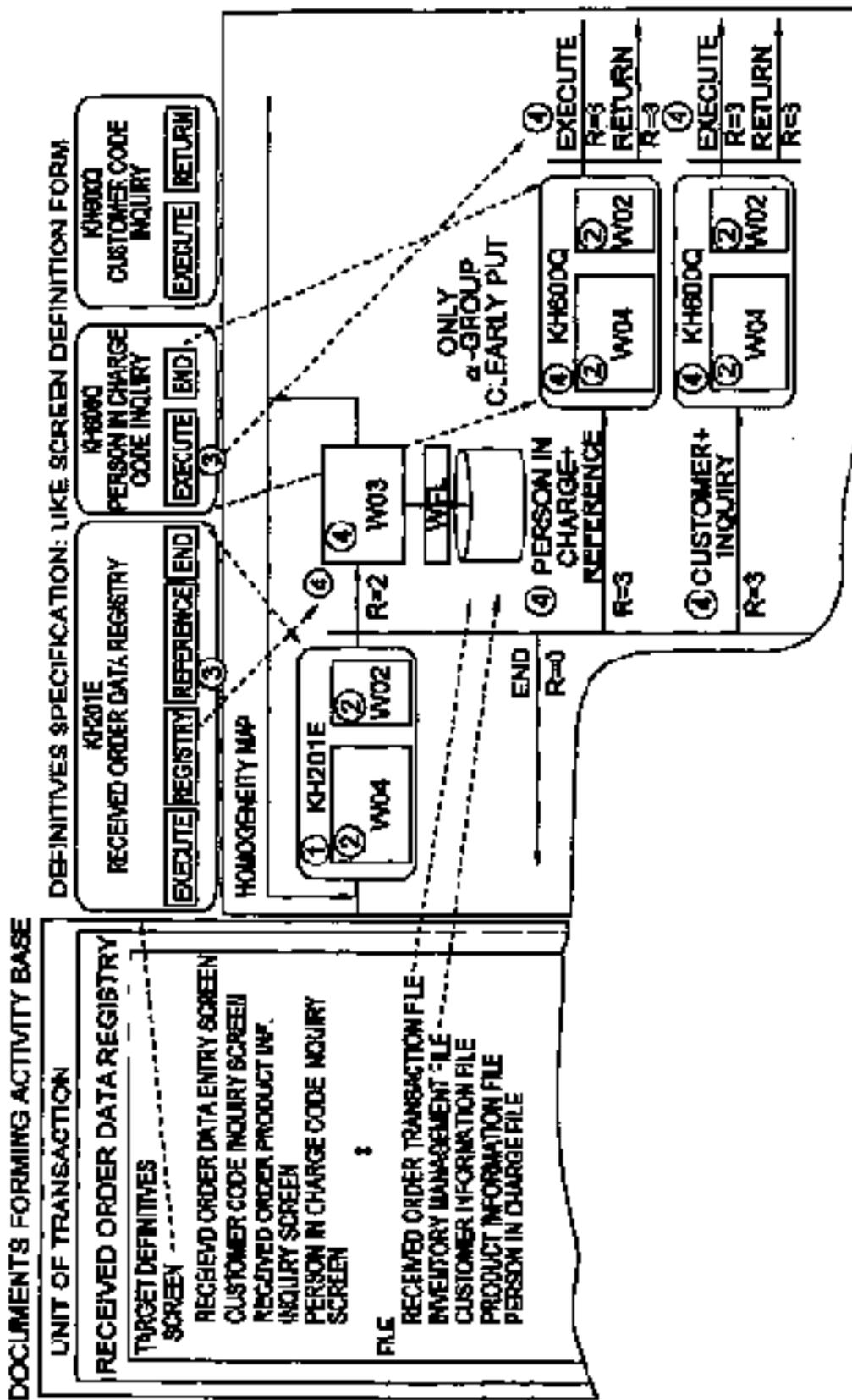


FIG. 41

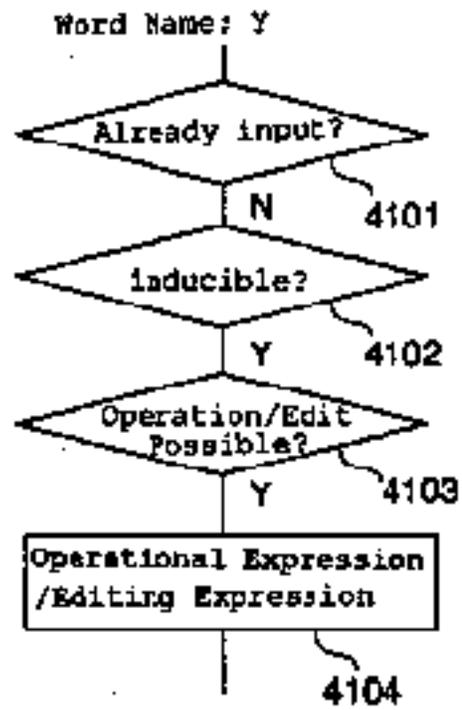


FIG. 42

DEFINITIVE NAME	MULTIPLE TRANSACTION FILE	DEFINITIVE ID	KD62BP	PALLET DRAIN FUNCTION CL	# OF AREA CL (WCS)	PALLET #	WCS3RY210E	TENSE CONTROL VECTOR CL	LOGIC
No.	ITEM NAME	ITEM ID	OPERATIONAL SIGNIFICANCE CONDITIONS	OPERATIONAL SIGNIFICANCE	OPERATIONAL EXPRESSION			REMARKS	
76	DISCOUNT TOTAL AMOUNT	KD1089	TRANSACTION CL IS ORDER RECEIVE AND TRANSACTION CL IS EXCEPT (NO DISCOUNT) AND PRODUCT QTY OF EACH TRANSACTION IS NOT 0.	DISCOUNT TOTAL AMOUNT (KD1089) OPERATION NUMBER = 2 (TRANSACTION QTY UNIT PRICE DISCOUNT AMOUNT (KE261))				WHEN OPERATION IS ACCEPTED, THE OPERATION ACCEPTANCE FLAG IS SET. WHEN THE TRANSACTION QTY UNIT PRICE DISCOUNT AMOUNT IS NOT CALCULATED, THE PALLET RESTART PROGRAM IS EXECUTED.	
77	QTY UNIT PRICE TOTAL AMOUNT	KD1857	BUSINESS CL IS ORDER RECEIVE AND PRODUCT QTY OF EACH TRANSACTION IS NOT 0.	QTY UNIT PRICE TOTAL AMOUNT (KD1857) OPERATION NUMBER = 2 (TRANSACTION QTY UNIT PRICE DISCOUNT AMOUNT (KE201))				WHEN OPERATION IS ACCEPTED, THE OPERATION ACCEPTANCE FLAG IS SET.	
78	TRANSACTION TOTAL AMOUNT	KD1854	TRANSACTION CL IS ORDER RECEIVE ONLY.	TRANSACTION TOTAL AMOUNT (KD1854) QTY UNIT PRICE TOTAL AMOUNT (KD1851) -DISCOUNT TOTAL AMOUNT (KD1089)				WHEN OPERATION IS ACCEPTED, THE OPERATION ACCEPTANCE FLAG IS SET. WHEN THE QTY UNIT PRICE TOTAL AMOUNT AND THE DISCOUNT TOTAL AMOUNT IS NOT CALCULATED, THE PALLET RESTART PROGRAM IS EXECUTED.	
79	QTY PRICE TOTAL AMOUNT	KD1856	TRANSACTION CL IS ORDER RECEIVE AND THE TRANSACTION PRODUCT IS NOT ORDER UNACCEPTABLE. THE TRANSACTION PRODUCT QTY IS NOT 0.	QTY PRICE TOTAL AMOUNT (KD1856) PRICE (KE1124) +DISCOUNT PRODUCT QTY (KE001)				WHEN OPERATION IS ACCEPTED, THE OPERATION ACCEPTANCE FLAG IS SET. WHEN THE TRANSACTION PRODUCT IS NOT ORDER UNACCEPTABLE, MESSAGE code=101 IS RESPONDED AND THE CORRESPONDING PRODUCT CODE FIELD IS DISPLAYED REVERSELY.	

FIG. 43

No.	DEFINITIVE NAME (DISTRIBUTOR)	DEFINITIVE ID	K201E	PALLET CHAIR FUNCTION CL	AREA CL	WOM	PALLET N	LAMA1C4D	TENSE CONTROL MESSAGES CL	LOGIC
56	TOTAL AMOUNT	A04360		PRODUCT QTY OF EACH TRANSACTION AND THE UNIT PRICE IS NOT 0.	DISCOUNT TOTAL AMOUNT (A04360) <small>SPECIFICATION NUMBER</small> =Σ (TRANSACTION QTY UNIT PRICE AMOUNT (A16721))				WHEN OPERATION IS ACCEPTED, THE OPERATION ACCEPTANCE FLAG IS SET. WHEN THE TRANSACTION QTY UNIT PRICE AMOUNT IS NOT CALCULATED, THE PALLET RESTART PROCESS IS EXECUTED.	
57	OPCD	A01540		UNCONDITIONAL	THE CORRESPONDING OPCD MUST EXIST IN THE PERSON IN CHARGE MASTER.				WHEN NOT EXISTING IN THE PERSON IN CHARGE MASTER, THE MESSAGE OP= 2001 IS RESPONDED, AND THE CORRESPONDING OPCD FIELD IS DISPLAYED REVERSELY.	
58	OPERATION PERSON IN CHARGE NAME	A01580		IN THE CASE THIS OPCD EXISTS IN THE PERSON IN CHARGE MASTER	OPERATION PERSON IN CHARGE NAME (A01580 OF KE201E) =OPERATION IN CHARGE NAME (SND792 OF PERSON IN CHARGE MASTER)					

FIG. 44

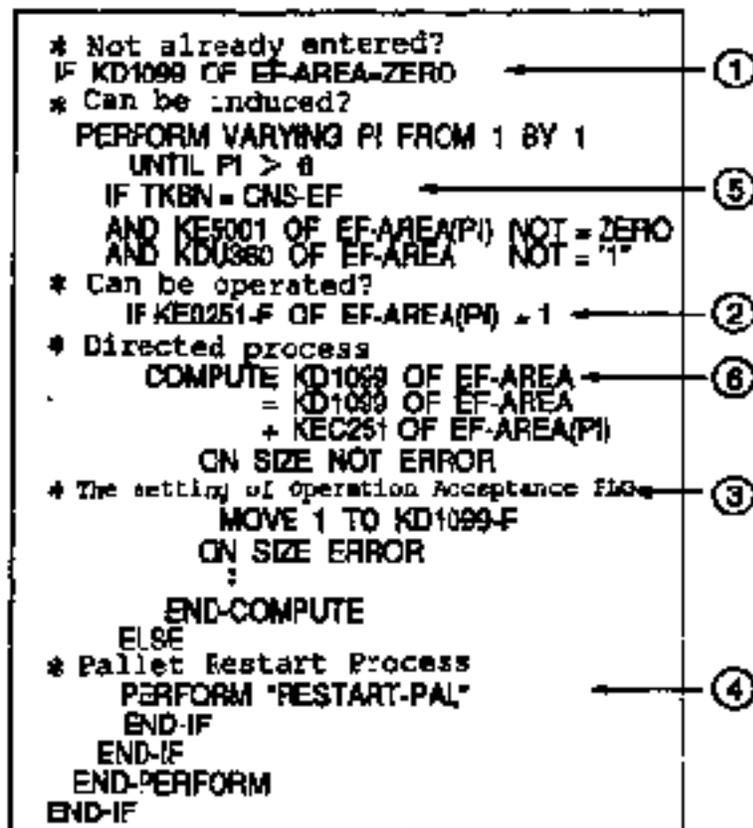


FIG. 45

Target Points	Traditional	LYEE	Effects
① Improvements in working method	<p>Design 40 Manufacture 60</p>	<p>Design 40 Manufacture 60 Substituted by LYEE theory</p> <p>Work logic by user</p>	Short-term development realized: 1/2 - 1/10
② Establishment of Quality Concept	<p>Work logic produced by SE 50 Indispensable control logic 30</p> <p>Work logic by user Indispensable control logic</p>	<p>Work logic produced by SE 50 Indispensable control logic 30 Substituted by LYEE theory</p> <p>Work logic by user</p>	Compression of the gross development volume: 20% - 80%
③ Exclusion of Empiricism	<p>Dependent on empiricism</p>	<p>LYEE theory</p>	Enhancement of the maintainability: 40 - 100 times.
④ Specialization of the Thinking Method	<p>Dependent on personal abilities 90</p> <p>Tool effects</p>	<p>Dependent on personal abilities 90 Substituted by LYEE theory Compression of dependency on personal abilities</p> <p>Tool effects</p>	Enhancement of the work efficiency: 40 - 100 times.

FIG. 46

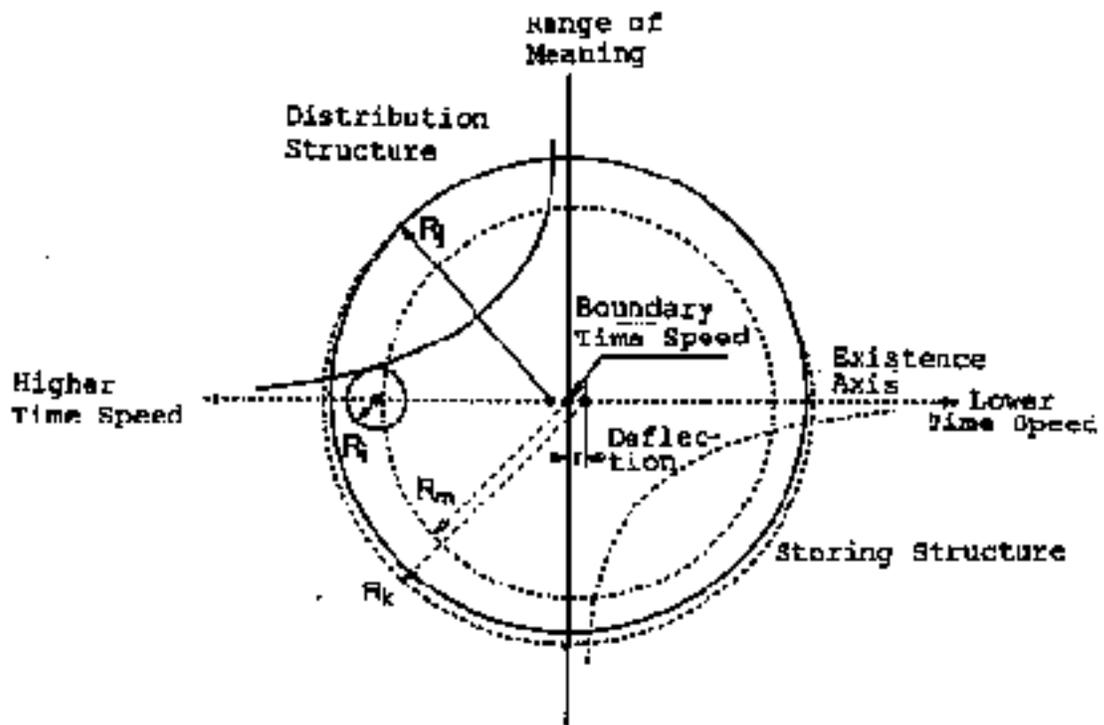
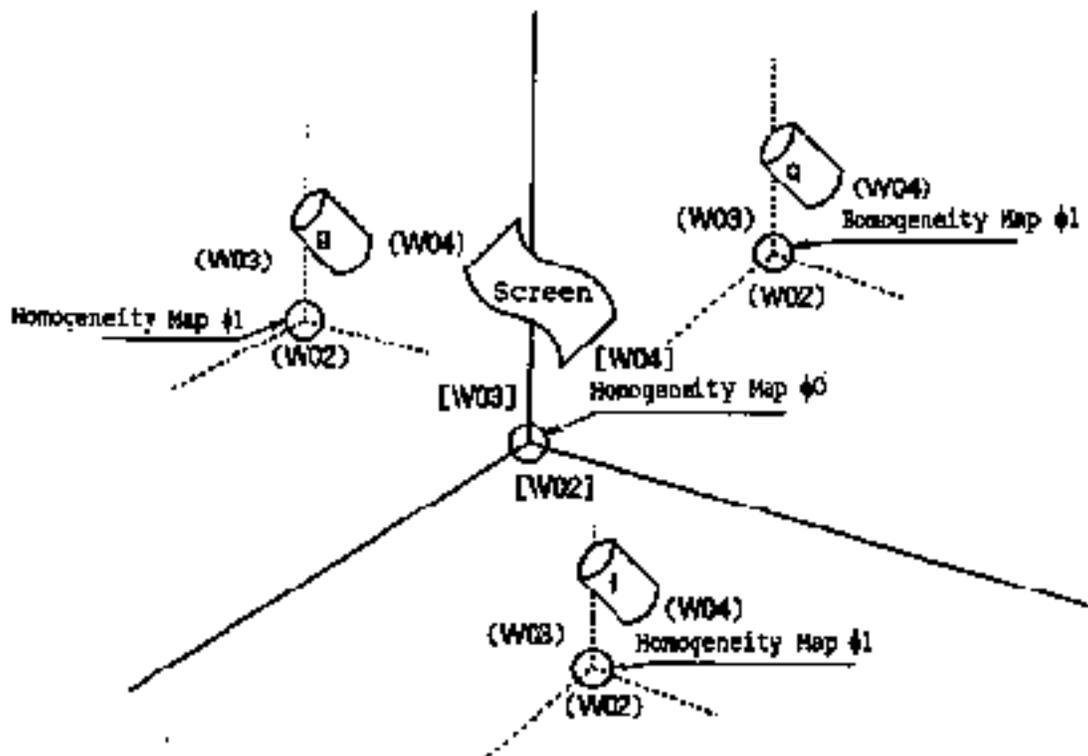


FIG. 48



INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP97/01492

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. ⁶ G06F9/06		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS RESEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
Int. Cl. ⁶ G06F9/06		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Jitsuyo Shinan Koho	1978 - 1997	
Kokai Jitsuyo Shinan Koho	1972 - 1994	
Toroku Jitsuyo Shinan Koho	1994 - 1997	
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
JGIS, "VOOJU"		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Class. of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP, 6-332673, A (Institute of Software Scientificial Constructions Co., Ltd., JR East Japan Information Systems Co.), December 2, 1994 (02. 12. 94) (Family: none)	1, 2
A	JP, 5-108319, A (Hitachi, Ltd.), April 30, 1993 (30. 04. 93) (Family: none)	1, 2
A	JP, 4-137038, A (K.K. Business System Kankyusho), May 12, 1992 (12. 05. 92) (Family: none)	1, 2
A	JP, 6-348498, A (Fujitsu Ltd.), December 22, 1994 (22. 12. 94) (Family: none)	1, 2
A	Strategic Computer, Vol. 33, No. 8, August 1994 (Tokyo), Shigenaki Towara "Account of experiments on "The VOOJU" the idea about extraordinary method of developing software, by a user - Challenge of NTP data communications - (in Japanese)" p. 51-56	1, 2, 4, 5
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family member.		
* Special categories of cited documents:		
"A" documents defining the general state of the art which is so mentioned in the art prior art category	"T" later documents published after the international filing date or priority date and not in conflict with the application but which do not contain the subject-matter underlying the invention	
"E" earlier documents not published on or after the international filing date	"X" documents of particular relevance for claims involving matter the technical effect of which is mentioned in the claims as constituting a technical effect	
"L" documents which may bear directly on priority claims which is cited to establish the publication date of another claim or other special reasons (as specified)	"Y" documents of particular relevance for claims involving matter the technical effect of which is mentioned in the claims as constituting a technical effect, such as mentioned in the claims as being obvious to a person skilled in the art	
"O" documents referring to an oral disclosure, use, exhibition or other means	"Z" abstracts extracted from the same patent family	
"P" documents published prior to the international filing date but later than the priority date claimed		
Date of the actual completion of the international search	Date of mailing of the international search report	
August 19, 1997 (19. 08. 97)	August 26, 1997 (26. 08. 97)	
Name and mailing address of the ISA/	Authorised officer	
Japanese Patent Office		
Facsimile No.	Telephone No.	

Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

International application No.

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(c) for the following reasons:

1. Claims Nos.: 3, 6

because they relate to subject matter not required to be searched by this Authority, namely:

The recording medium mentioned in claims 2 and 4 has a distinctive feature in a recorded program only, and hence the Claims are deemed to be mere presentations of information.

2. Claims Nos.:

because they relate to parts of the international application that do not comply with the prescribed requirements in such an extent that no meaningful international search can be conducted specifically.

3. Claims Nos.:

because they are dependent claims and are not claimed to be acceptable with the second and third sentences of Article 8(1)(b).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. An all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. An all searchable claims could be searched without effect justifying an additional fee, this Authority did not receive payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims, it is covered by claim Nos.:

Reasons for Prior art:

 The additional search fees were accompanied by the applicant's process. The process accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (3)) (July 1992)

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP97/01493

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
E	WO, 97/16784, A1 (Fujio Negoro), May 9, 1997 (09. 05. 97) (Family: none)	1, 2, 4, 5
A	JP, 4-238534, A (Hitachi, Ltd.), August 26, 1992 (26. 08. 92) (Family: none)	1, 2 4, 5
X	JP, 5-73290, A (Hitachi, Ltd., Hitachi Software Eng. Co., Ltd.), March 26, 1993 (26. 03. 93) (Family: none)	4, 5
X	JP, 5-237870, A (Nippon Telegraph & Telephone Corp.), October 8, 1993 (08. 10. 93) (Family: none)	4, 5
X	JP, 4-181455, A (Hitachi, Ltd., Hitachi System Engineering K.K.), June 26, 1992 (26. 06. 92) (Family: none)	4, 5

Form PCT/ISA/210 (continuation of second sheet) (July 1992)