(54) Title: KNOWLEDGE MANAGEMENT SYSTEM

(57) Abstract: A knowledge management system including a user configurable portal page for a web browser or the like; said page comprising. (a) an assembly zone for assembly by said user of user-selected links; (b) a selection zone comprising a plurality of link zones; each link zone providing access to a plurality of links which each offer access to a predetermined grouping of knowledge-providing links.

KNOWLEDGE MANAGEMENT SYSTEM

The present invention relates to a knowledge management system and, more particularly, to such a system suitable for implementation over a computer network such as the Internet

5   or a corporate Intranet.

BACKGROUND

There presently exist various kinds of data management tools for using the power of computers to assist users to

10   make sense of or otherwise manage the vast volumes of data which those same computers are now capable of generating and storing.

One well known corporate tool for so doing is Lotus Notes (Trade Mark of IBM Corporation).

15   The problem with proprietary knowledge management tools often revolves around the very fact that they are proprietary - their usage is carefully controlled and propagation of the system is effectively controlled thus constituting in itself an impediment to the very knowledge management process which

20   the system seeks to provide.

It is an object of the present invention to address or ameliorate one or more of the abovementioned disadvantages or at least provide a useful alternative.

BRIEF DESCRIPTION OF INVENTION

Refer to Claims

5   BRIEF DESCRIPTION OF DRAWINGS

Embodiments of the present invention will now be described with reference to the accompanying drawings wherein:

Fig. 1.1 illustrates a representative portal screen 10   according to a first embodiment of the invention;

Fig.1.2 is a block diagram representing steps in the construction of a customized portal screen of Fig.1.1;

Fig 2.1 illustrates a web page incorporating an amended or customized portion;

15   Fig.2.2 illustrates a template function by which the customized or amended web page of Fig.1.1 can be communicated to others in accordance with a further embodiment of the present invention;

Fig 2.3 is a flowchart relating to exemplary steps of 20   operation of the template function of Fig.2.1;

Fig.3.1 illustrates a browser window in accordance with the prior art;

Fig 3.2 illustrates a browser window in accordance with a further embodiment of the present invention;

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Fig.3-3 illustrates a state mark function for use in association with the browser window of Fig 3.2; and

Fig 3.4 illustrates operation of a state mark function in accordance with a second embodiment of the present invention.

5   Fig.4-1 is a block diagram of usage of a token pass function in accordance with a first embodiment of the present invention;

Fig 4.2 is a block diagram of propagation of the portals of Fig 4-1;

10   Fig 4.3 is a representation of an embodiment of a token suitable for use with the arrangement of Fig 4.1;

Fig. 5.1 is a block diagram of usage of a characterization function in association with a web portal page in accordance with a first embodiment of the present

15   invention;

Fig.5.2 is a block diagram of propagation of the portals of Fig 5.1;

Fig.5.3 is a representation of an embodiment of a characterization token suitable for use with the

20   arrangement of Fig 5.1; and

Fig.5.4 is a block diagram of characterization by colour of token applied to the system of Fig 5.2.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

5 <u>Customised Portal</u>

With reference to Fig. (.1 there is illustrated an exemplary screen display 11 of a customized portal 10 according to a first preferred embodiment of the present invention.

10   In this instance the screen display 11 is open within a browser screen such as that supported by, for example, MicroSoft Explorer.

The screen display 11 is divided into a portal assembly zone 12 and a selection zone 13.

15   The selection zone 13 includes a plurality of icons, each of which comprises a link to a plurality of links which each offer competing products/services in a predetermined product/service category. In this instance selection zone 13 comprises first category icon 14A, second category icon 14B,

20 third category icon 14C, fourth category icon 14D through to Nth category icon 14N.

Each category relates to a particular product/service category and can, for instance, include an Internet Service

Provider (ISP) category, a mail provider category, a chat service category, a channel provider category and so on.

In this specification a reference to a "category" is a reference to a grouping of product or service providers who provide competing products and/or competing services which can be categorized under a single category heading.

In use, and with reference to Fig. 2, a user will user a mouse pointer (not shown) or like raster-scan pointing device with associated clickable switch whereby a user can "click" the switch on the mouse when the mouse pointer as shown on the screen display 11 is located over an icon or other area which is to be signaled to the computer driving the screen display as a selected icon or other selected area.

With reference to Fig. 2 a user can assemble a portal in the portal assembly zone 12 by selecting icons representing links to desired product/service providers from within the selection zone 13. To do so a user first clicks on the icon representing a specified category such as, for example, first category icon 14A as a first step. This will cause a plurality of links in the form of category specific icons 16A, 16B … 16N to be displayed in the selection zone 13 of screen display 11.

The user then selects one of the category specific icons 16A-16N, in this example icon 16N and clicks and drags the

icon across from selection zone 13 into portal assembly zone 12 as a third step in the selection process.

The user then repeats this process for other categories until, finally, the user has assembled within the portal
5   assembly zone 12 a plurality of category specific icons, one for each general category of personal interest to the user. The user has thereby constructed a customized portal in the portal assembly zone. This customized portal is then saved as a template 17 whereby that particular customized portal
10   will open on future access to screen display 11.

Template Function

Fig.2.1 illustrates a customized web page 10 comprising, in this instance, a first zone comprising an assembly zone 11
15   surrounded by a second zone comprising a selection zone 12. The details of the construction of a web page such as this are more fully explored in the applicant's co-pending Australian Provisional Patent Application No. PQ9674, the specification and drawings of which are incorporated herein
20   by cross-reference.

In this instance customized web page 10 is customized by a user (not shown) dragging one or more icons 13 from selection zone 12 into assembly zone 11 thereby to form a user-specific selection of icons 13A.

Fig 2·2 illustrates first computer 20 connectable via internet 21 to second computer 22.

First computer 20 displays customized web page 10 including assembly zone 11 and selection zone 12.

5   When a user (not shown) desires to export assembly zone 11 and selection zone 12 to a second user operating second computer 22 the user invokes template function 23 comprising a routine executable on first computer 20 whereby the HTML code comprising assembly zone 11 and selection zone 12 is

10   encapsulated by template function 23 so as to form a transmittable message packet 24.

The user can then transmit transmittable message packet 24 including assembly zone 11 and selection zone 12 via internet 21, for example using an email program or equivalent

15   to second computer 22. Similarly, assembly zone 11 is extracted and displayed as a facsimile 11A of assembly zone 11.

A corresponding template function 23A executable on second computer 22 operates to extract selection zone 12 from

20   its transmittable message packet 24 and display selection zone 12 as a facsimile 12A of selection zone 12 on a monitor of second computer 22.

In this manner a user of first computer 20 is able to communicate a customized web page 10, in this instance

comprising assembly zone |11 and selection zone (12 to another user.

With reference to Fig.∂·3 there is illustrated a flowchart for the template function|23 previously described with reference to Fig∂·2.

The template function |23 invokes the following steps during execution:

A user (not shown) of first computer|20 initiates export of customized web page|10 by means of "initiate export" step |25 for example by clicking on an icon designated "initiate export" within assembly zone 11 or selection zone (12 with reference to Fig∂·1.

A program on first computer|20 then encapsulates the subject matter of both assembly zone (11 and selection zone |12 in an "encapsulate" step |26 following which the program initiates transmission of the encapsulated web page|10 over Internet\21 by means of "transmit" step|27.

The target computer, in this case second computer|22 receives data comprising the customized, encapsulated web page |10 from Internet |21 in a "receive" step |28. A counterpart program to the export program on first computer |20 then unencapsulates the encapsulated web page by means of an "unencapsulate" step|29 followed by an "instantiate" step |30 wherein the program installs the customized web page|10 as

assembly zone ⎰11A within selection zone ⎰12A on second

computer⎰22 for subsequent use and/or modification by a user

of second computer⎰24 in a "use/modify" step⎰31.

In this instance the template function⎰23 transmits all

5   of customized web page⎰10 including both assembly zone⎰11 and

selection zone⎰12. It also encapsulates for transmission

provide a trace of the history of the creation of the

assembly zone⎰11 and selection zone⎰12. In one form this is

performed by a state mark function as described in more

10   detail in the applicant's co-pending Australian Provisional

Patent Application No. PR1076, the disclosure and drawings of

which are incorporated herein by cross-reference.

The second user (not shown) operating second computer⎰22

can now, if desired, modify and customize assembly zone⎰11A

15   with reference to the icons available in selection zone⎰12A

and, indeed, then export to others their customized web page.

State Mark Function

In this specification, with particular reference to the

20   embodiments, the context of implementation of embodiments of

the state mark function is the World Wide Web. In current

terminology the World Wide Web comprises a portion of the

World Wide interconnected network of computers currently

known as the Internet wherein communication is performed

utilizing a language called HTML which permits communication of relatively simple yet graphically rich images, one page (or "web" page) at a time. The web pages of HTML text or language are readable by a program commonly known as a

5   "browser". The browser is adapted to interpret the HTML code and render corresponding graphically rich images, one page at a time, within a browser window.

Fig.3·1 illustrates a prior art browser window 10 which could be, for example, a window available under Microsoft

10   Explorer or Netscape Navigator. In this instance the browser window 10 shows a list of "favourites" which comprises a list 11 of addresses 1…N. Each address 11-1, 11-2, 11-N represents the Web address of a Web page accessible over the Internet or like interconnected computer network. Should a

15   user look up one of the addresses 11-1 …11-N, for example by clicking with a mouse pointer device on a selected one of the addresses from the list 11 then the browser accesses that address via the Web and presents within the browser window 10 the Web page accessed at that address.

20   With reference to Fig 3·2 there is illustrated a browser window 2110 according to a further preferred embodiment of the present invention which displays a list 7111 of state marks 2111-1 …2111-N. State Mark 2111-1 is illustrated in greater detail in Fig 3·3 and comprises a Web page address storage

means 112, in this case in the form of 4 consecutive memory addresses 113, 114, 115, 116 all associated with each other and with a state mark header 117.

The storage means 112 is constructed on a user's
5   personal computer (not shown) or like Web access device by a state mark function 118 which tracks consecutive Web addresses accessed by the user, in this case comprising addresses 113, 114, 115, 116 and then stores those addresses 113..116 in storage means 112 associated in order of access
10   113, 114, 115, 116 and associated with a state mark header 117, in this instance entitled "State Mark 1".

The header 117 is then made available in a list 111 of state marks within the browser window 110 and is also made available as a data file which can be transmitted to others.
15   If either the current user accesses state mark 111-1 or a third party to whom the user has transmitted the file, either one may recreate and call up Web pages associated with the addresses 113, 114, 115, 116 in the order in which they were originally accessed by the user thus recreating the Web
20   experience of the user.

With reference to Fig.3·4 there is illustrated a state mark function system 210 according to a further embodiment of the present invention.

In this instance a user operating on screen template 211 may choose to access a banking site via banking icon 212. Clicking on icon 212 leads the user (not shown) down banking path 213 wherein the user may, at a first state 214, enter

5   password and user information before progressing further down path 213.

Having entered the user information 214 (which is stored as a first state mark 215) the user may then, for example, access a "pay bills" facility 216 (which is recorded as

10 second state mark 217).

The user may then perform a pay bill transaction 218 (which is recorded as third state mark 219). This user experience following path 213 is stored as a linked list of ordered state marks 215, 217, 219 via state mark function

15 220.

The user can then, for example, export the experience comprising path 213 to a colleague.

In some embodiments the exported function 220, on export, is stripped of information which is confidential to

20 the user.

Alternatively the linked list of ordered state marks comprising state mark function 220 can be thought of as a "macro" by which all commands, web addresses, user name entries and other input information comprising a contiguous

portion of a user's web experience is stored as a "macro" for replay by the user or by a third party to whom the user sends or exports the state mark function 220.

5   **Token Pass Function**

With reference to Fig.4·1 there is illustrated a token pass function 310 for use across an interconnected network of computers such as Internet or Intranet 11.

In this instance a first user 12 operating a first
10   network communication device in this instance in the form of first personal computer 13 has available on PC13 a web page in the form of a first portal page 14.

In accordance with a further ~~first~~ embodiment of the present invention first user 12 can export portal page 14 across the
15   network of interconnected computers 11 to second personal computer 15 operated by second user 16. The portal page 14A thus imported will be available for viewing on personal computer 15 by second user 16 and may, in some instances, be further modified by second user 16 prior to further use, for
20   example by the addition of new web page links to page 14A and perhaps also the deletion of some of the existing links on page 14A.

The result of the export by first user 12 of portal page 14 to second user 16 is that first user 12 is credited with one reward token 17. Without limitation the token 17 may be graphically depicted on a computer screen in the form

5   illustrated in Fig.4° 3. More importantly a user token database 18 maintained for the benefit of first user 12 is updated so as to reflect a credit of one token to the credit or benefit of first user 12 as a result of the transmission of first portal page 14 to second user 16.

10   In a particular form a user token database 18A associated with and maintained for the benefit of second user 16 can be credited with one token on receipt of and instantiation by second user 16 of portal page 14A onto his/her network communications device (in this case personal

15   computer 15).

In addition, in a particular form, a group token database 19 is maintained for the benefit of all users 12, 16 who become involved in export of or reception of portal pages 14, 14A.

20   The group token database 19 maintains a tally of all tokens credited by participating user.

So, for example, with reference to Fig 4.2, user 1 (being first user 312 of Fig.4-1) exports portal page 314 to three users, namely users 2.1, 2.2 and 2.3 (and wherein user 2.1 is designated as second user 316 from Fig.4-1).

5   The user token database 318 for user 1 will show a credit of three tokens as a result of the three transfers.

At the same time, in this instance, each of users 2.1, 2.2 and 2.3 will be credited with one token upon instantiation of the portal page 314 on their communication

10   devices. Line 1 of user token database 18A illustrates this credit of 1 token for user 2.1.

If, subsequently, each of users 2.1, 2.2 and 2.3 themselves export a portal page to three new prospective users 3.1, 3.2 and 3.3 they will each be credited with one

15   token for each of those transfers as illustrated in the second line of user token database 318A.

In this instance, because user 1 was responsible for entry into the group of users 2.1, 2.2 and 2.3 user 1 receives a credit of one token into user 1's user token

20   database 318 for each of the portal page transmissions initiated by each of users 2.1, 2.2 and 2.3 as is reflected in line 2 of user token database 318 in Fig.4-2.

In this instance group token database 3 19 is also updated, via communication over the same network of interconnected computers 3 11 with information pertaining to the token credits of all participating users, 1, 2.1, 2.2,

5   2.3, 3.1 … as is also illustrated in Fig.4-2.

The tokens 3 17 can be utilized for simple record keeping as an indication of activity of each user in relation to export of portal pages. In more complex arrangements the record of tokens 3 17 can be utilized for rewarding the

10   activity of users and/or may be designated as a tradable commodity amongst users.

Characterisation Function

With reference to Fig.5-1 there is illustrated a

15   characterization function 4 10 for use across an interconnected network of computers such as Internet or Intranet 11.

The characterization function 4 10 is intended to provide a means of characterizing at least a first user 4 12

20   according to pre-selected criteria. A mechanism in the form of tokens 4 17 is also described by which the characterizations can be communicated with other users 4 16 and also, in one form with a group database 4 19.

A first user 12 operating a first network communication device in this instance in the form of first personal computer (PC) 13 has available on PC 13 a web page in the form of a first portal page 14.

In accordance with a further embodiment of the present invention first user 12 can export portal page 14 across the network of interconnected computers 11 to second personal computer 15 operated by second user 16. The portal page 14A thus imported will be available for viewing on personal computer 15 by second user 16 and may, in some instances, be further modified by second user 16 prior to further use, for example by the addition of new web page links to page 14A and perhaps also the deletion of some of the existing links on page 14A.

The result of the export by first user 12 of portal page 14 to second user 16 is that first user 12 is credited with one characterization token 17. Without limitation the token 17 may be graphically depicted on a computer screen in the form illustrated in Fig 3. More importantly a user token database 18 maintained for the benefit of first user 12 is updated so as to reflect a credit of one token to the credit or benefit of first user 12 as a result of the transmission of first portal page 14 to second user 16.

In a particular form a user token database 18A associated with and maintained for the benefit of second user 16 can be credited with one characterization token on receipt of and instantiation by second user 16 of portal page 14A onto his/her network communications device (in this case personal computer 15).

In addition, in a particular form, a group token database 19 is maintained for the benefit of all users 12, 16 who become involved in export of or reception of portal pages 14, 14A.

The group token database 19 maintains a tally of all tokens by token type credited to participating users.

The token 17 is selected so as to be representative of at least a first characteristic of first user 12. The characteristic can be any pre-selected characteristic but, in particular forms of the present invention, will be a characteristic or group of characteristics which relate to the user's communications over the computer network. It may, for example, be characteristic of a particular pattern of communication activity of first user 12. It may be characteristic of particular interests of first user 12. In one alternative, particular form the characterization may be defined by first user 12 so as to define not the

actual person but, in effect, a virtual person having
characteristics selected by but not necessarily of
themselves specifically characteristic of first user 12.

In all instances, however, the intention is that the
portal page 14 of first user 12 will directly or indirectly
reflect these pre-selected characteristics for example with
reference to the content of the web links on the portal
page 14 or with reference to the pattern of communication
activity entered into over the computer network 11 by way
of portal page 14. In particular it is expected that those
users to whom the portal page 14 is exported by first user
16 will have some commonality or nexus with the pre-
selected characteristics defined with reference to or to
the use of the exported portal page whereby the recipients
of the portal page take on or can otherwise be similarly
characterized by the same pre-selected characteristics.

In the particular, but non-limiting, form of the
present embodiment the token 17 is arranged to be
representative of the pre-selected characteristic or pre-
selected group of characteristics by the association of
characteristic information 20 associated with it. In this
particular instance colour is used as being representative
of the characteristic information 20 with the result that

the group of users illustrated in Figs. 2, for example, are initially grouped by export of portal pages but, ultimately, become grouped by the passage of tokens 417 having the specified characteristic information 20 as a

5   common feature.

So, for example, with reference to Fig. 2, user 1 (being first user 12 of Figs. 1) exports portal page 14 to three users, namely users 2.1, 2.2 and 2.3 (and wherein user 2.1 is designated as second user 16 from Figs. 1).

10   The user token database 18 for user 1 will show a credit of three tokens as a result of the three transfers.

At the same time, in this instance, each of users 2.1, 2.2 and 2.3 will be credited with one token upon instantiation of the portal page 14 on their communication
15   devices. Line 1 of user token database 18A illustrates this credit of 1 token for user 2.1.

If, subsequently, each of users 2.1, 2.2 and 2.3 themselves export a portal page to three new prospective users 3.1, 3.2 and 3.3 they will each be credited with one
20   token for each of those transfers as illustrated in the second line of user token database 18A.

In this instance, because user 1 was responsible for entry into the group of users 2.1, 2.2 and 2.3 user 1 receives a credit of one token into user 1's user token database 418 for each of the portal page transmissions
5   initiated by each of users 2.1, 2.2 and 2.3 as is reflected in line 2 of user token database 418 in Fig5.2.

In this instance group token database 419 is also updated, via communication over the same network of interconnected computers 411 with information pertaining to
10   the token credits of all participating users, 1, 2.1, 2.2, 2.3, 3.1 … as is also illustrated in Fig5.2.

The tokens 417 can be utilized for simple record keeping as an indication of activity of each user in relation to export of portal pages. In more complex
15   arrangements the record of tokens 417 can be utilized for rewarding the activity of users and/or may be designated as a tradable commodity amongst users.

In the instance of Fig5.2 all tokens 417 are of the same colour, in this instance a green colour with the
20   result that all of the users 1, 2.1, 2.2, 2.3, 3.1 … illustrated in Fig5.2 are characterized by the same token colouring of green and are, in effect, grouped by that colour and therefore by characteristic information 420.

In alternative embodiments any given user can be characterized by more than one characteristic and this can be reflected in any given user having attributed to him/her tokens of different characteristic information types. In one simple form these different characteristic information types can be represented by different colours of the tokens. So, for example, first user 412 may ultimately have attributed to him/her tokens of the colour green, orange and red.

With reference to Fig 5-4 a simple example of multiple characteristic information categorization can involve first user 412 maintaining three separate portal pages 414G, 4140 and 414R, each one having a different collection of web links associated with it. For example portal page 414G may reflect first user 412's business interests, portal page 4140 may reflect first user 412's sporting interests and portal page 414R may reflect first user 412's cultural interests. In this instance the respective interests comprise respective characteristic information reflected in respective associated characteristic information 420G, 4200 and 420R reflected in respective tokens of colour green, orange and red.

Should first user 12 export portal page 1G to a second
user 2.1 then the token 20G reflected back will be of
colour green reflecting that corresponding characteristic
information. Similarly, communication by first user 12 of

5   portal page 1O to user 2.2 will reflect back token 20O of
colour orange and, finally, export of portal page 1R by
first user 12 to a second user 2.3 will be reflected in
transmission of token 20R of colour red back from second
user 2.3.

10 The corresponding group token database 19 in this
instance includes token information further subdivided by
characteristic information 20 in the form of colour columns
green, red and orange with the token credits as illustrated
in Fig. 5·4 following the portal page transmissions

15 previously described with reference to Fig. 5·4 by first user
12 to respective second users 2.1, 2.2 and 2.3.

The above describes only ~~one~~ Some embodiment~~s~~ of the present
invention and modifications, obvious to those skilled in
the art, can be made thereto without departing from the

20 scope and spirit of the present invention.

Two specific examples are described below'.—

EXAMPLE   STATE MARK

This example
~~The invention~~ pertains to computer networks and more particularly to apparatus and methods for enabling users of a network to be characterised and matched accordingly.

Methods and apparatus are proposed which allow a user of a computer

5   network to identify and contact other users according to user characteristics which are captured and recorded by a network administrator. The invention does not require that users overtly compile information relating to their own characteristics. Rather, the characteristics are compiled and stored centrally, by a network administrator, based on the way a user transmits information to

10   other users. This methodology creates a network wherein users are connected to one another and characterised objectively according to their use of the network resources.

this example
Accordingly, ~~the invention~~ provides software which enables a first user to transmit a workspace to a second user. The workspace comprises links to

15   networked resources which are selected by the first user. At least some of the links can be related to one or more topics. A user is assigned a characteristic based on the topics expressed in a workspace transmitted by them.

In some embodiments, a topic is associated with a weight which reflects the intensity of the user's interest or expertise in the topic.

20   In preferred embodiments, a user's topics and weights are compiled objectively and stored by a network administration. A user may be characterised according to a compilation of their topics and weights, together referred to as a spectrum.

In other embodiments the network permits a search of user's spectrums

25   so that a user may identify another user according to the other user's spectrum.

In some preferred embodiments, a user may limit the way spectral

information is compiled, stored or disseminated in order to protect their own

privacy. *This application elsewhere*

~~The applicant's co-pending application PR 0662~~ discloses a workspace

5   which is constructed by a user to suit their individual needs, preferences and

usage habits. The workspace comprises a collection of icons to resources

accessible over a network. The workspace may be portable as to any variety

of hardware devices which are used on the network. The work space may be

transmitted to other users. In preferred embodiments an icon in a user's

10   workspace may comprise a state mark.

A state mark not only identifies a resource, such as a page of a www

site, but also contains information which is used, in the nature of a script to

make requests, supply data and otherwise automatically interact with a

resource so as to cause transmittal, to the state mark user, of a particular

15   resource in a particular state.

In this particular

~~In one~~ example, a user (U1) browsing the www encounters a site of

interest, for example, a site devoted to cooking. They enter the site through

the home page (P1) and select from a drop-down menu, another page (P2)

within the site dealing with recipes. From P2 they press a graphic button using

20   their mouse which allows them to join a mailing list devoted to wine and directs

them to a subscription page (P3) where they enter their user name and e-mail

address as text in a form appearing within P3. Knowing that a friend, (U2)

would also like to participate in this same list, U1 creates a state mark using

software and transmits the state mark to U2, perhaps with an explanation.

25   The state mark appears upon U2's graphic display (e.g. video screen),

preferably as part of a workspace transmitted by U1. When the state mark is

activated by U2 it has the effect of navigating U2 to P3 (through P1 and P2 if

required). In preferred embodiments, U2's software will insert U2's stored user

name and e-mail address into the form in P3 so that U2 will in effect become

subscribed to the same mailing list as U1.

In order to practice ~~the invention~~, an administrator of a network to

5   which both U1 and U2 are connected compiles objective spectral information

about the exchange of information between U1 and U2 as well as the use, by

U2, of information or statemarks transmitted by U1. The invention requires that

the administrator assign one or more topics to the U1's transmission or be

informed of topics by some action taken by U1, for example, U1 submitting a

10   form to the administrator when the workspace is transmitted to U2.

In one embodiment, the administrator is an intermediary in the

transmission from U1 to U2 and parses the pages associated with the state

mark. It can then ascertain that the state mark was concerned with food and

more particularly with wine. The administrator then records, objectively in

15   respect of U1, a record of a transmission having a topic of "wine". Depending

on the number of wine related state marks (or other data) taken from U1's

transmission, the administrator then assigns a weight to U1's wine topic.

Together with the other topics associated with U1's transmission to U2,

U1 is assigned a spectrum which is composed of a number of topics and a

20   weight for each. U1 may be assigned a singular spectrum which evolves over

time based on their transmissions. In the alternative, U1 may have a plurality

of spectra, each one having a particular domain such as season, time, type of

recipient, origin place of U1's transmission, or other. In summary U1 can be

characterised by one or more spectra which are compiled by the administrator.

25   The state mark may also contain information which provides a

provenance or indication of the path through which it was received and

retransmitted by various users. For example, a state mark which has been

retransmitted various times indicates (a) that it is useful or popular and (b) that

its originator is astute, and (c) that its later recipients are receiving valuable

information about a subject. This information may have commercial value to

the administrator. A statemark or an icon in a workspace may have a particular

5   colour or be surrounded by an ornamental frame of a particular colour. This

colour may be used to indicate a category to which an icon or statemark

belongs.

Given that the administrator now has a record of one or more spectra

associated with network users, searches may be conducted in respect of those

10   users. In one example, a user might submit a query to an administrator that

users be identified that have a deep interest in food and poetry and some

interest in travel in the winter months and that live in Mexico. The administrator

could search its records accordingly and report back to the querying user

based or stored spectral data. It will be understood that a user may impose

15   privacy constraints to their own information. A user may quarantine any or all

of their stored information as well as information about them stored on or by

the network. A user can thereby custom tailor what information they share

according to flexible criteria such as when or where a request about them

originates, or the purpose of it, or what compensation they receive for the

20   · information or according to subject matter sought or combinations of the above.

Subject to these privacy measures, the invention gives a user the ability to

locate individuals, across the globe, according to highly refined, objective

criteria. In another example, the querying user simply requests a list of other

like-minded users, perhaps limited to a geographic region whereupon the

25   querying user's spectrum is used as a basis for comparison with other users

and a report generated accordingly. In a third example, a first user's query is

based on the spectrum of a third party, even where the characteristics of that

spectrum are not known to the querying user. In this example, a user U1 might ask that other users be identified that have a spectrum corresponding (to some degree) to U3. U3 might be a friend or business associate.

A vast array of information types are capable of being incorporated into a user's spectrum. For example, the point in time when a statemark for example within a given workspace is received or transmitted can be used to distinguish "early adaptors" from latecomers to a topic. The number of different people to whom a statemark or workspace is sent by an individual may be used to measure that individual's influence as a propagator, particularly if statemarks pertaining to particular commercial sites etc. are retransmitted. In another example the frequency of an individual's transmission may be used to deduce the degree to which they use a computer to communicate.

One of the benefits of the system described above is that a network user can locate other users without needing to know their specific identity. This gives network users the power to find and correspond with specific individuals according to shared interests, values and knowledge or expertise. Of course, the system also gives these same network users the option of not making public their spectra or identity and thereby maintaining their privacy. A user may custom tailor their privacy according to specific needs, for example, that their details about literary interests should always be concealed, that their spectra in relation to sports shall not be revealed to commercial vendors, that they shall remain entirely anonymous during the months of January and February and that they shall remain anonymous to users from the domain ".to".

These same features allow detailed marketing information to be compiled on a single user or on a population of users, subject to their consent and the privacy customisation referred to above. In this way, spectral information can be sold to advertising, marketing or retail organisations, for

example. The sale of this information may be conducted directly between individual network user and the purchaser, or through an intermediate. The intermediate may be a specially appointed network administrator that acts as a broker of information and that passes proceeds of the sale on to individual

5   users. The intermediate may also be a club or organisation representing users of a particular type.

Other benefits include the potential to allocate tokens, credits, virtual shares and the like to network users, according to their spectra. This goes toward the assignment of a monetary value to a spectrum, because the

10   allocated tokens etc. may be used:

- to obtain discounts or products from merchants
- to trade among network users
- to obtain equity in the network
- to obtain access to network features.

15   In alternative embodiments of the invention the transmission of icons, workspaces or statemarks, from one user to other users is moderated by a central authority. The central authority may be the same entity which provides the software to the users which enables the transmissions of statemarks and workspaces. Moderation entails acting as an intermediary between the sender

20   and the recipient of a workspace, statemark or icon. This allows either (a) the monitoring of the transmissions for the purpose of accumulating information, or (b) modifying the transmission so that the recipient must electronically visit the moderator's chosen site in order to register or otherwise log the transmitted workspace, statemark or icon. Both (a) and (b) serve the purpose of

preserving, for the moderator's use, information which would otherwise be lost in a direct transmission from one user to another.

EXAMPLE 1 — KNOWLEDGE MANAGEMENT VIA WORKSPACE

This example pertains to the construction of and uses of a personal workspace in a networked environment.

New users of the Internet are presented with a bewildering array of choices and difficult decisions.

5   Further, the types of devices a user may connect to the Internet are even increasing. The PC provides an entry point for many users. A user makes an investment of time in customising a PC interface for their particular use. Means are required for amortising the user's investment by providing means to transfer the user's customisation of the PC interface to other devices

10   such as telephones, personal digital assistants, or other internet connected appliances.

Information about Internet users and their use habits is highly valuable marketing data. Means are required which transparently captures marketing data in a way which enlists user cooperation and participation rather than user

15   resistance.

These needs are addressed by the present example which in one embodiment provides a personal workspace comprising configurable graphical user interface to a network such as the Internet.

The workspace comprises a plurality of icons which serve as links to

20   networked resources. Icons are constructed by dragging and dropping icons or other images from a resource onto the workspace.

In preferred embodiments, an original workspace is exported to another device, which displays in a second workspace some or all of the functional attributes of the original workspace.

25   In other embodiments of the example, a workspace may be expressed as a data object or file and transmitted to and used by a subsequent user

In further embodiments, a remote server is notified of the transmission of a workspace from one user (the sender) to another. Information about the transmitted workspace is stowed and compiled as a portion of a user profile of at least the sender.

5   In other embodiments, a token is allocated or distributed to the sender and recipient of a workspace. Tokens may be traded among users regardless of whether or not they have inherent value.

Workspace

10   A workspace, within the context of the present ~~invention~~ *example* comprises a graphical user interface to network. A workspace may reside on a PC or other device. A workspace, such as a Windows™ desktop, is customised, composed or arranged by a user to suit the user's needs.

An Internet user may benefit from a workspace which is dedicated to

15   their particular needs as they relate to the Internet. Most users require one or more of each of the following:

- an Internet service provider (ISP)
- e-mail application and connection to e-mail server
- web browser

20   - chat application and connection to chat server
- link to a search engine
- links to Internet resources such as specific sites, documents, streams, services or portals

25   A user's desktop might have some or all of the above presented as icons within a window. However, the compilation of such a workspace

represents an investment of time spent obtaining and installing applications, trial and error, research and learning.

This investment in time is prohibitive to some users, particularly new users. Some users will simply lack the time or expertise required to build a

5   useful workspace.

The present ~~invention~~ *example* includes a software application for building a personal workspace (workspace builder or "WB"). The WB allows a user to construct a workspace which is a software object, itself composed of objects. The WB allows a user to select icons from a variety of sources and transfer

10   them into their workspace using the drag-and-drop process built into most PC operating systems. In the alternative the WB allows a user to select an image or portion of an image and turn that image or portion into the graphic component of an icon which is then associated with a URL, either of the user's choice or, for example, the URL of the image source. In other embodiments,

15   icons are provided to users as discrete files comprising a collection from which they may select.

The workspace constructed this way is stored locally as an object or as a file and is therefore capable of being transmitted to other users in any way in which digital information may be transmitted. Examples of transmission

20   methods include e-mail, any of the direct client-to-client protocols or file transfer protocols.

User Profiles

The present ~~invention~~ *example* provides a server or network servers which

25   compile database of details regarding the transmission of workspaces among users. Details captured in a central database may include the identity of the sender and recipient, the identity of the icons transmitted and the frequency of

their use, and the location of sender, recipient and resources identified by the
icons.

Units

example

5   In one embodiment of the ~~invention~~, the identification by the server of a
transmission of a workspace cause a credit or token or share together ("units")
to be allocated to or distributed to both the sender and recipient of the
workspace. Subsequent re-transmissions of a workspace (or a modified
version) by a recipient are credited to the original sender, the re-transmitting

10   sender and the re-transmitting sender's recipient. In one example of this
method, the token, credit or share bears a category or theme which may be
expressed as a colour. For example, where a workspace is dominated by links
to music related resources, the token, credit or share might be identified with a
particular colour, say green.

15   In particular embodiments, units lack any face value, but may be traded
among users at their discretion. These units may also be offered as
inducements to other e-commerce or conventional transactions. In other
embodiments, the units have a face value, even if it is very small, say 1 cent to
0.1 cent or alternately may represent some small fractional ownership in a

20   company which owns, administers or is affiliated with the subject matter of this
disclosure. It is expected that the widespread distribution and use of units will
result in an appreciation of the value of those units. This mechanism creates
an environment in which the conduct that results in new allocations of units is
encouraged.

25

Portable Workspace

The present invention also allows that a user's workspace, once

constituted, may be transmitted from one of the user's devices to another. for

example, a user may wish to implement their PC workspace to a personal

5   digital assistant (PDA). As previously mentioned, the workspace is an object

composed of other objects such as icons. The user wishing to transmit the

workspace uses software to export it from one device to another. The export

software packages the necessary data and optionally edits or alters the data to

account for the type of device that will import the data, the user having

10   indicated this to the export software. The export software might therefore,

having been told of the export from PC to PDA, eliminate certain objects or

alter their properties to suit PDA's in general or the particular PDA identified by

the user.

Once workspace data is received by the importing PDA, it may also add,

15   remove or alter objects, to suit. For example. a PDA lacking a sound card

might edit out icons that link to resources which provide only an audio output,

such as streaming Internet radio.

Workspace Characteristics

20   As previously mentioned, a workspace is a window or other graphic

device in which is displayed a collection of icons or links networked resources

Such a workspace will also have certain other features. The workspace may

display a list of pre-set links to "channels" grouped according to category such

as sport, travel, shopping etc. The workspace may also serve as a launching

25   point to sponsors by providing space for active or passive advertisements. It is

expected that the workspace and its commercial provider will be branded and

links will be displayed to like-branded products or services. The workspace

may also display links to or have tools or menus to operate commonly used functions, for example, a unit counter, tools required to obtain new drag-and-drop icons, and the tools required to transmit or export workspaces.

Icon with Script

5   In some embodiments an icon is an object which has the property of running a script. Whereas a conventional icon may serve as a link to a particular URL or to an Internet application such as a browser which is opened to a particular URL when the icon is run, the present invention provides an alternative. In the present invention, a scripting software application can be

10   run which logs or otherwise tracks a users interaction with an Internet resource. For example, a user may open a browser, enter a URL, go to a particular HTML page, then select one or more items from a drop-down menu, enter text into a text box an finally submit a request to the URL based on those actions. The scripting software of the present invention creates a record of the

15   aforementioned user activity and creates a script which defines the activity in a sequence of discrete steps, actions or inputs. The scripting software then associates or appends the script to a user selected icon so that the icon becomes a symbolic link not just to the URL, but to the URL plus the user's inputs and requests etc., so that running the icon also causes the script to run.

20   In this way, not only does the user create an icon which eliminates subsequent repetitive forms of interaction with the URL, but also creates an icon or object which can be transmitted to other users. It may be transmitted alone or as part of a collection of icons or as part of a workspace. As such the icon and its associates script comprise a "state mark" rather than a book mark.

25   The icon represents a particular state within a continuum of interactive possibilities and not just a location.

In some embodiments an icon as disc_ssed above may have a drop down menu or other selection means, (for example accessible with the right mouse button) which allows a user to select ʿom a number of different states or scripts associated with an icon of the present invention.

5   In other embodiments, a script may be automatically edited by a recipient. A recipient's software may, upon recognising a newly received script, excise data in selected fields and replace that data with data which is relevant to the recipient. For example, a script sent from user A to user B, may indicate or have a data field which identifies user A to a URL. The recipient's

10   software parses the script, removes the reference to user A and substitutes the identity of user B. In this way the icon and it's script are personalised for user B, by user B's own software.
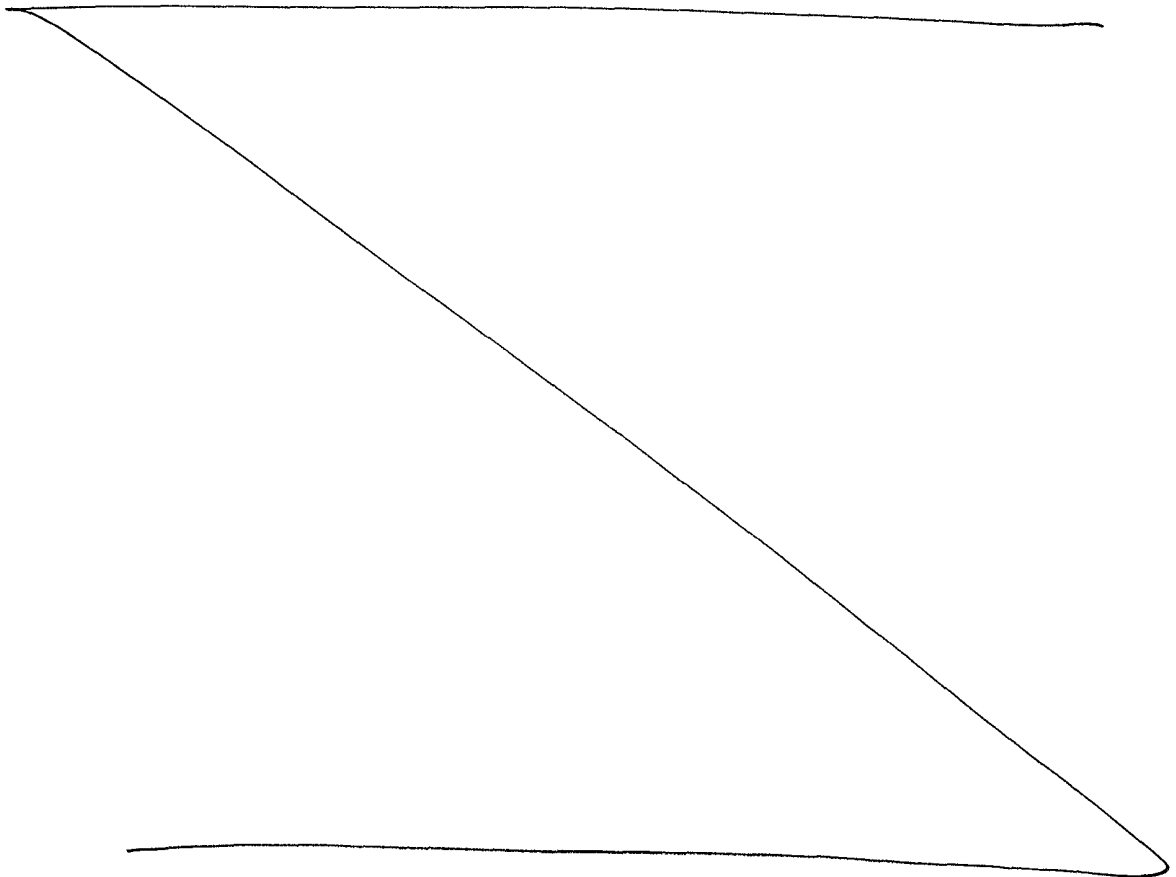
CLAIMS

Knowledge Management

1.   A knowledge management system including a user configurable portal page for a web browser or the like;

5   said page comprising:

    (a)   An assembly zone for assembly by said user of user-selected links;

    (b)   A selection zone comprising a plurality of link zones; each link zone providing access to a

10   plurality of links which each offer access to a predetermined grouping of knowledge-providing links.

Customised Portal

2.   A user configurable portal page for a web browser or the

15   like; said page comprising:

    (a)   An assembly zone for assembly by said user of user-selected links;

    (b)   A selection zone comprising a plurality of link zones; each link zone providing access to a

20   plurality of links which each offer competing products/services in a predetermined product/ service category.

3.   The user configurable portal page of Claim 2 wherein a user selects individual ones of said links for inclusion

on said assembly zone by first accessing a link zone

corresponding to a product/service category of interest

to said user.

4. The portal page of Claim 3 wherein said user selects by

5   clicking at least once with a pointer device in order to

select a link.

5. The portal page of any one of Claims 1 to 4 wherein said

user places said individual one of said links in said

assembly zone by a click and drag action with said

10   pointer device.
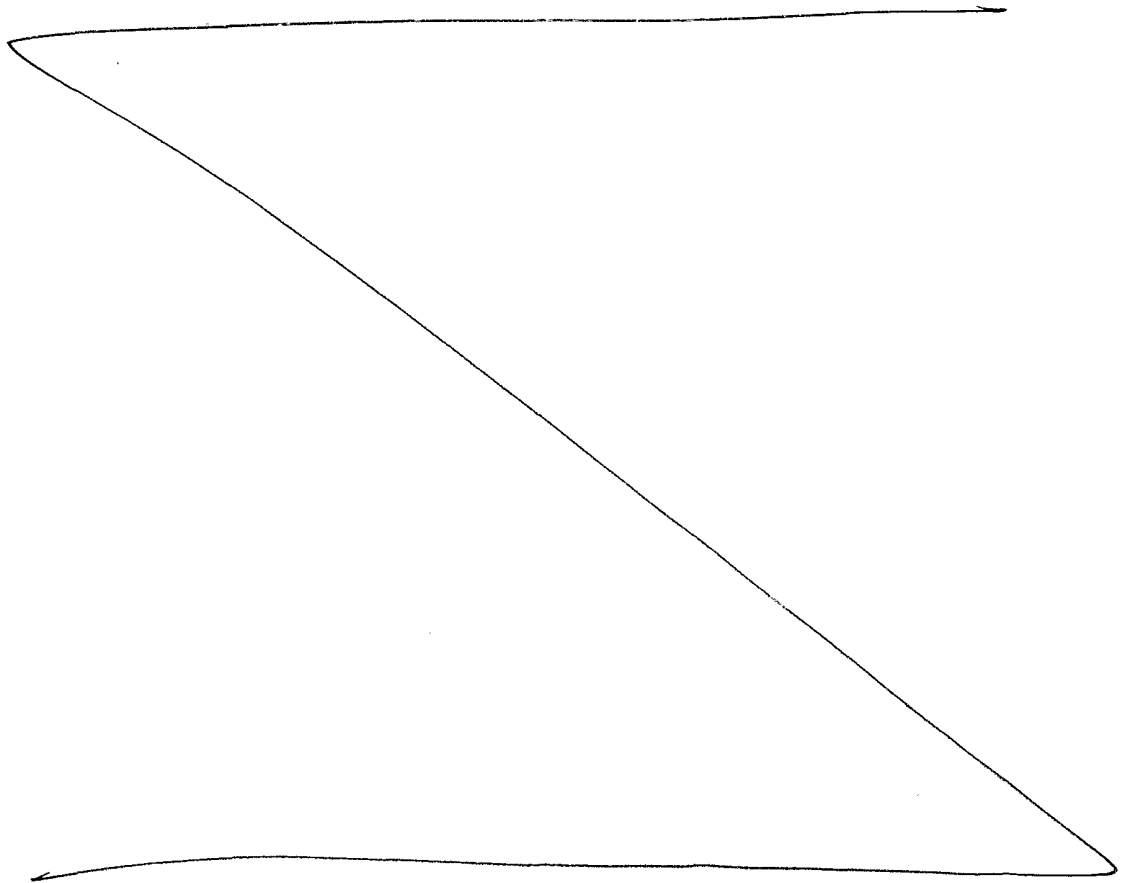
6. An assembly zone located on a Web browser page comprising a plurality of links in the form of icons assembled into said assembly zone by selection from a selection zone.

7. A method of assembly of a portal from category specific icons, said method comprising the steps of:

(a) selecting a category specific icon by a clicking action with a mouse pointer;

(b) selecting a category specific icon; and

(c) clicking and dragging the icon with the pointer device to a portal assembly zone.

Template Function

8. A template function for transmission of at least a portion of a customized web page from a first user to a second user, said template function incorporating encapsulation means whereby said at least a portion of said customized web page is encapsulated for transmission to a remote computer or like device.

2.9 The template function of Claim 8 wherein said portion of said customized web page comprises a selection zone.

2.10 The template function of Claim 8 wherein said portion of said customized web page comprises an assembly zone.

11.   The template function of Claim 5 wherein said portion of said customized web page comprises both an assembly zone and a selection zone.

12.   The template function of Claim 8 comprising an encapsulation portion and an unencapsulation portion.

13.   The template function of Claim 12 wherein said encapsulation portion is adapted to encapsulate at least a portion of said customized web page and then transmit the encapsulated, customized web page over a computer network.

14.   The template function of Claim 13 wherein said unencapsulation portion of said template function includes means to receive said encapsulated customized web page, further means to unencapsulate said encapsulated customized web page, means to instantiate the customized web page on said remote computer or like device whereby a user can use said customized web page.

15.   The template function of Claim 14 wherein use of said customized web page includes modification of said customized web page.

16.   A computer or like device adapted to communicate web pages over a computer network, said computer incorporating a template function whereby a first user of a customized web page can export said customized web

page to a remote computer or like device over said computer network.

State Mark Function

17. A state mark function for storing a trace of at least a portion of a user's Web experience, said function including:

(a) Web page address storage means;

(b) Web address association means;

whereby a trace of consecutively accessed Web page addresses and other entries forming a user rate comprising said user's web experience is stored for subsequent recall; thereby to recreate said user's web experience.

18. The state mark function of Claim 17 further including additional data storage means.

19. The state mark function of Claim 18 wherein said additional data storage means comprises storage means for storing information other than web page addresses which is entered by a user in the course of a user's web experience.

20. The state mark function of any one of claims 17 to 19 wherein said web address association means comprises a linked list of memory locations, said memory locations

storing consecutively accessed web page addresses and

other entries forming said user route.

21. A method of storing a user's web experience for

subsequent recall; said method comprising storing a

5   contiguous list of web page addresses and other entries

forming a user route.

Token Pass Function

22. A method of rewarding transmission of data; said

10   method comprising

(a) the election of a first user, said first user

transmitting data to a second user by means of a

network data transmission;

(b) said first user receiving a token as

15   acknowledgement of said network data transmission

23. The method of Claim 22 wherein said data is a block of

data comprising a portal page.

24. The method of Claim 22 or Claim 23 wherein said second

user receives a token on receipt of said network data

20   transmission;

25. The method of any one of Claims 22 to 24 wherein said

token is stored as an entry in a database.

25. The method of Claim 4 wherein said token is stored as an entry in a database on a respective user's computer.

26. The method of any one of claims 22 to 26 wherein information pertaining to credits earned by each said user is transmitted to a group database for representation as a collated grouping on said group database.

Characterisation Function

28. A method of transmission of characterization data; said method comprising

    (a)   At the election of a first user, said first user transmitting data characteristic of said first user to a second user by means of a network data transmission;

    (b)   said first user receiving a token as acknowledgement of said network data transmission

29. The method of Claim 28 wherein said data is a block of data comprising a portal page.

30. The method of Claim 28 or Claim 29 wherein links on said portal page are characteristic of said first user.

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4. The method of Claim 1 or Claim 2 wherein usage by said first user of said data represents a characteristic of said first user.

5. The method of any one of claims 28 to 31 wherein said token has associated with it characteristic information which represents said characteristic of said first user.

6. The method of Claim 32 wherein said characteristic information is represented as indicia on said token.

7. The method of Claim 33 wherein said indicia comprises colour.

8. The method of any one of Claims 28 to 34 wherein said second user receives a token on receipt of said network data transmission;

9. The method of any one of Claims 28 to 35 wherein said token is stored as an entry in a database.

10. The method of Claim 36 wherein said token is stored as an entry in a database on a respective user's computer.

11. The method of any one of claims 28 to 37 wherein information pertaining to credits earned by each said user is

transmitted to a group database for representation as a collated grouping on said group database.

12. A method of characterizing a user on a computer network; said method comprising:

5   (a) defining at least a first characteristic of said user;

     (b) Defining a first characterization representation for said first characteristic;

     (c) Attributing said first characteristic

10   representation to said user.

13. The method of Claim 12 wherein said first characteristic is defined by said user.

14. The method of Claim 12 wherein said first characteristic is defined with reference to interests

15   of said user.

15. The method of Claim 14 wherein said first characteristic is defined with reference to interests of said user as reflected in activity patterns of said user on said computer network.

16. The method of any one of Claims 12 to 15 wherein said first characterization representation is by way of colour.

17. The method of Claim 16 wherein said characterization representation is defined by the colour of a token.

18. The method of Claim 12 wherein said user can export a portal page across said computer network; said portal page representative of said at least a first characteristic of said user.

19. The method of Claim 18 wherein the content of said portal page is characteristic of said user.

20. The method of Claim 18 wherein usage of said portal page by said user is characteristic of said user.

Customised Portal

1. A user configurable portal page for a web browser or the like; said page comprising:

   (c) An assembly zone for assembly by said user of user-selected links;

   (d) A selection zone comprising a plurality of link zones; each link zone providing access to a plurality of links which each offer competing

products/services in a predetermined product/
service category.

47. The user configurable portal page of Claim 46 wherein a
user selects individual ones of said links for inclusion

5   on said assembly zone by first accessing a link zone
corresponding to a product/service category of interest
to said user.

48. The portal page of Claim 49 wherein said user selects by
clicking at least once with a pointer device in order to

10   select a link.

49. The portal page of any one of Claims 46 to 50 wherein said
user places said individual one of said links in said
assembly zone by a click and drag action with said
pointer device.

15 50. An assembly zone located on a Web browser page
comprising a plurality of links in the form of icons
assembled into said assembly zone by selection from a
selection zone.

51. A method of assembly of a portal from category specific

20   icons, said method comprising the steps of:

       (d)   selecting a category specific icon by a clicking
              action with a mouse pointer;

       (e)   selecting a category specific icon; and

(f) clicking and dragging the icon with the pointer

device to a portal assembly zone.

Template Function

5   10. A template function for transmission of at least a

portion of a customized web page from a first user to a

second user, said template function incorporating

encapsulation means whereby said at least a portion of

said customized web page is encapsulated for

10 transmission to a remote computer or like device.

11. The template function of Claim 1 wherein said portion of

said customized web page comprises a selection zone.

12. The template function of Claim 1 wherein said portion of

said customized web page comprises an assembly zone.

15 13. The template function of Claim 1 wherein said portion of

said customized web page comprises both an assembly zone

and a selection zone.

14. The template function of Claim 1 comprising an

encapsulation portion and an unencapsulation portion.

20 15. The template function of Claim 5 wherein said

encapsulation portion is adapted to encapsulate at least

a portion of said customized web page and then transmit

the encapsulated, customized web page over a computer

network.

16. The template function of Claim 59 wherein said unencapsulation portion of said template function includes means to receive said encapsulated customized web page, further means to unencapsulate said encapsulated customized web page, means to instantiate the customized web page on said remote computer or like device whereby a user can use said customized web page.

17. The template function of Claim 60 wherein use of said customized web page includes modification of said customized web page.

18. A computer or like device adapted to communicate web pages over a computer network, said computer incorporating a template function whereby a first user of a customized web page can export said customized web page to a remote computer or like device over said computer network.

State Mark Function

1. A state mark function for storing a trace of at least a portion of a user's Web experience, said function including:

(d) Web page address storage means;

(e) Web address association means;

whereby a trace of consecutively accessed Web page addresses and other entries forming a user rate comprising said user's web experience is stored for subsequent recall; thereby to recreate said user's web experience.

64. The state mark function of Claim 63 further including additional data storage means.

65. The state mark function of Claim 64 wherein said additional data storage means comprises storage means for storing information other than web page addresses which is entered by a user in the course of a user's web experience.

66. The state mark function of any one of claims 63 to 65 wherein said web address association means comprises a linked list of memory locations, said memory locations storing consecutively accessed web page addresses and other entries forming said user route.

67. A method of storing a user's web experience for subsequent recall; said method comprising storing a contiguous list of web page addresses and other entries forming a user route.

Token Pass Function

7. A method of rewarding transmission of data; said method comprising

    (a) the election of a first user, said first user transmitting data to a second user by means of a network data transmission;

    (b) said first user receiving a token as acknowledgement of said network data transmission

8. The method of Claim 7 wherein said data is a block of data comprising a portal page.

9. The method of Claim 7 or Claim 8 wherein said second user receives a token on receipt of said network data transmission;

10. The method of any one of Claims 7 to 9 wherein said token is stored as an entry in a database.

11. The method of Claim 10 wherein said token is stored as an entry in a database on a respective user's computer.

12. The method of any previous claim wherein information pertaining to credits earned by each said user is transmitted to a group database for representation as a collated grouping on said group database.

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Characterisation Function

21. A method of transmission of characterization data; said method comprising

(a) At the election of a first user, said first user transmitting data characteristic of said first user to a second user by means of a network data transmission;

(b) said first user receiving a token as acknowledgement of said network data transmission

22. The method of Claim 1 wherein said data is a block of data comprising a portal page.

23. The method of Claim 1 or Claim 2 wherein links on said portal page are characteristic of said first user.

24. The method of Claim 1 or Claim 2 wherein usage by said first user of said data represents a characteristic of said first user.

25. The method of any previous claim wherein said token has associated with it characteristic information which represents said characteristic of said first user.

26. The method of Claim 75 wherein said characteristic information is represented as indicia on said token.

27. The method of Claim 79 wherein said indicia comprises colour.

5   28. The method of any one of Claims 74 to 80 wherein said second user receives a token on receipt of said network data transmission;

29. The method of any one of Claims 74 to 81 wherein said token is stored as an entry in a database.

10   30. The method of Claim 82 wherein said token is stored as an entry in a database on a respective user's computer.

31. The method of any previous claim *one of claims 74 to 83* wherein information pertaining to credits earned by each said user is

15 transmitted to a group database for representation as a collated grouping on said group database.

32. A method of characterizing a user on a computer network; said method comprising:

    (a)   defining at least a first characteristic of said
20   user;

54

(b)   Defining a first characterization representation
       for said first characteristic;

(c)   Attributing said first characteristic
       representation to said user.

5   33.   The method of Claim 12 wherein said first
           characteristic is defined by said user.

     34.   The method of Claim 12 wherein said first
           characteristic is defined with reference to interests
           of said user.

10   35.   The method of Claim 14 wherein said first
           characteristic is defined with reference to interests
           of said user as reflected in activity patterns of said
           user on said computer network.

     36.   The method of any one of Claims 12 to 15 wherein said

15   first characterization representation is by way of

           colour.

     37.   The method of Claim 16 wherein said characterization
           representation is defined by the colour of a token.

     38.   The method of Claim 12 wherein said user can export a

20   portal page across said computer network; said portal

page representative of said at least a first characteristic of said user.

92

39. The method of Claim 18 wherein the content of said portal page is characteristic of said user.

93

5   40. The method of Claim 18 wherein usage of said portal page by said user is characteristic of said user.

Fig 1·1
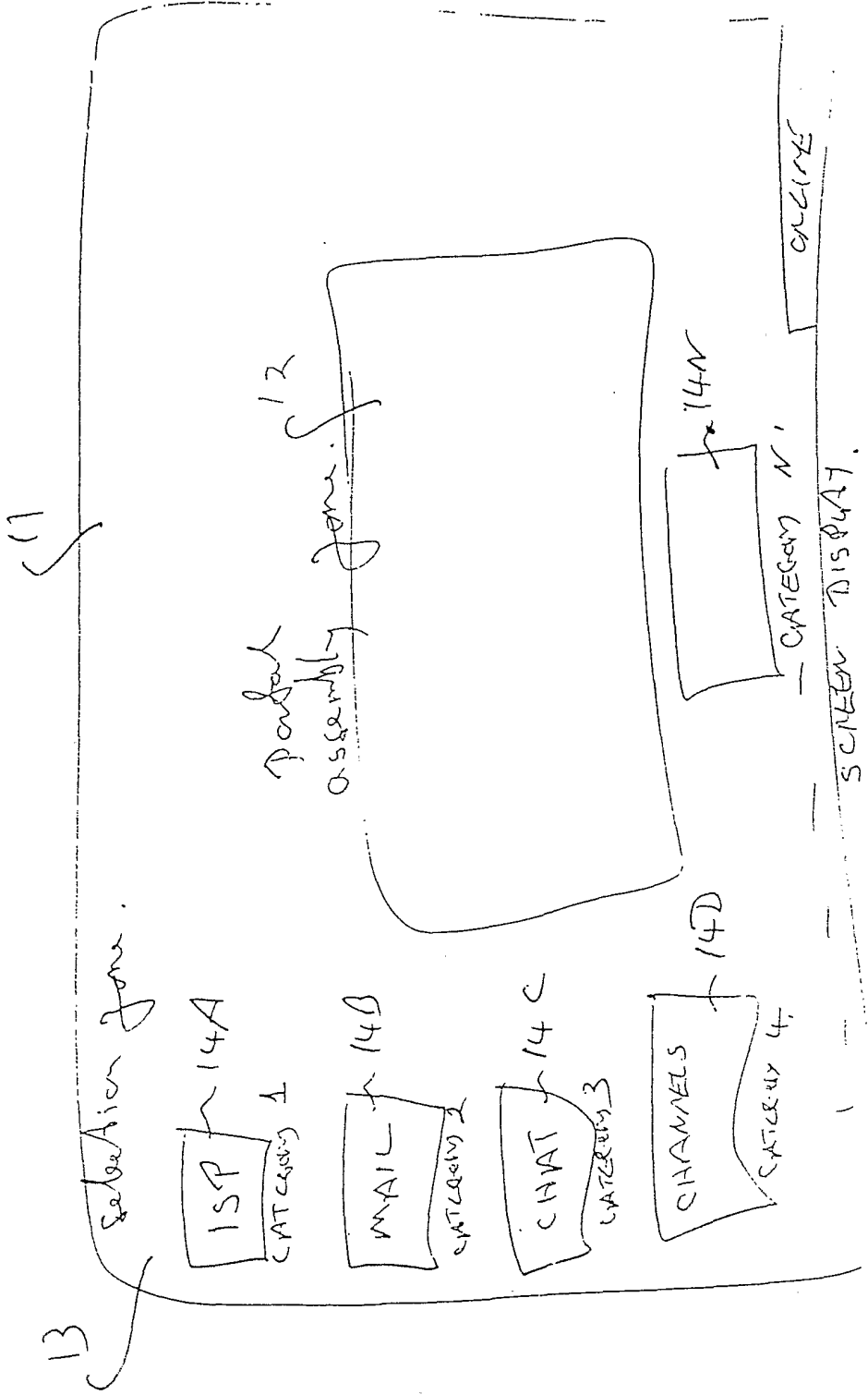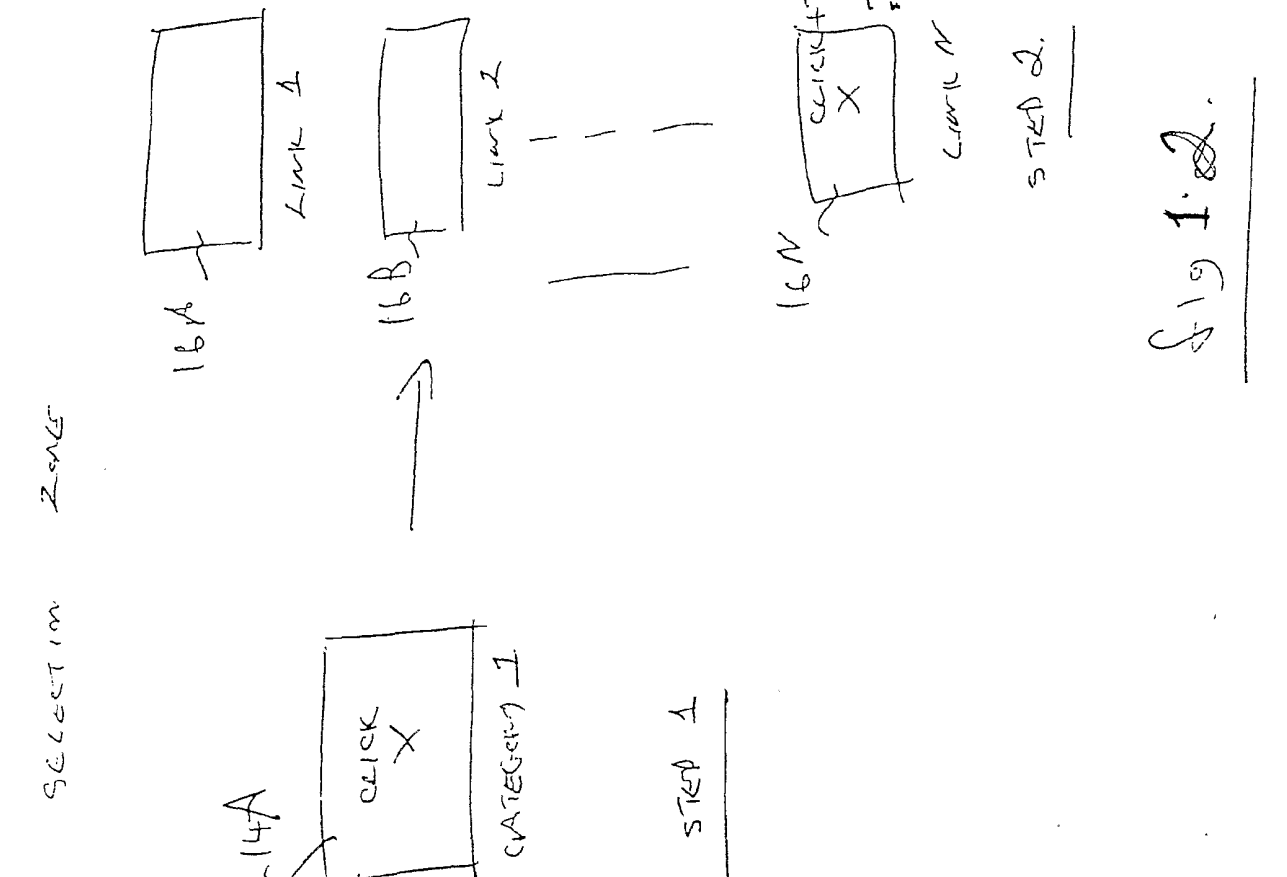
PORTAL ASSEMBLY ZONE.
12

SELECTION ZONE
13

16A
LINK 1

16B
LINK 2

16N
CLICK + DRAG
X
LINK N.

STEP 2.

14A
CLICK
X
CATEGORY 1

STEP 1

STEP 3.

SAVE AS TEMPLATE
17
STEP 4

Fig 1.2.

yesitsyou.com

Fig. 21

Fig 2.2

123

INITIATE EXPORT ─ 125

ENCAPSULATE ─ 126

TRANSMIT ─ 127

RECEIVE ─ 128

UN-ENCAPSULATE ─ 129

INSTANTIATE ─ 130

USE/MODIFY ─ 131

Fig.3

Fig 3.1

Fig. 3.

Template 1 — 2117

Template 1 — 2111-1

Address 1 — 2113

Address 2 — 2114

Address 3 — 2115

Address 4 — 2116

Internal Address 1 — 2113

Address 2 — 2114

Address 3 — 2115

Address 4 — 2116

1 — 2118

Fig 3.3

Fig 3.4.

Fig 4.1

GROUP TALLY   319

USER-1   = 12
USER 2-1   = 4
USER 2-2   = 4
USER 2-3   = 4

311

312

318

Token Tally
User 1

318A

Token Tally
User 2-1   316

1

2-1   2-2   2-3

3-1   3-2   3-3

3-1   3-2   3-3

3-1   3-2   3-3

Fig 4.2.

Figure 3

410

412   413

PORTAL / ENTRY PAGE (SCREEN).
create = 1 share.

assoc. of user 1

414

411

[INTRANET]
/ INTERNET

export = +1 share ◯ 417
export view permit : Y/N.

417

export to user 2.

415

import/create = 1 share

assoc. y user 2

414A

15
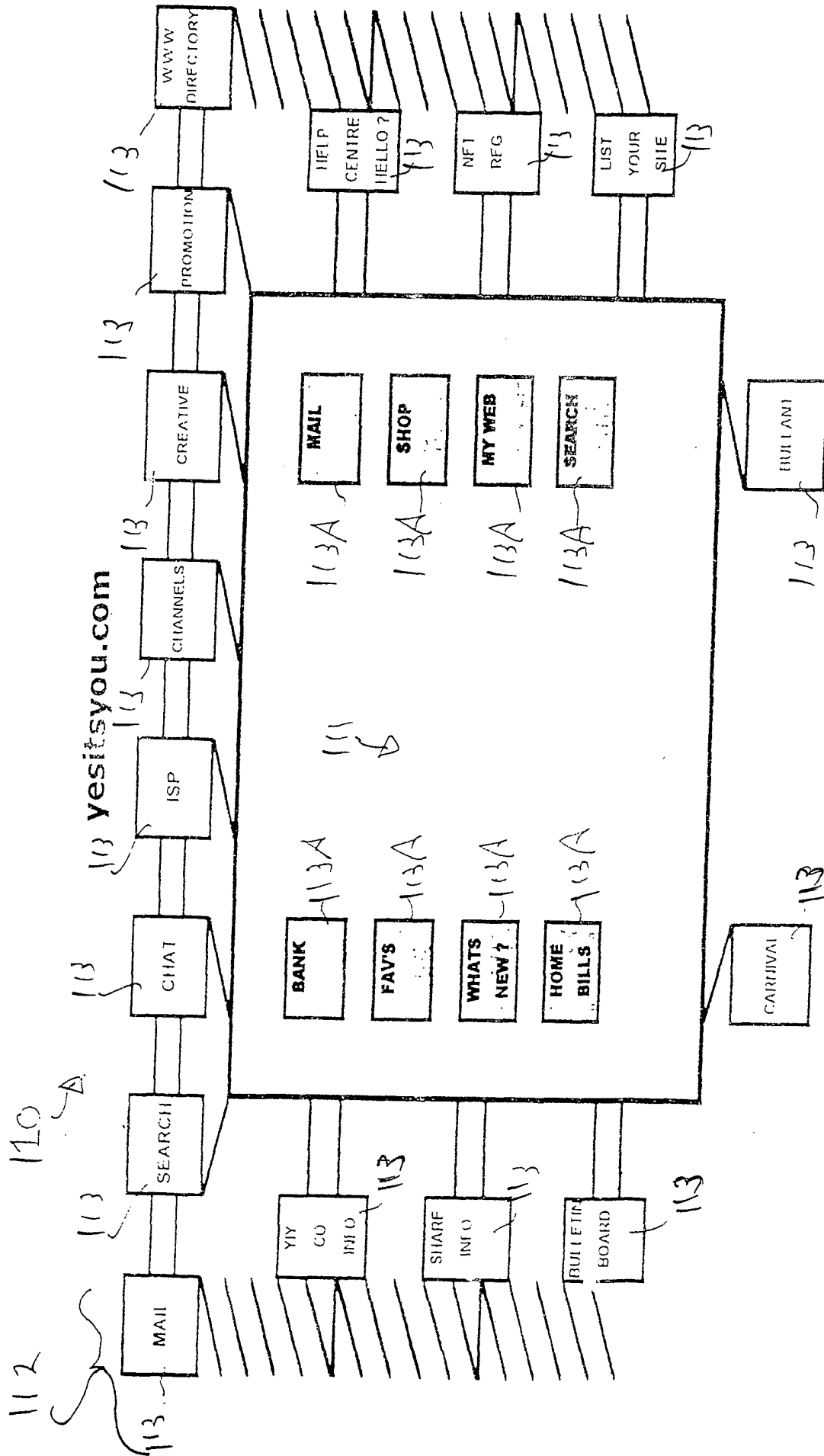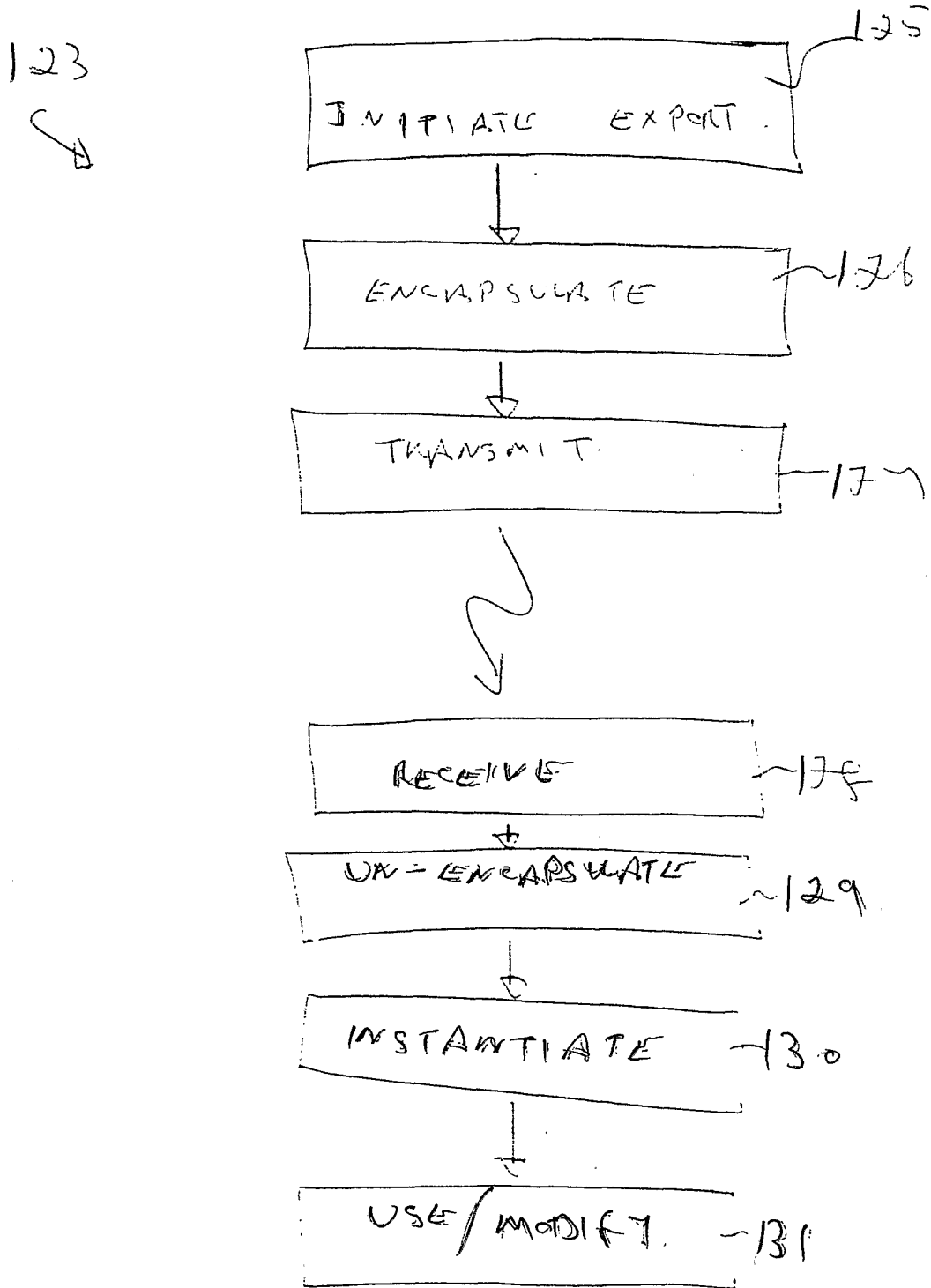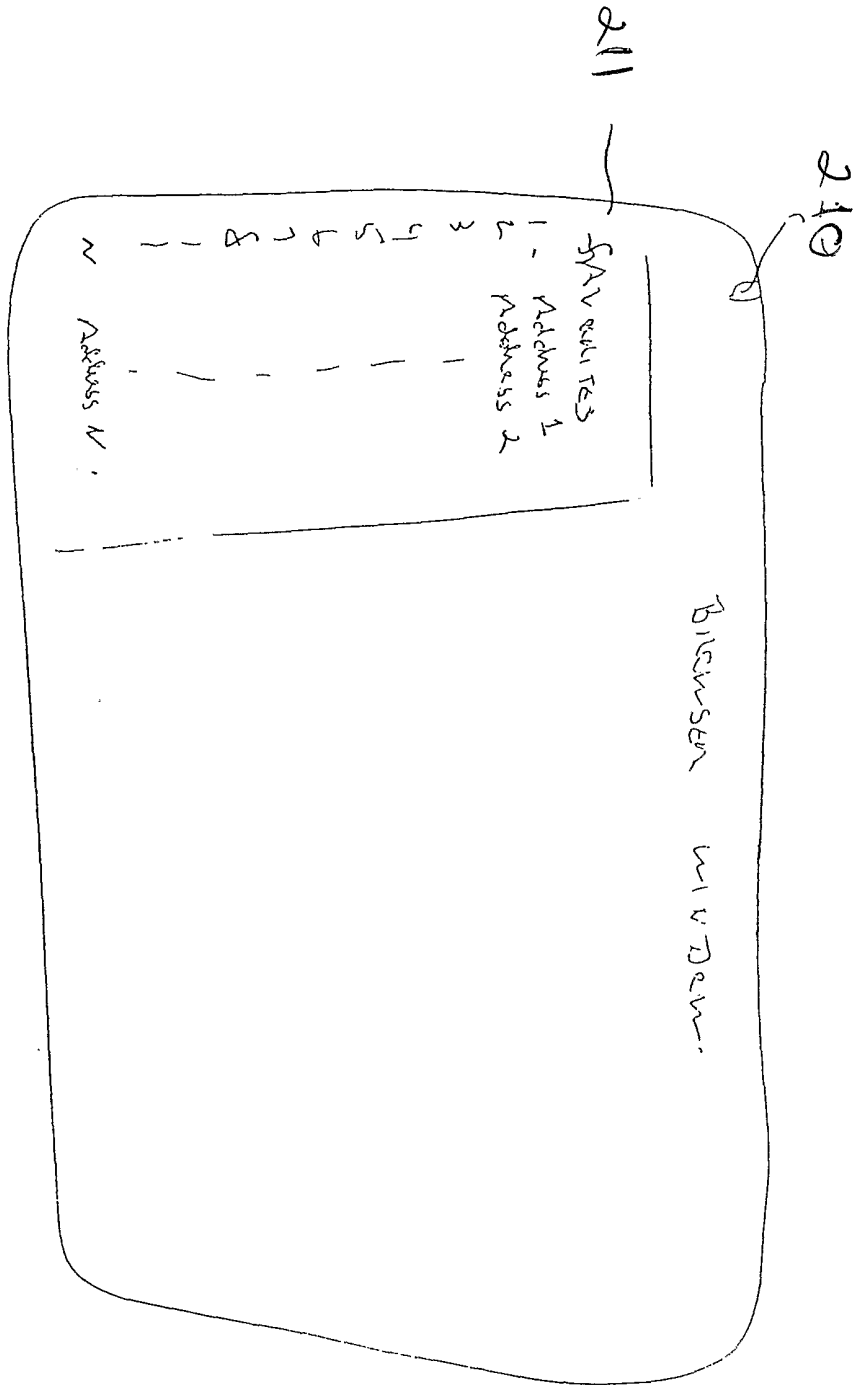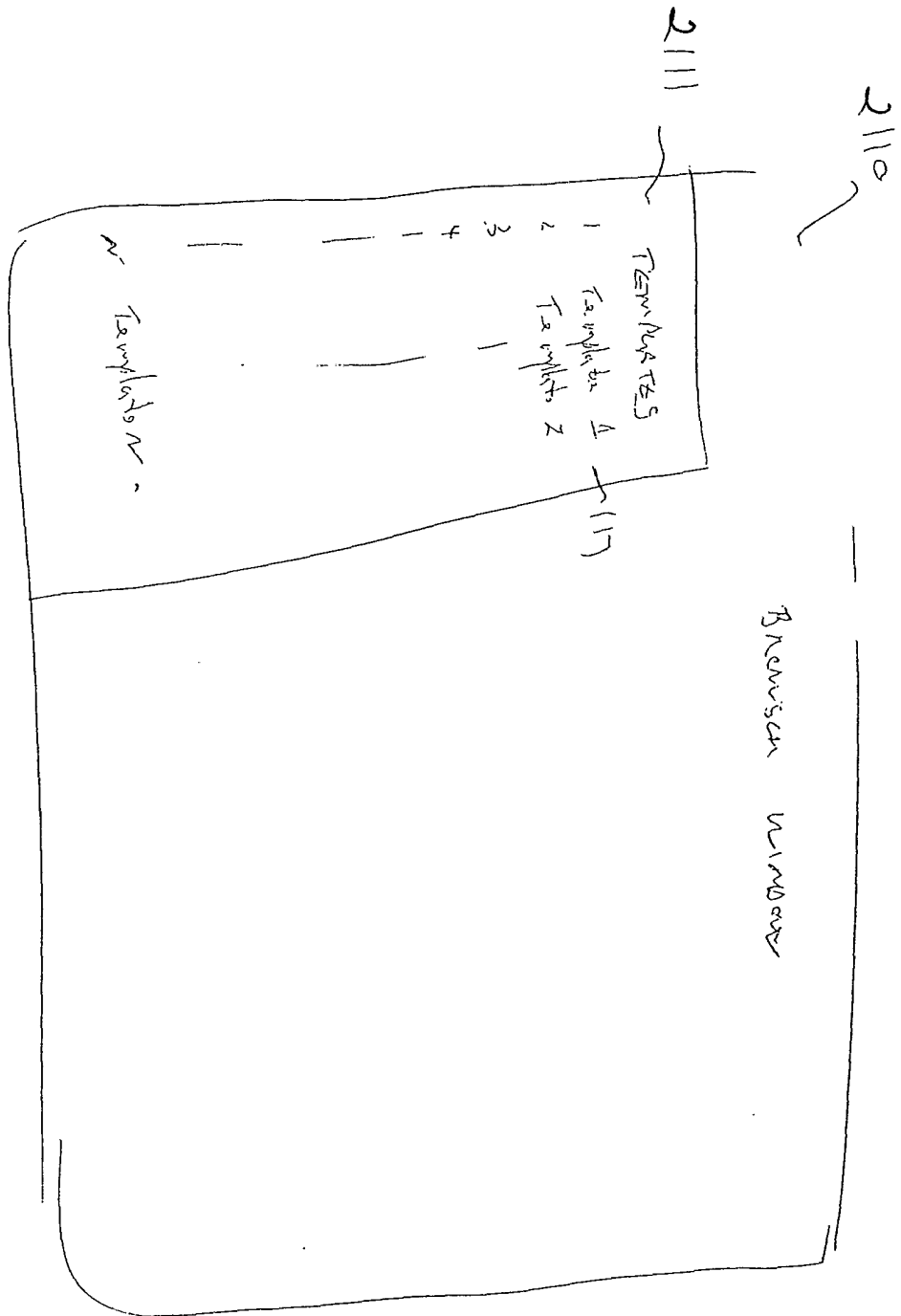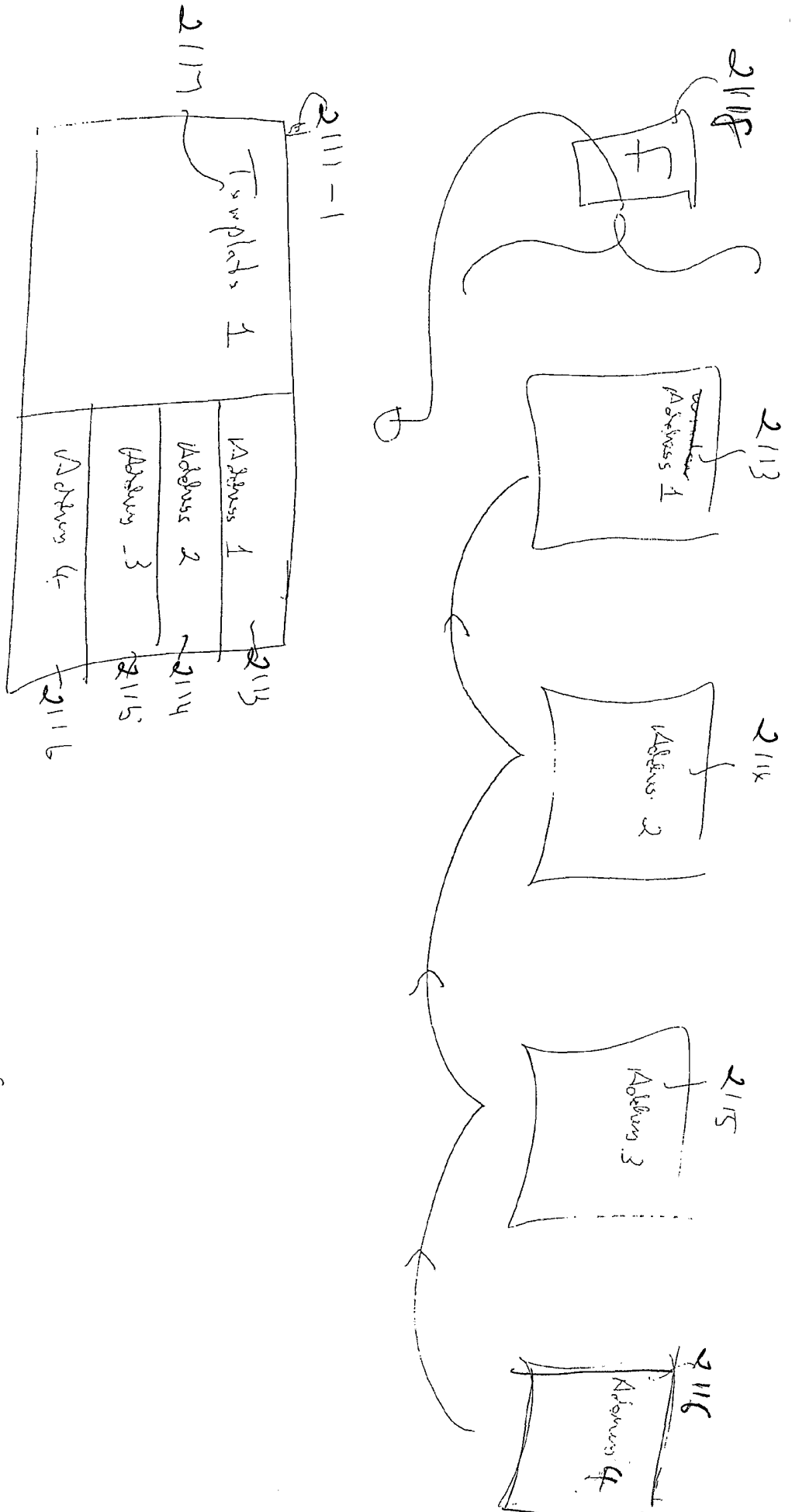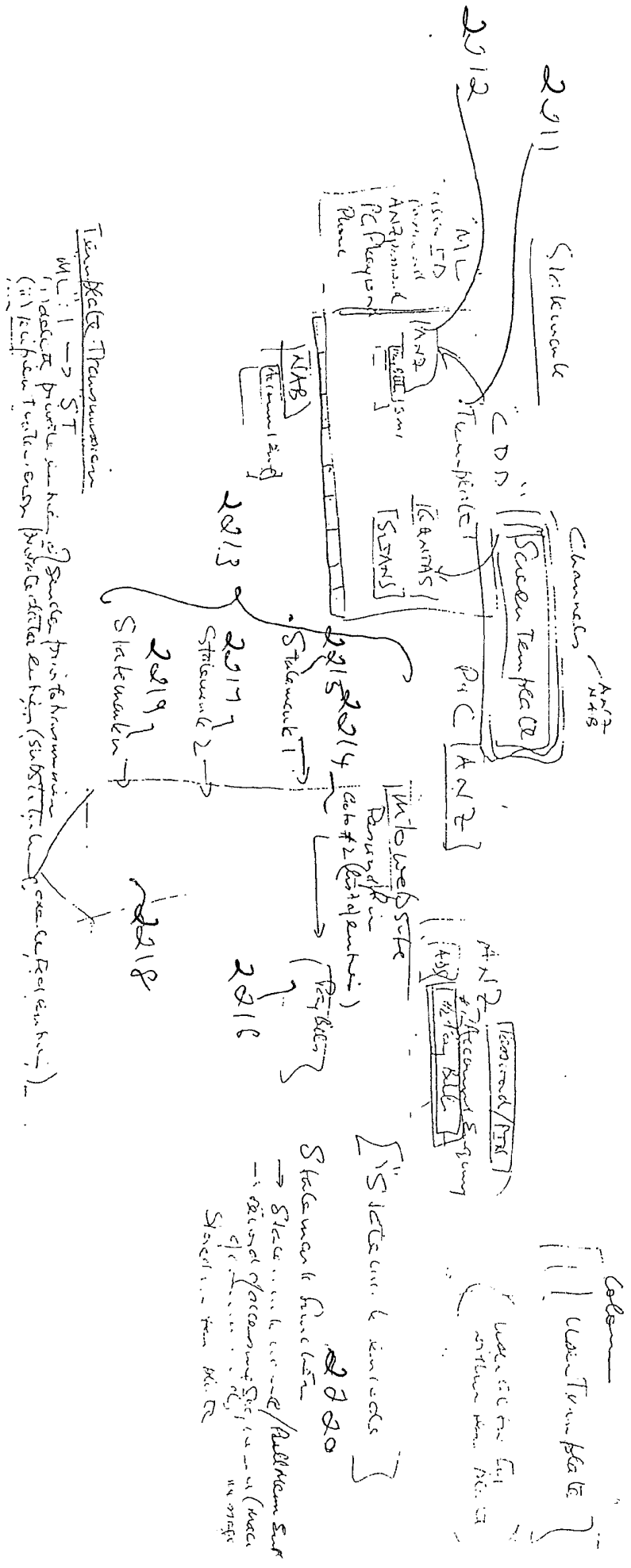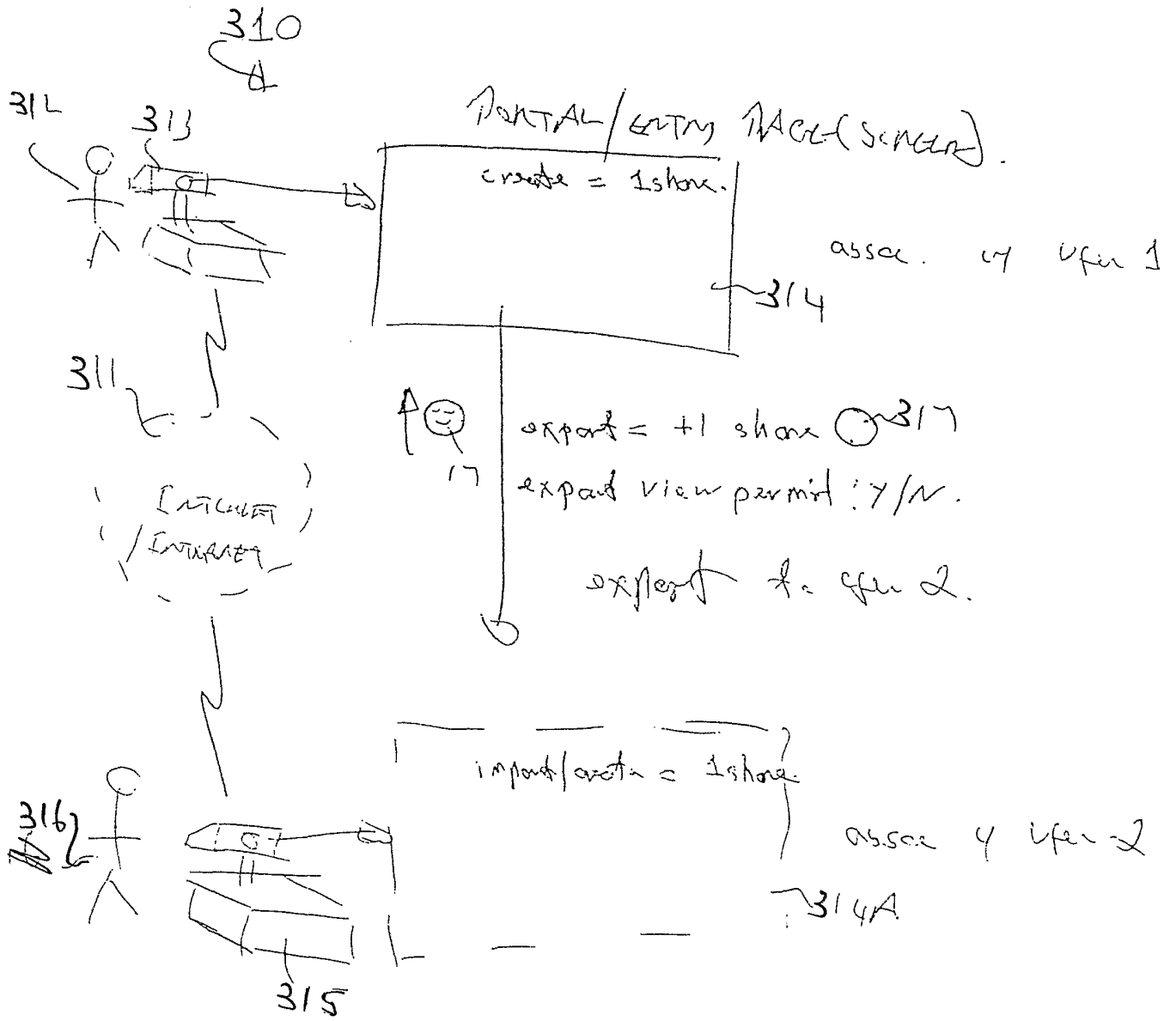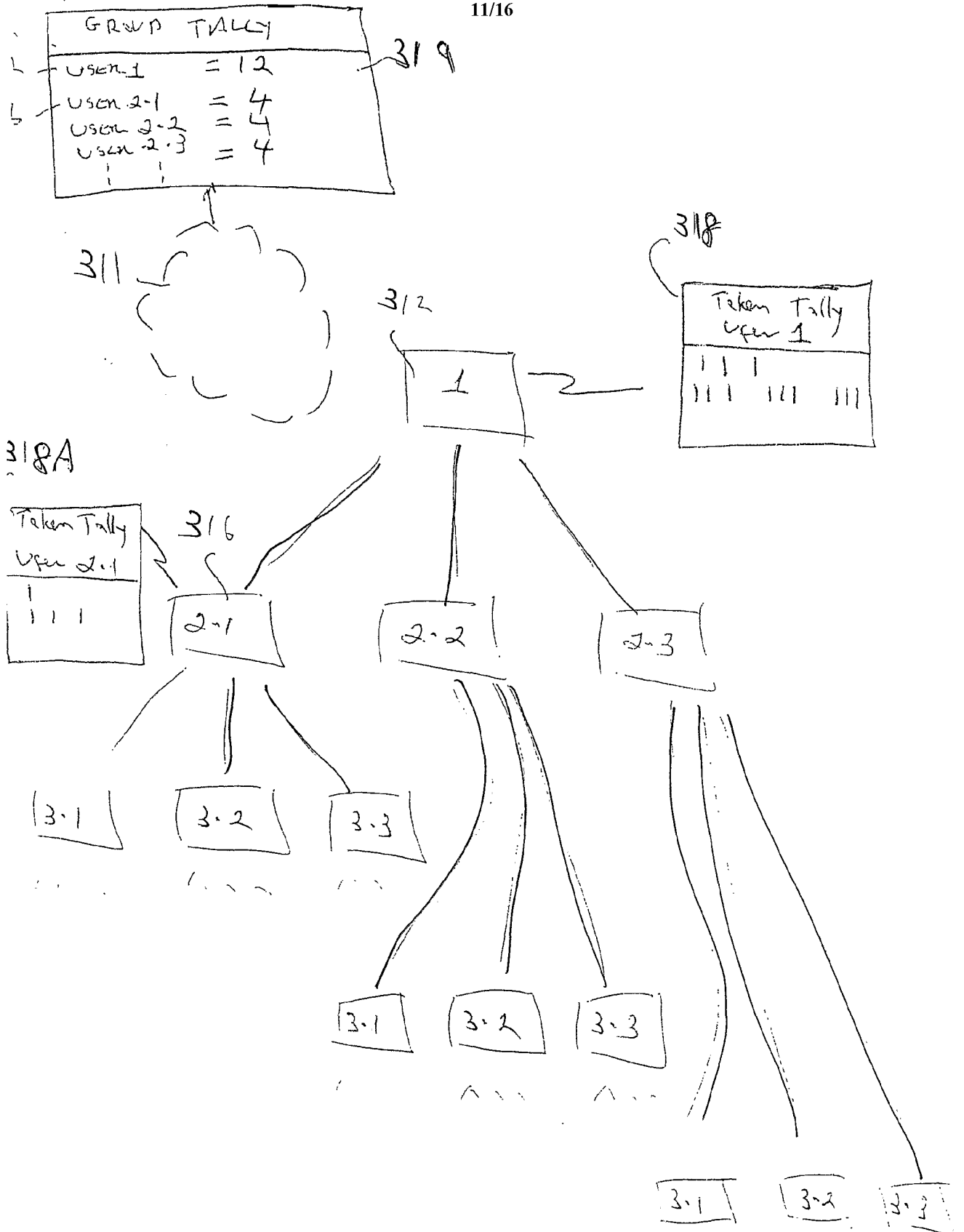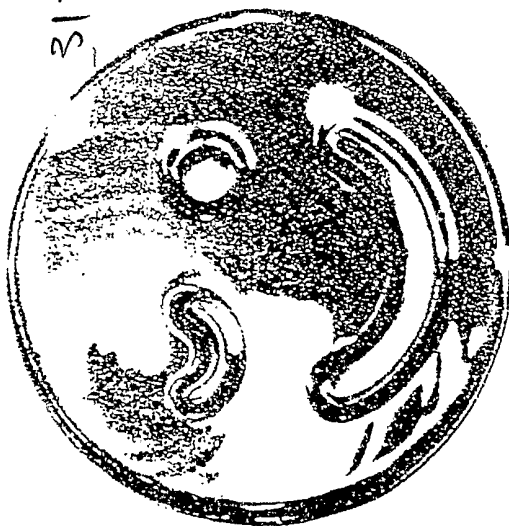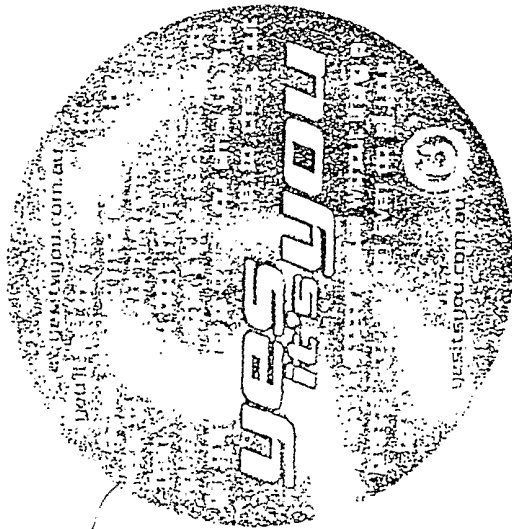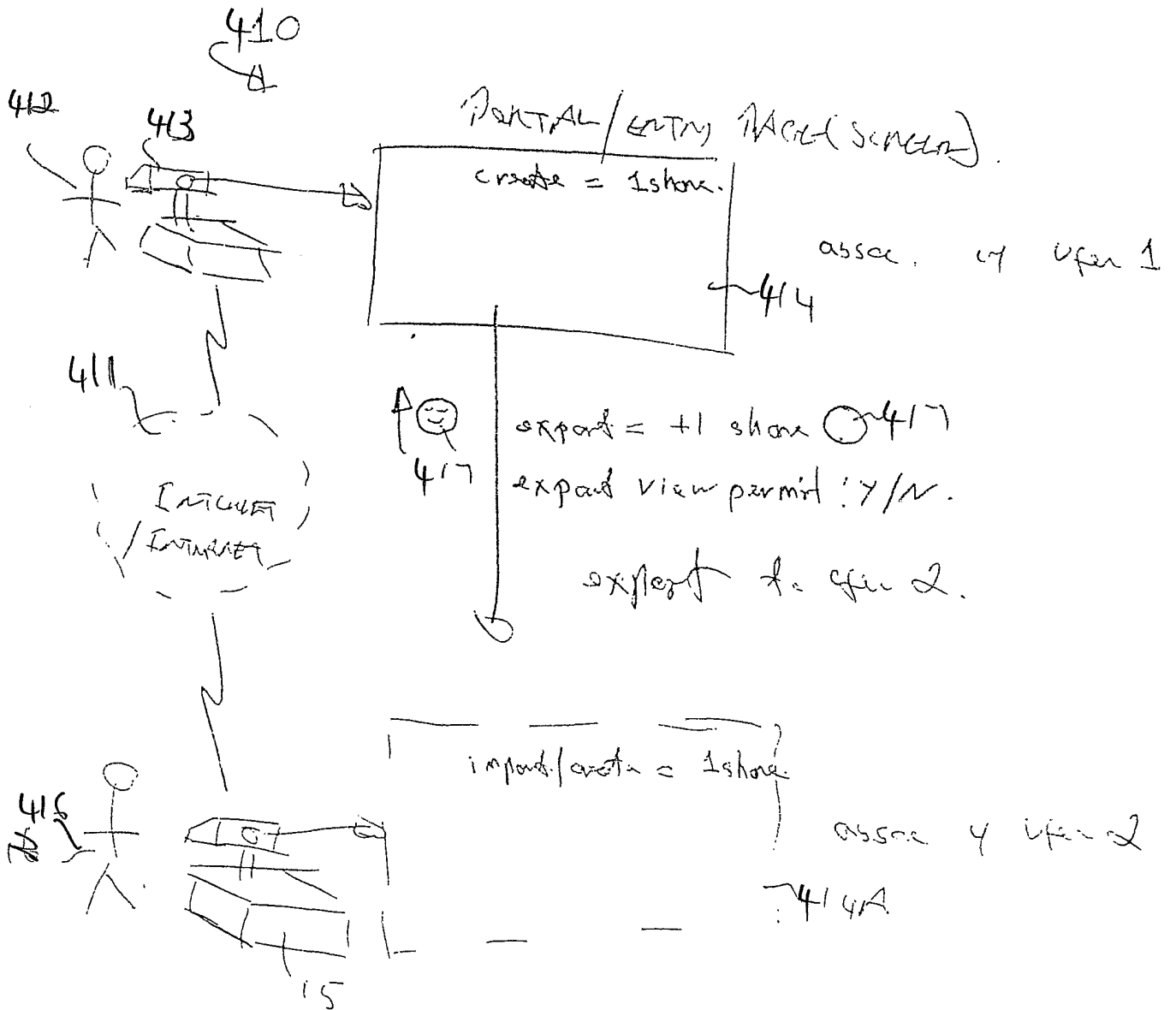
fig 5.1
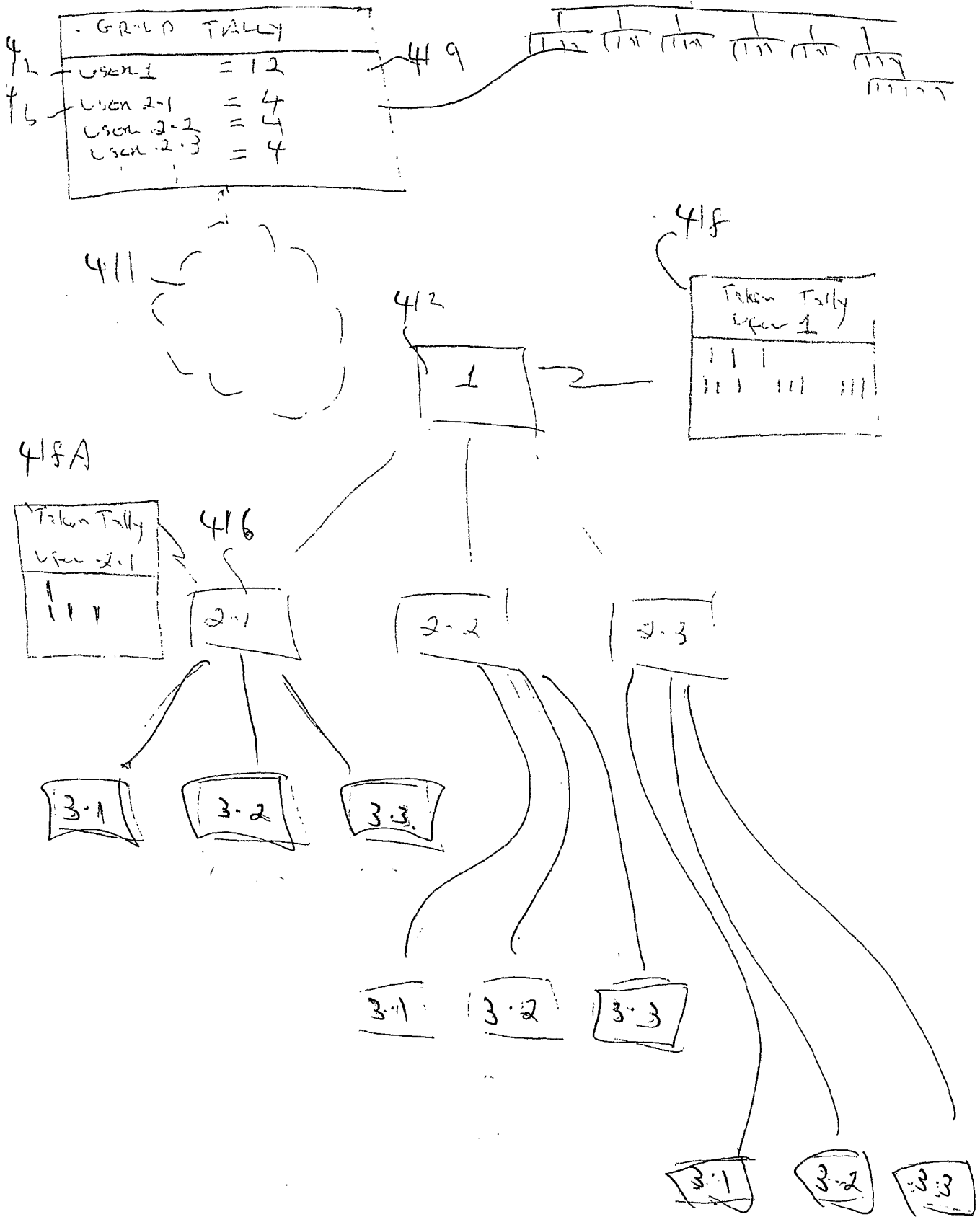
Fig 5.2.
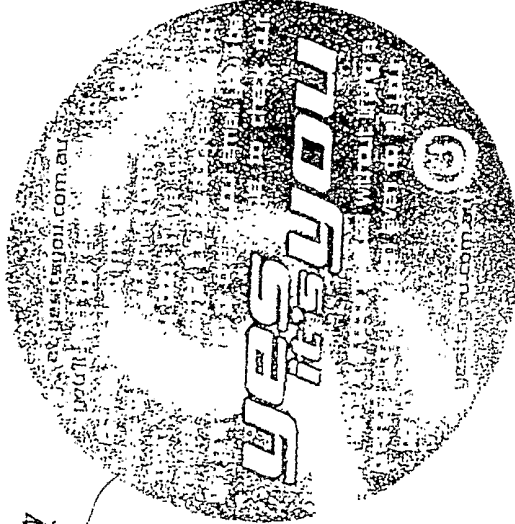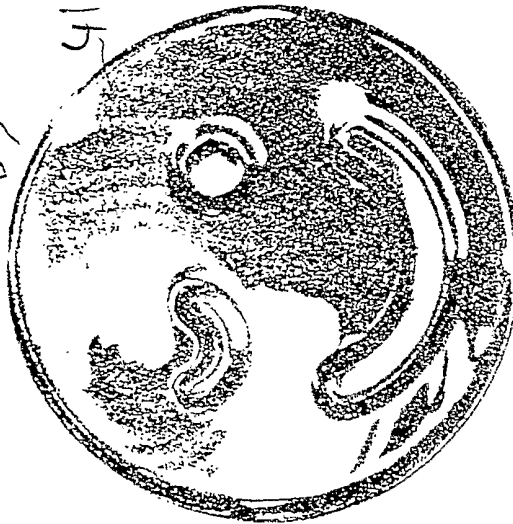
fig 5.4

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU01/01065

A.	CLASSIFICATION OF SUBJECT MATTER

Int. Cl. [7]:   G06F 15/16, 3/033

According to International Patent Classification (IPC) or to both national classification and IPC

B.	FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT with keywords such as internet, portal, web page, reward, template

C.	DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P,X	US 6209007 B (KELLEY et al) 27 March 2001	1 - 7, 48 - 53
P,X	US 6122647 A (HOROWITZ et al) 19 September 2000	1 - 7, 48 - 53
X	US 5940834 A (PINARD et al) 17 August 1999	1 - 7, 48 - 53
X	US 5911145 A (ARORA et al) 8 June 1999	1 - 7, 48 - 53

[X] Further documents are listed in the continuation of Box C   [ ] See patent family annex

*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance		
"E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
12 December 2001	2 0 DEC 2001

Name and mailing address of the ISA/AU	Authorized officer
AUSTRALIAN PATENT OFFICE PO BOX 200, WODEN ACT 2606, AUSTRALIA E-mail address: pct@ipaustralia.gov.au Facsimile No. (02) 6285 3929	J.W. THOMSON Telephone No : (02) 6283 2214

C (Continuation).	DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6026433 A (D'ARLACH et al) 15 February 2000	1 - 7, 48 - 53 8 - 16,54 - 62
X	US 5983227 A (NAZEM et al) 9 November 1999	8 - 16,54 - 62
P,X	WO 00/57314 A (CHAMBERS et al) 28 September 2000	8 - 16,54 - 62
X	WO 99/57657 A (LEXTRON SYSTEMS, INC) 11 November 1999	8 - 16,54 - 62
X	US 6052730 A (FELCIANO et al) 18 April 2000	17-21,63-67
X	US 6012093 A (MADDALOZZO, JR et al) 4 January 2000	17-21,63-67
X	US 5809250 A (KISOR) 15 September 1998	17-21,63-67
X	US 5727129 A (BARRETT et al) 10 March 1998	17-21,63-67 28-47,74-93
P,X	US 6189024 B (BAUERSFELD et al) 13 February 2001	17-21,63-67
P,X	WO 01/11472 A (R-COUPON.COM, INC) 15 February 2001	22-27,68-73
X	US 6256614 B (WECKER et al) 3 July 2001	22-27,68-73
X	US 6014634 A (SCROGGIE et al) 11 January 2000	22-27,68-73
X	US 5893075 A (PLAINFIELD et al) 6 April 1999	22-27,68-73
X	US 5749075 A (TOADER et al) 5 May 1998	22-27,68-73
X	US 6128663 A (THOMAS) 3 October 2000	28-47,74-93
X	US 5948061 A (MERRIMAN et al) 7 September 1999	28-47,74-93

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5848396 A (GERACE) 8 December 1998	28-47,74-93

C (Continuation)   DOCUMENTS CONSIDERED TO BE RELEVANT

Box I	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

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

1. ☐ Claims Nos :

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

2. ☐ Claims Nos :

because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos :

because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a)

Box II	Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

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

1. Claims 1 to 7, and 48 to 53 define a customised portal. It has a special technical feature that the system allows a user to make a customised selection of links on a portal page.

2. Claims 8 to 16 and 54 to 62 define a template function for transmission of a web page.

3. Claims 17 to 21 and 63 to 67 define a state mark function. This records the history of links accessed by a user.

4. Claims 22 to 27 and 68 to 73 define a method of rewarding transmission of data,

5. Claims 28 to 47 and 74 to 93 define a method of characterising a user.

These are five independent inventive concepts, that is, they have independent special technical features.

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite 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 claims Nos.:

Remark on Protest   ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member					
US	6209007	NONE						
US	5940834	CA	2231980	GB	2324896			
US	5911145	AU	38083/97	WO	9804983			
US	6026433	NONE						
US	5983227	AU	69915/98	EP	889421	WO	9857276	
WO	200057314	AU	200039188					
WO	9957657	AU	66880/98	BR	9808192	EP	973871	
		US	6011197	WO	9839416			
US	6052730	NONE						
US	6012093	NONE						
US	5809250	NONE						
US	5727129	NONE						
US	6189024	NONE						
WO	200111472	AU	200067629					
US	6256614	NONE						
US	6014634	WO	9723838	AU	13445/97	EP	870264	
		US	5970469	US	6185541			
US	5893075	NONE						
US	5749075	AU	60292/96	CA	2223787	US	5774869	
		WO	9639668	US	5806043			
US	6128663	NONE						
US	5948061	NONE						
US	5848396	CA	2252568	EP	895685	WO	9741673	
		US	5991735					

END OF ANNEX