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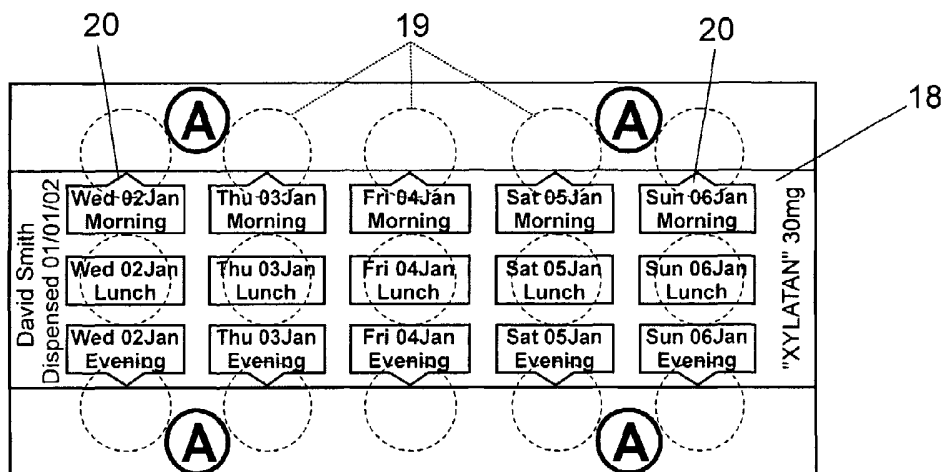
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(54) Title: A MEDICINE DISPENSING SYSTEM AND COMPONENTS THEREOF



(57) Abstract: A system and method of dispensing medication units that are supplied by a pharmaceutical company in a blister pack (1) is provided in which a custom label (6) is adhered, at the point of dispensing of the medication, to the usual cover sheet (5) that holds the medication units (4) captive in the recesses (3) in the blister sheet (2). The custom label carries prescribing information (7, 14, 20, 21) in clear association with each recess indicating the general time when the medication unit accommodated in that recess is to be taken. The custom label is frangible to the extent necessary to enable removal of a medication unit from a recess to be carried out in the usual way. At least in cases in which the custom label obscures the identification data of the medication units themselves, then the label carries information (10) as to such identification data. The system involves the use of the data' base that contains data enabling custom labels to be printed such that prescribing information is associated with the positioning of the recesses of the particular medication units concerned. A blank blister pack is also provided for extending the operation of the invention to medication units supplied in bulk or loose form.



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A MEDICINE DISPENSING SYSTEM AND COMPONENTS THEREOF

5 FIELD OF THE INVENTION

This invention relates to a medicine dispensing system that is designed to facilitate the regular taking of one or more medicines by a person in a manner aimed at enhancing the confidence of the person taking the
10 medication. The invention also relates to components of such a system.

More particularly, the invention relates to medicines in unit dosage form which term is intended to include all types of unit dosage forms such as pills, capsules, dragees, lozenges, suppositories and any other physical units
15 which will be referred to herein generically as medication units.

BACKGROUND TO THE INVENTION

It is a widely acknowledged problem that persons taking regular medication
20 units, for whatever reason, and whether they be part of a specific short term course such as in the case of antibiotics, or a more protracted course of medication, tend to forget when the next medication unit is to be taken and often cannot remember if they have taken a particular medication unit that was due to be taken at about a specific time. It is hardly necessary to
25 mention the deleterious effects that can result from a person not taking prescribed medication units at approximately the correct time or taking a greater number of such units than has been prescribed in order to "catch up".

An enormous amount of inventive effort has thus been devoted to solving this
30 problem, at least to some extent, and numerous patents have been obtained in this general field. Many of the solutions that have been put forward involve the provision of a multicompartment container wherein each compartment is

to receive a medication unit, or in some cases a plurality of medication units, that are to be taken at the same specific time, and each compartment is marked with appropriate information as to when the medication units are to be taken.

5

Prior art solutions of this general type range from simple multicompartment boxes of moulded plastics material to complicated electronically controlled portable dispensing storage units such as that described in United States patent 5,408,443. Many of these are inappropriate for a dispensing
10 pharmacist to charge with the correct medication units and from a practical point of view it is up to the person taking the medication units to charge the compartments with the medication units on a periodic basis, such as weekly. or each time a new prescription is obtained.

15 Also to be considered as a multicompartment container is a blister package of the type that is intended to be filled by the pharmacist or other person dispensing the medication units. One example of this type of multicompartment container is set out in United States patent 5,791,478. Similar systems are set out in United States patents numbers 4,685,271 and
20 the 5,542,236. Each of these systems has certain advantages and certain disadvantages.

The difficulty with all of the multicompartment containers of which applicant is aware is that, whilst they are often convenient to utilize in cases in which the
25 medication units are supplied in bulk or loose form, they lose a significant amount of appeal when applied to medication units that are supplied in blister packs from the pharmaceutical suppliers.

What has to be done in order to employ a multicompartment container of the
30 type described in the prior art is that the medication units supplied in blister packs must be removed from the blister pack and introduced into the appropriate compartment of the multicompartment container by whatever

means is available, generally manually. This may be satisfactory in the case of personal use of a multicompartment container but is not appropriate in the case of a dispensing pharmacist who must go through the procedure of removing each medication unit individually from its blister pack and
5 introducing it into a compartment of the multicompartment container.

Not only this, but to un-package medication units supplied in blister packs destroys at least much, if not all, of the advantages of such packs. These advantages include the ease of handling, the ease of dispensing (any
10 counting that may be involved is rendered completely elementary), the hygiene and the inherent tamperproof nature of medication units packaged in blister packs. Applicant therefore considers a procedure of unpackaging such medication units for the purpose of introducing them individually into a compartment of a multicompartment container to be counter-productive and
15 not strictly in anyone's interests.

Furthermore, it is to be noted that as a result of the advantages of blister packs, the supply of medication units packaged in this way is apparently very much on the increase. Applicant has been advised that in excess of 50
20 percent and possibly even 60 percent of medication units are presently supplied by the pharmaceutical suppliers in blister packed form, at least in many market regions.

In consequence of the wide range of different sizes of medication units and
25 the different numbers thereof that are required to complete a typical prescription, blister packs are produced in a wide variety of different sizes, configurations and with a variety of different numbers of medication units in each pack. It is therefore not practical to design a universal holder for a blister pack that has the advantages of a multicompartment container.
30 Holders for blister packs that have been suggested in the past involve the packaging or repackaging into blister type packs particularly configured for association with a holder. An example of this type of arrangement is that

described in United States patent 5,542,236. Once more, repackaging of the existing blister packed medication units would have to be carried out.

Some pharmaceutical suppliers have taken cognizance of the difficulty to a
5 limited extent and, in instances in which a particular type of medication unit is to be taken exclusively on a daily basis for seven days or multiples of seven days, they have printed on the cover sheet of blister packs the names of the days of the week in association with each of a series of seven recesses of the blister pack. Whilst being helpful, to some extent, this is not entirely
10 satisfactory as the day of commencement might land in the middle of a row of recesses and can thus lead to some confusion. Also, this is of no assistance in the case of medication units that are to be taken more than once a day; in instances in which a course of medication is not of seven days duration, or multiples thereof; or in instances in which the frequency with which the
15 medication units are taken varies according to circumstances, usually body weight and age of the recipient.

OBJECT OF THE INVENTION

20 It is, accordingly, an object of this invention to provide a medicine dispensing system and components thereof in which the disadvantages associated with multicompartment containers is alleviated, at least to some extent, and wherein the unpackaging of medication units that are supplied packaged in blister packs may be obviated.

25

SUMMARY OF THE INVENTION

In accordance with one aspect of the invention there is provided a method of dispensing medication units supplied in a blister pack that consists of a blister
30 sheet defining a plurality of recesses each accommodating a medication unit and a cover sheet secured over the blister sheet to enclose the individual medication units in the recesses, the method being characterized in that it

comprises the step of applying to the cover sheet a custom label on which there is printed, or hand written, prescribing information in clear association with each recess indicating the general time when the medication unit accommodated in that recess is to be taken, the custom label being frangible to any extent necessary to enable removal of a medication unit from a recess, and, in the event that the label obscures the identification data of the medication units themselves, then information as to such identification data.

Further features of this aspect of the invention provide for the label to carry information as to the identity of the person for whom the medication units have been prescribed; for the label to extend over a substantial area of the cover sheet in which case the prescribing information associated with each recess can be located directly over or in immediate proximity to the particular recess; for the prescribing information to be arranged so that medication units are to be taken commencing at one end or one corner of the blister pack and the medication units are progressively removed from that end or corner of the blister pack to the opposite end or corner; in the case of medication units to be taken more than once a day for the prescribing information to include information as to the general time of day when each medication unit is prescribed to be taken; for the prescribing information to include information as to the day of the week and general time of day when each medication unit is prescribed to be taken; for the prescribing information to include the date on which each medication unit is to be taken; and for the prescribing information or the custom label to include information as to the commencement date of the prescription or the date of dispensing thereof, or both, as well as information as to any other conditions to be adhered to in the taking of the medication units, such as before or after meals etc.

The invention also provides a blister pack comprising a blister sheet defining a series of the recesses each of which accommodates a single medication unit held captive in the recess by a frangible cover sheet, the blister pack being characterized in that a custom label is adhered to the cover sheet

wherein the custom label has applied thereto prescribing information in clear association with each recess indicating the general time when the medication unit accommodated in that recess is to be taken, the custom label being frangible to any extent necessary to enable removal of a medication unit from a recess, and, at least in the event that the custom label obscures the identification data of the medication units themselves, then information (10) as to such identification data. The prescribing information may include any or all of the items of information defined above.

10 In accordance with a second aspect of the invention there is provided a medicine dispensing system in which there is included a computer accessible data base containing information as to the configuration and relative locations of each recess of each of a series of different blister packaged medication units that are available for dispensing in such blister packs, software for
15 utilizing such information associated with the configuration of a particular type of medication unit being prescribed and for enabling a printout to be made on a label so that the label, when correctly applied to the particular blister pack, will carry prescribing information that is associated with each recess of the blister pack indicating the general time when the particular medication unit in
20 the associated recess is to be taken.

Further features of this aspect of the invention provide for the data base to include data as to each different blister pack configuration in which a particular medication unit is available in instances in which the same
25 medication unit is packaged in different configurations or packages and, in such an instance, for the software to provide a pharmacist with a selection menu enabling the appropriate selection to be made of the particular packaging configuration of the medication unit being dispensed by the pharmacist; for the information printed on the label to include any one or
30 more items identified above in relation to the first aspect of the invention; for the data base to be either a data base included in the computer system of the dispensing pharmacist or to be a communal data base accessible by way of

a landline (including the Internet) or wireless communication by participating pharmacists; and for the software to be compatible with, or to be integrated with, a conventional type of pharmacist's software package.

- 5 Still further features of this aspect of the invention provide for the software to be adapted, at the option of the dispensing pharmacist, to cause an additional label to be printed out in the case that a particular person is to take more than one type of medicine concurrently wherein the additional label sets out in simple tabular form the general times when each of the medicines is to
- 10 be taken; for an easy identification letter, symbol or the like to be associated with each different type of medicine; and for the additional label and each label printed out for attachment to each of the different types of medicine to carry such easy identification letter or symbol.
- 15 It is an additional and important feature of the invention that one or more type or size of blank blister sheets be employed in the system of this invention for the purpose of enabling packaging of bulk or loose medication units by a pharmacist in the manner envisaged in the prior art referred to above. In this case labels as defined above are employed in an analogous manner such
- 20 that each compartment or recess of the blank blister sheets, or at least those into which the pharmacist has introduced a medication unit, has the prescribing information indicated above associated with it. In such an instance the usual blister pack cover sheet could be formed integral with the label, or the label could actually form the cover sheet provided that adequate
- 25 protection is provided against the medication units becoming stuck to any adhesive that may be on the label. One method of avoiding difficulty with the adhesive is to provide the blank blister sheets with pressure sensitive adhesive over the surface thereof to which the label sheet is to be adhered with the pressure sensitive adhesive being covered by the release cover
- 30 sheet. In utilizing this feature of the invention the advantages associated with the implementation of the invention as applied to prepackaged blister packs

can be extended to medication units supplied in bulk or loose form for dispensing by a pharmacist.

In order that the above and other features of the invention may be more fully understood the following more detailed description is made with reference to the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

10 In the drawings:-

Figure 1 illustrates a typical blister pack supplied by a pharmaceutical supplier in schematic side elevation;

15 Figure 2 is a plan view of the blister sheet side of the blister pack of Figure 1;

Figure 3 is a view of the cover sheet side of the blister pack of Figure 1 that has a label produced according to the invention applied thereto;

20

Figures 4, 5, 6 and 7 are views similar to Figure 3 but of different blister packs having different label configurations and arrangements of recesses receiving medication units;

25

Figure 8 illustrates an additional label for attachment to a package, for example, accommodating a plurality of different medicines to be taken concurrently by the same person;

30 Figure 9 illustrates one form of label that has been rendered easily frangible;

Figure 10 illustrates a blank blister sheet for use in packaging bulk or loose medication units utilizing labels according to the invention; and,

5 Figure 11 illustrates schematically an alternative blank blister sheets for bulk or loose medication units.

DETAILED DESCRIPTION WITH REFERENCE TO THE DRAWINGS

10 As indicated above, the invention is directed in the first place, at medication units supplied by a pharmaceutical supplier in a blister pack, generally indicated by numeral (1), that consists of a blister sheet (2) defining a series of recesses (3) each of which accommodates a single medication unit (4) and wherein the open mouths of the recesses are closed by a cover sheet (5),
15 typically an aluminium or other frangible foil sheet, secured to the non-recessed portions of the surface of the blister sheet in the usual way.

In terms of this invention, and with particular reference to Figure 3, the cover sheet has applied thereto, at the point of dispensing of the blister pack by a
20 pharmacist or other authorized person, a custom printed label (6). The custom label carries prescribing information indicated by numerals (7a) through (7e) in a manner such that, in this particular instance, an item of prescribing information is positioned directly over each recess that accommodates a medication unit. Each medication unit thus has a specific
25 item of prescribing information associated directly with it. In this case the recesses are arranged in two juxtaposed rows thereof and the information associated with two adjacent recesses at one end of the rows is to take the medication units immediately (as indicated by numeral (7a)); the next two
30 recesses have the prescribing information that they are to be taken after breakfast and after-dinner respectively on Wednesday Jan 2, 2002 (as indicated by numeral (7b)); and so on through Thursday, Friday and Saturday

for the next following pairs of recesses (as indicated by numerals (7c), (7d), and (7e)).

5 The label includes information indicated by numeral (9) as to the identity of the person for whom the prescription has been prepared; information indicated by numeral (10) as to the identity of the type of medication unit (that may now be obliterated by the custom label); and the date on which it was dispensed as indicated by numeral (11).

10 Any other information that is required by law or regulation can also be printed on the label as will be quite apparent to those skilled in the art and, in particular, information as to the identity of the pharmacist or pharmacy dispensing the medication units will generally be printed on the label. Of course, any general instruction concerning the taking of the relevant
15 medication units can be printed on the label such as to be taken before or after a meal only, or to avoid exposure to sunlight etc.

Another advantage of the invention is that all the information printed on the label can be printed in a language selected by the pharmacist according to
20 the language chosen by the person concerned. Choice of language could also be provided on a menu on the pharmacist's computer.

It will be clear that a person taking medication that has been labelled according to this invention cannot make a mistake by not knowing which
25 medication units have been taken and which are to be taken at a specific time. It will be understood that the invention is not concerned with actually reminding the person to take the medicine as this has been addressed by numerous solutions in the past and in reality can be taken care of with the simple use of a timer or electronic alarm that may even have multiple
30 channels as may be required.

The prescribing information may be compiled in any required manner and in any graphical format that is convenient and is capable of being managed by the software being utilized. Figure 4 illustrates one variation simply by way of example. In this variation the label (12) has the prescribing information associated with rectangles (13) printed on the label and each rectangle has a date (14) allocated to it. An area of each rectangle extends fully or partially over one recess (15) and is allocated to the medication unit that is to be taken that morning whilst another area of each rectangle extends over an adjacent recess (16) that carries the prescription information that the associated medication unit is to be taken that evening.

Regarding the size of label to be printed in implementing the invention, a standard size that may be larger than many blister packs can be used in which case an arrow (17) (see Figure3) can be printed in one corner of the label indicating that that corner is to be placed at an appropriate corner of the cover sheet of a blister pack. Excess label material projecting beyond the edge of the blister pack can simply be trimmed off by the dispensing pharmacist using a guillotine or pair of scissors.

As an alternative to the trimming of such a label, the label could be made in a strip form as indicated by numeral (18) in Figure 5 wherein the strip has a width corresponding generally to the smallest blister pack available and the strip would then generally extend the full length of the blister pack. It is envisaged that a dedicated label printing machine would be capable of cutting off the length of label appropriate to each blister pack configuration on the basis of data stored in the data base as to the length of label required.

The embodiment illustrated in Figure 5 has three rows of five recesses (19) and the prescribing information printed on the label includes an arrow ahead (20) associated with it in order to indicate the relevant recess and medicinal unit therein in appropriate instances in which the label material does not cover the entire recess.

In order to produce labels of the type described above a data base is created in which there is stored data concerning the configuration and arrangements of medicinal units in each different type of blister pack available and each different medication unit is associated with its particular configuration of blister pack. Software in a controlling computer is adapted to cause the labels to be printed in conformity with the configuration and number of recesses in the blister packs and, in instances in which a particular type of medicinal unit is available in different packages, the software is adapted to cause a menu to be displayed enabling a pharmacist to select the type of package that he has available for dispensing.

Programming of the computer is such that the data as to the arrangement of medication units in a particular blister pack is retrieved and combined with identification data and other prescription data by the computer acting on commands given by the pharmacist or computer operator. The personal identification data of the recipient and the prescription information data may be recovered from the pharmacist's data base in instances in which the recipient is a regular customer or, in instances in which the particular prescription is a new one, the personal identification data and prescription information data will be input by the pharmacist or computer operator. It is preferred that the resulting image based on the combined data be displayed on the computer screen so that it can be checked by the pharmacist against the blister pack actually being dispensed prior to the label being printed. The actual format (data file type) in which the data is stored will depend on the software being used and achieving the objective indicated above is regarded merely as a matter of routine computer programming the need not be discussed any further herein.

The data base may be maintained on a computer or computer system of the dispensing pharmacist or pharmacy and may be updated periodically as in the case of some existing software packages utilized by pharmacists. This is typically done on a periodic basis by supplying participating pharmacists with,

for example, a CD on which updated information is stored. Alternatively, the data base may be maintained on a communal computerized server accessible to participating pharmacists by way of land line (including the Internet) or wireless communication in any suitable manner. In such a case
5 updating of the communal data base can be achieved more regularly as and when new package configurations of blister packs and new types of medication units become available.

Figures 6 and 7 illustrate the type of result that will be achieved with
10 configurations of packages different from those described above. Figure 6 illustrates a label on a blister package of a medication unit to be taken twice a day, morning and evening, for five days, with the recesses (21) arranged in two terminal columns of four and a central column of two. Figure 7 illustrates
15 a label on a blister package of a medication unit to be taken once a day for seven days and wherein the recesses (22) are arranged in one column of four, and one column of three. The software and data from the data base cooperate to configure the printed label appropriately to the particular package.

20 It is to be mentioned that the labels should be frangible so that the medication unit in a recess can be forced through the cover sheet and label together in order to release the medication unit from its recess in the usual way. Many different types of paper are available that will achieve this objective but in the event that an easily frangible paper is not available, a
25 label as illustrated in Figure 9 could be employed in which a multitude of slits (23) are provided through the label to make it easily frangible.

One of the advantages envisaged of implementing the system of this invention is that, in most instances, the system can be run by existing
30 computers of pharmacists and no new equipment will be essential although a high-quality dedicated label printer would be preferable. It is also envisaged

that the system can be integrated with existing pharmacist's software packages thereby making it simple and inexpensive to implement.

It is an added advantage of the system that it can be extended to the packaging in blank blister sheets of medication units supplied in bulk or lose form in the general manner envisaged by prior United States patents 4,685,271 and 5,791,478 the description of which is included herein by reference. In such an instance medication units can be introduced into a blank blister sheet, for example by means of any manual aid of the type described in US patents 4,685,271 and enclosed therein by means of a cover sheet. The label produced according to this invention may serve as the cover sheet itself or may be adhered to the cover sheet.

The only cautionary action that would have to be taken on the part of a pharmacist in applying the invention to such a method of dispensing would be to ensure that the label produced according to this invention was in registration with the recesses of the blank blister sheet into which the pharmacist has introduced medication units. This may result from the fact that it is unlikely that the all recesses of every blank blister sheet employed in this manner would be occupied by a medication unit. Some recesses would undoubtedly be empty. A system could be employed in which the label produced according to this invention is firstly created and medication units are introduced into appropriate recesses in the blank blister sheet to correspond to the label in order to ensure that prescribing information printed on the label in accordance with this invention is in registration with each occupied recess of the blank blister sheet.

It is envisaged that, in order to complete or enhance the system according to this invention the use of such blank blister sheets would be encouraged. In this event there would be substantial standardization in the packaging of dispensed medication units in that all of them, whether originally packaged in blister packs or supplied in bulk or lose form, would be labelled alike in terms

of this invention. In order to assist therein this invention provides a blank blister sheet as illustrated in Figure 10.

5 This blank blister sheet (26) has pressure sensitive adhesive indicated by numeral (27) applied to all the areas thereof other than the recesses (28) on the surface surrounding the access openings to the recesses and the adhesive is covered by means of a silicon type release sheet (29) that preferably has cut-outs corresponding to the recesses to enable the blanks to be nested for transport and storage purposes. A cover sheet for the resultant
10 blister pack can be a plain sheet that will adhere to the adhesive when the release sheet has been removed.

As an alternative to a substantially conventional rectangular blister sheet illustrated in Figure 10, a blank blister sheet could be provided in strip form
15 that could be unrolled from a roll (30) thereof and wherein only one or two series of recesses (31) are provided across the width of the strip (32). This arrangement would avoid, to a large extent, the difficulty indicated above of unoccupied recesses.

20 As an added aid to the facility provided by this invention, the software could be adapted, in instances in which the same person is to take more than one medication concurrently, to furthermore print out an additional label such as that illustrated in Figure 8. In this case the additional label can be applied to a paper or other bag, or a medication box, in which the plurality of medicines
25 is supplied by the pharmacist. The additional label can indicate, in tabular form, the various possible times at which the medicines are to be taken and, in the illustrated embodiment of the invention, these possible times are "morning", "lunch" and "dinner" as indicated by numeral (24). The table printed on the label provides space for each day for the duration of the
30 course of medication and in the illustrated embodiment seven days are applicable. Each of the different medicines is preferably simply identified by a letter, numeral or symbol such as is indicated as the letters "A", "B" and "C"

in a circle as indicated by numeral (25). The various medicines are similarly labelled with such identifying letter, numeral, or symbol which may be printed on the labels produced according to the invention.

Thus, referring to Figure 8, it will be seen that medicines "A", "B" and "C" are each to be taken for five consecutive days in the morning; medicine "A" for five consecutive days at lunchtime; and medicines "A" and "B" should be taken on the five consecutive days at dinnertime. Medicine "C" is, in addition, to be taken in the morning on two additional days. This type of graphic representation can be configured to be simple to understand and could prove to be a highly useful tool. The custom labels illustrated in Figures 5, 6 and 7 are shown as having been identified in this manner.

It will be understood that numerous variations may be made to the embodiments of the invention described above without departing from the scope hereof.

CLAIMS:

1. A method of dispensing medication units supplied in a blister pack (1) that consists of a blister sheet (2) defining a plurality of recesses (3) each accommodating a medication unit (4) and a cover sheet (5) secured over the blister sheet to enclose the individual medication units in the recesses, the method being characterized in that it comprises the step of applying to the cover sheet a custom label (6) on which there is printed, or hand written, prescribing information (7, 14, 20, 21) in clear association with each recess indicating the general time when the medication unit accommodated in that recess is to be taken, the custom label being frangible to any extent necessary to enable removal of a medication unit from a recess, and, in the event that the custom label obscures the identification data of the medication units themselves, then information (10) as to such identification data.
2. A method as claimed in claim 1 in which the custom label carries information (9) as to the identity of the person for whom the medication units have been prescribed.
3. A method as claimed in either one of claims 1 and 2 in which the custom label extends over a substantial area of the cover sheet in which case the prescribing information associated with each recess can be located directly over or in immediate proximity to the particular associated recess.
4. A method as claimed in any one of the preceding claims in which the prescribing information is arranged so that medication units are to be taken commencing at one end or one corner (17) of the blister pack and the medication units are progressively removed from that end or corner of the blister pack to the opposite end or corner.

5. A method as claimed in any one of the preceding claims in which the medication units are to be taken more than once a day and the prescribing information includes information as to the general time of day when each medication unit is prescribed to be taken.
6. A method as claimed in any one of the preceding claims in which the prescribing information includes at least one item of information selected from the day of the week; the general time of day; and the date on which each medication unit is to be taken; information as to the commencement date of the prescription; the date of dispensing thereof; and any other conditions to be adhered to in the taking of the medication units.
7. A blister pack (1) comprising a blister sheet (2) defining a series of recesses (3) each of which accommodates a single medication unit (4) held captive in the recess by a frangible cover sheet (5), the blister pack being characterized in that a custom label (6) is adhered to the cover sheet wherein the custom label has applied thereto prescribing information (7, 14, 20, 21) in clear association with each recess indicating the general time when the medication unit accommodated in that recess is to be taken, the custom label being frangible to any extent necessary to enable removal of a medication unit from a recess, and, at least in the event that the custom label obscures the identification data of the medication units themselves, then information (10) as to such identification data.
8. A blister pack as claimed in claim 7 in which the custom label carries one or more items of information selected from the identity of the person for whom the medication units have been prescribed (9); the day of the week; the general time of day; and the date on which each medication unit is to be taken; information as to the commencement date of the

prescription; the date of dispensing thereof (11); and any particular conditions to be adhered to in the taking of the medication units.

9. A medicine dispensing system characterized in that there is included a computer accessible data base containing information as to the configuration and relative locations of each recess of each of a series of different blister packaged medication units that are available for dispensing in such blister packs, software for utilizing such information associated with the configuration of a particular type of medication unit being prescribed and for enabling a printout to be made on a custom label so that the custom label, when correctly applied to the particular blister pack, will carry prescribing information that is associated with each recess of the blister pack indicating the general time when the particular medication unit in the associated recess is to be taken.
10. A medicine dispensing system as claimed in claim 10 in which the information printed on the custom label includes one or more items of information selected from the identity of the person for whom the medication units have been prescribed; the day of the week; the general time of day; and the date on which each medication unit is to be taken; information as to the commencement date of the prescription; the date of dispensing thereof; and any particular conditions to be adhered to in the taking of the medication units.
11. A medicine dispensing system as claimed in either one of claims 9 or 10 in which the software is compatible with, or is integrated with, a conventional type of pharmacist's software package.
12. A medicine dispensing system as claimed in any one of claims 9 to 11 in which the software is adapted, at the option of a dispensing pharmacist, to cause an additional label to be printed out in the case that a particular person is to take more than one type of medicine

concurrently wherein the additional label sets out in simple tabular form the general times when each of the medicines is to be taken.

13. A medicine dispensing system as claimed in claim 12 in which each type of medicine is associated with an easy identification letter, symbol or the like.
14. A blank blister sheet characterized in that it has pressure sensitive adhesive over the surface thereof to which a cover or custom label sheet is to be adhered with the pressure sensitive adhesive being covered by the release cover sheet.

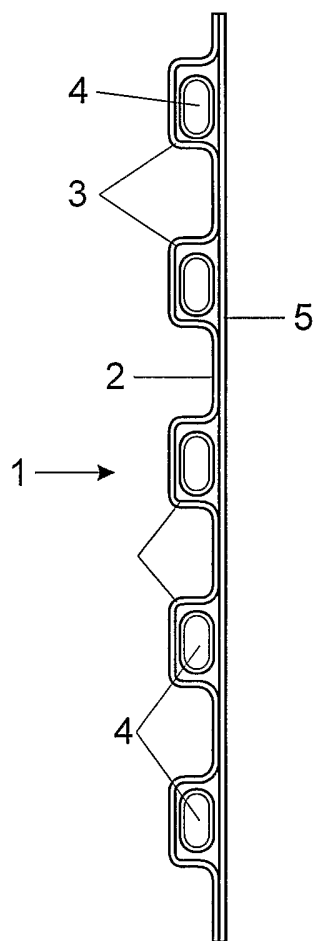


Figure 1

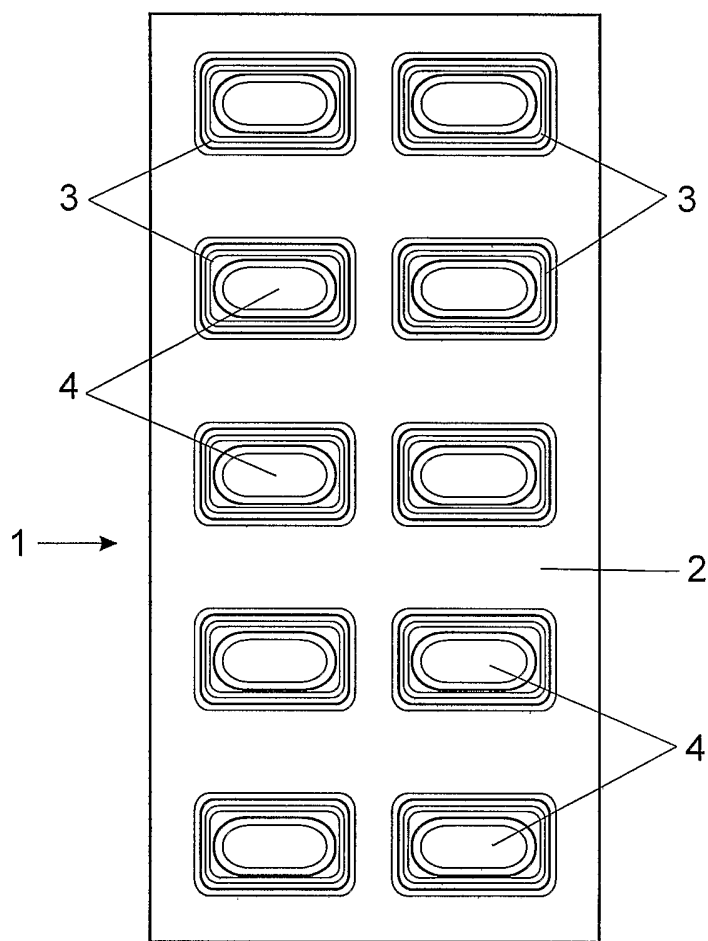


Figure 2

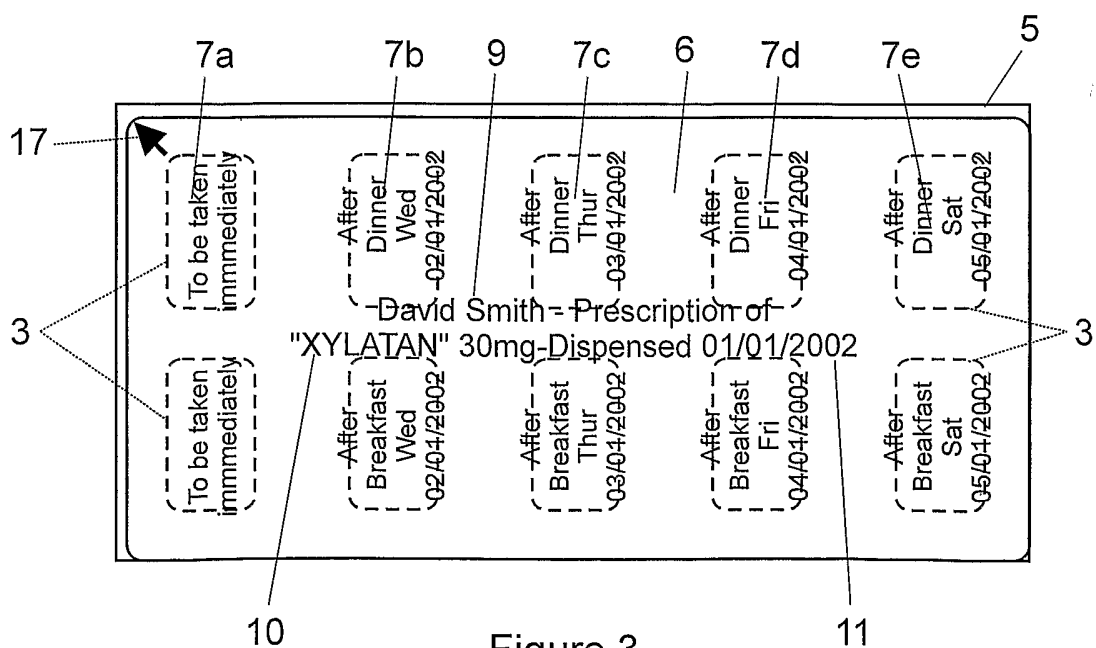


Figure 3

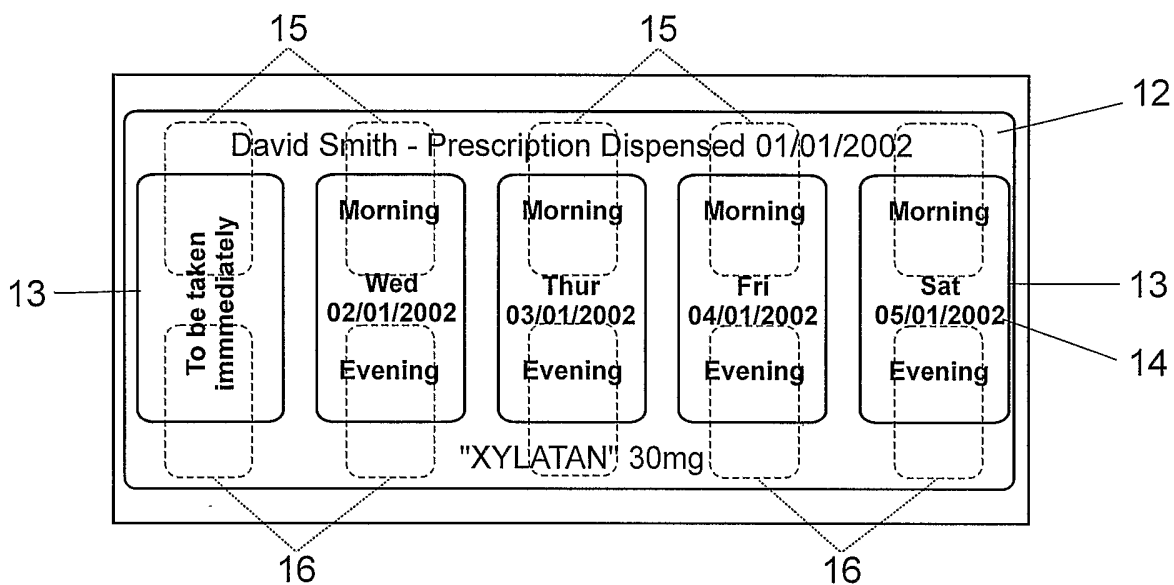


Figure 4

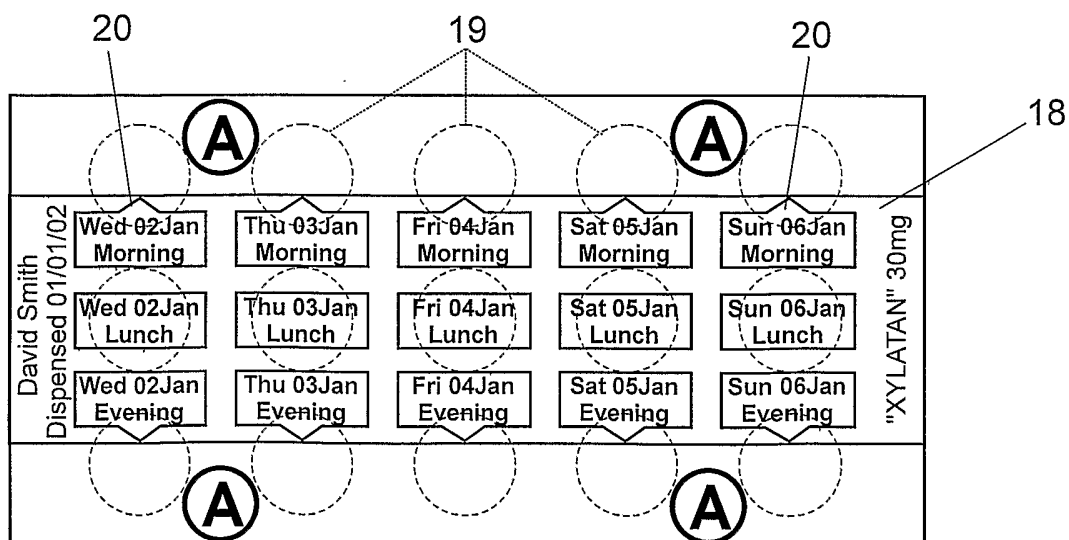


Figure 5

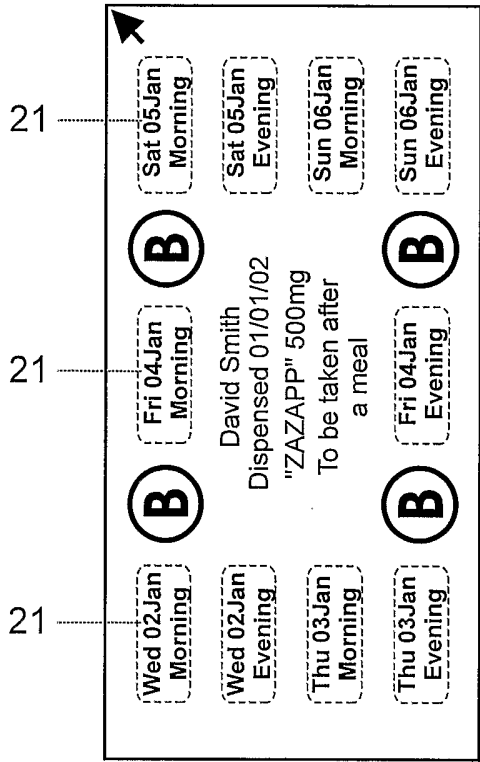


Figure 6

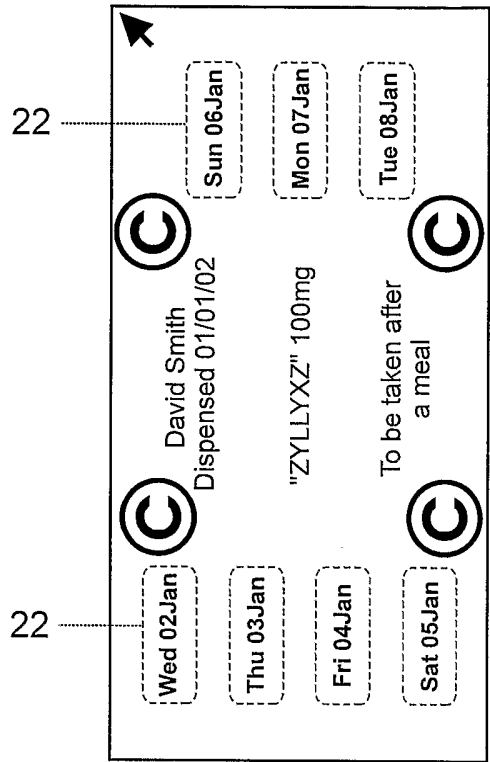


Figure 7

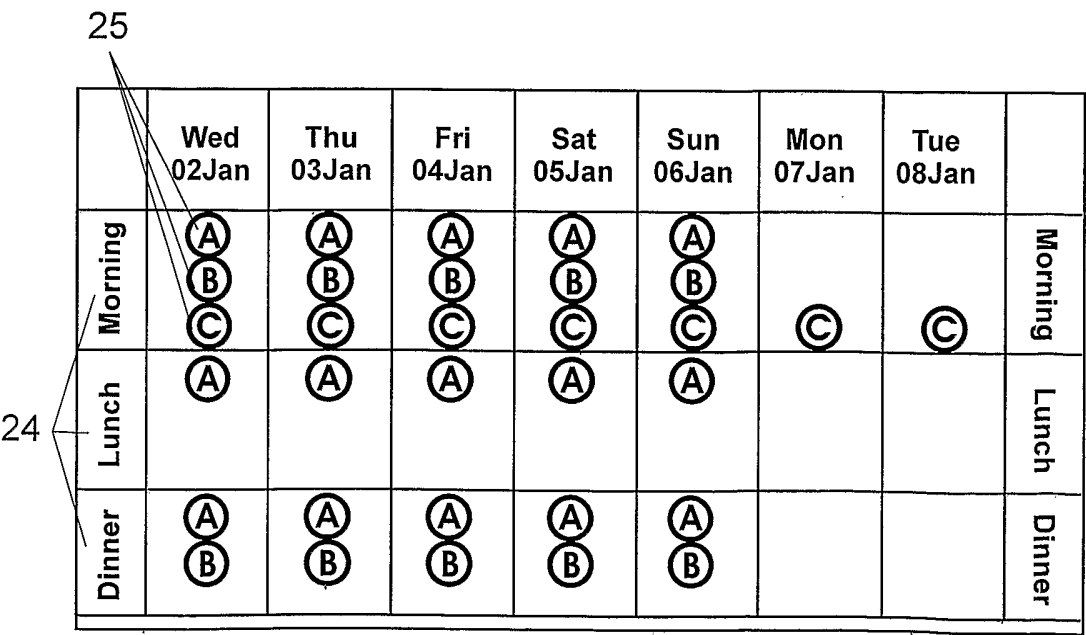


Figure 8

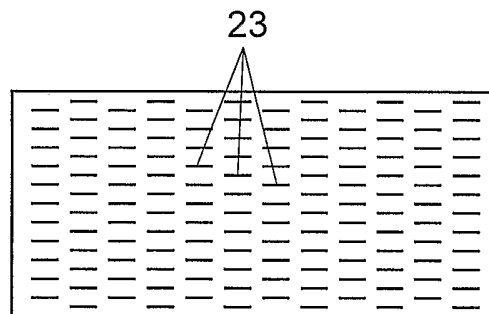


Figure 9

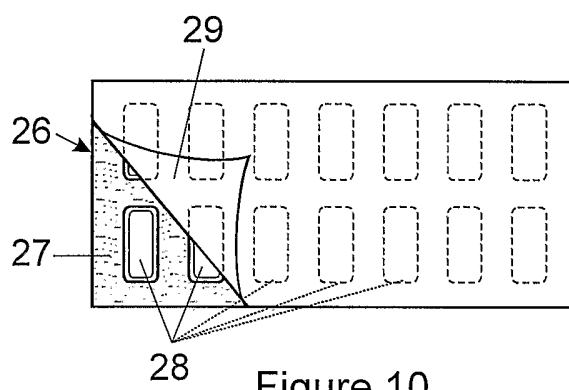


Figure 10

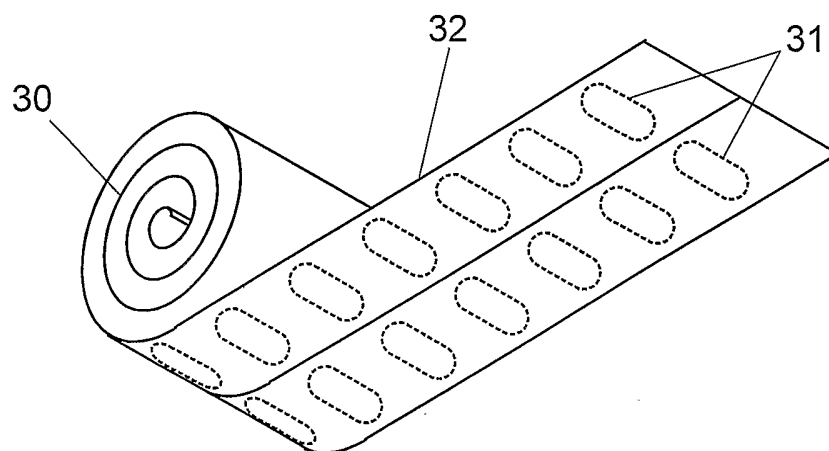


Figure 11

INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/00002

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B65D75/34

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)

IPC 7 B65D G09F A61J

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 practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 791 478 A (SALDITCH IAN E ET AL) 11 August 1998 (1998-08-11) column 4, line 22 - line 55; figures ---	1-14
X	US 5 014 851 A (WICK JOHN J) 14 May 1991 (1991-05-14) column 4, line 1 -column 5, line 5; figures ---	1-14
A	WO 98 29083 A (PROVOST JEAN) 9 July 1998 (1998-07-09) abstract; figures ---	1-14
A	US 5 542 236 A (MILLER IRWIN) 6 August 1996 (1996-08-06) column 2, line 48 -column 3, line 55; figures --- -/--	1-14

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- *O* document referring to an oral disclosure, use, exhibition or other means
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Date of the actual completion of the international search

13 March 2003

Date of mailing of the international search report

24/03/2003

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/IB 03/00002

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 299 13 867 U (SCHREITER PETER) 23 December 1999 (1999-12-23) the whole document	1-14
A	US 3 780 856 A (BRAVERMAN M) 25 December 1973 (1973-12-25) the whole document	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/IB 03/00002

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5791478	A	11-08-1998	NONE	
US 5014851	A	14-05-1991	NONE	
WO 9829083	A	09-07-1998	CA 2194134 A1 AU 5473898 A WO 9829083 A1	16-05-1998 31-07-1998 09-07-1998
US 5542236	A	06-08-1996	NONE	
DE 29913867	U	23-12-1999	DE 29913867 U1	23-12-1999
US 3780856	A	25-12-1973	NONE	