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(54) **METHOD OF PACKAGING DATED TOOTHBRUSHES**

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(57) **ABSTRACT**

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A package comprises two or more toothbrushes which are dated to indicate a service period such as by designating a starting date and/or an ending date, or some other date in the service period. The service periods are sequential and add up, ideally, to one complete year so that a package, purchased at any time during a year, provides toothbrushes that can be used for twelve sequential months. Providing sequentially dated toothbrushes provides an indication to the user to discard used toothbrushes at the ends of the service periods thereby promoting dental health as recommended by dentists and toothbrush manufacturers. The service period indicator may be numbers, letters, words, symbols, colors, figures or any combination that suggests a period of service of a particular toothbrush and may be placed at any suitable location on each toothbrush. Suitable instructions, placed on and/or in the package or separate from the package, are preferably provided to inform potential users of the meanings of the indicators.

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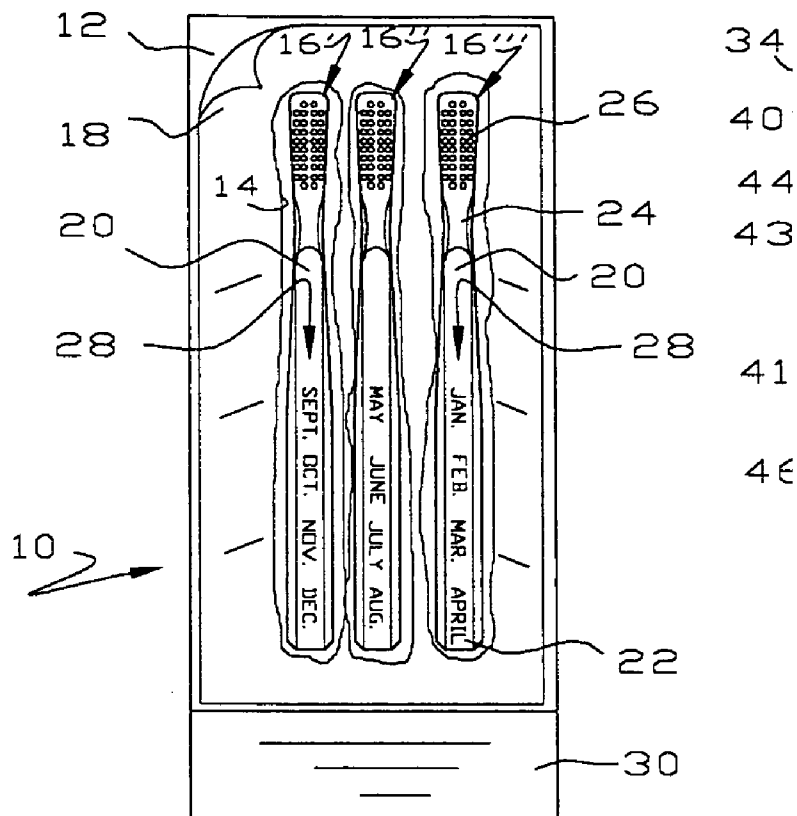


FIG. 1

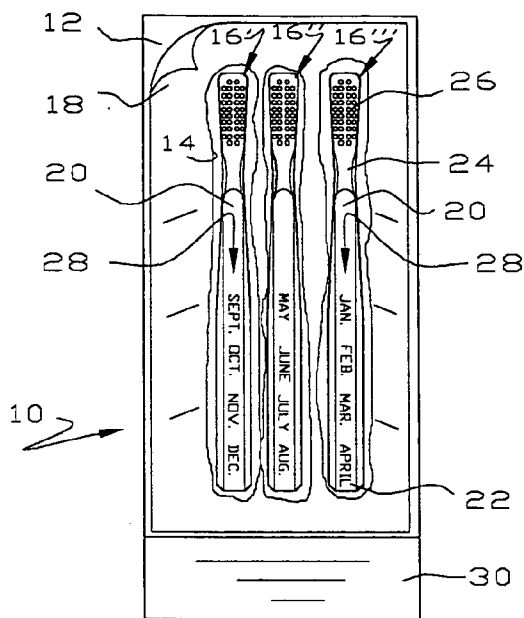


FIG. 2

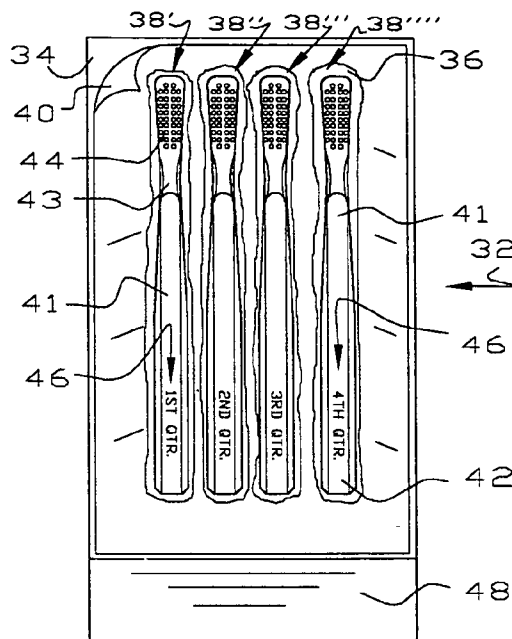


FIG. 3

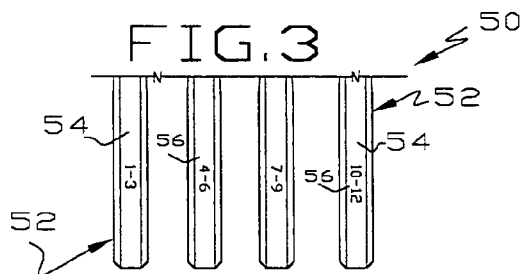


FIG. 4

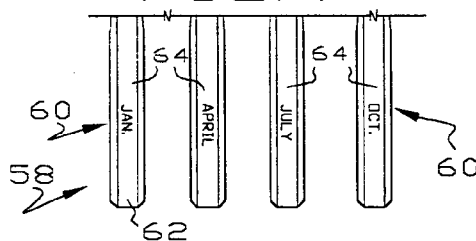


FIG. 5

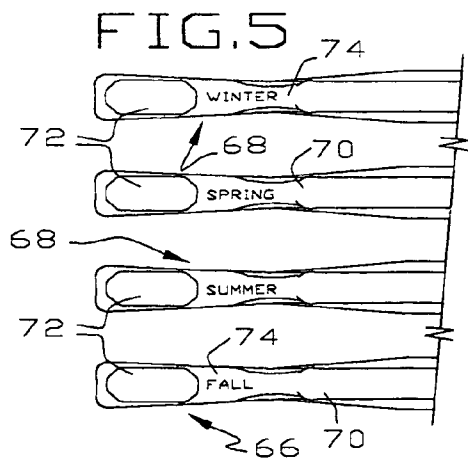
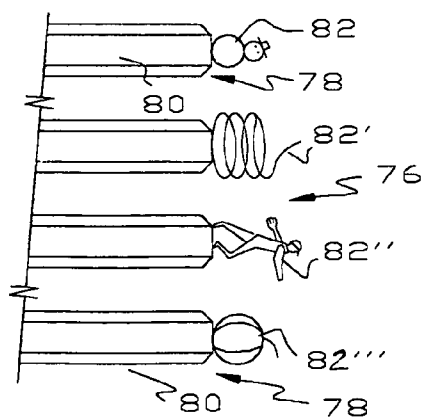


FIG. 6



METHOD OF PACKAGING DATED TOOTHBRUSHES

[0001] This application is a division of application Ser. No. 10/390,321, filed Mar. 17, 2003.

[0002] This invention is a package of toothbrushes and method, and more particularly, a toothbrush package in which the toothbrushes each have at least one indicator thereon indicating a service period.

BACKGROUND OF THE INVENTION

[0003] It is well known that people employ toothbrushes long beyond their useful life, at least as recommended by dentists and toothbrush manufacturers. Toothbrush bristles gradually become soft and gradually lose their ability to clean teeth and gums in an optimal fashion. The degradation of toothbrush bristles is so slow that users are not aware of it until there is an abrupt realization that the toothbrush one is using has become old and inefficient. Dentists propose, and toothbrush manufacturers promote, replacement of toothbrushes after three months use. Without doubt, the average toothbrush is discarded after being used substantially longer than recommended.

[0004] This phenomena has been recognized in the prior art. There are a number of proposed labels, changeable indicators and the like to display a service period for toothbrushes, such as in U.S. Pat. Nos. 2,489,707; 4,466,150 and 5,072,477. These devices have the disadvantage of requiring the user's active intervention by modifying the device at the outset of use. Similar structures for somewhat different purposes are found in U.S. Pat. Nos. 4,589,159 and 5,704,087.

[0005] In addition, a commercially available toothbrush is provided with colored bristles that lose their color, starting from the free bristle end, with use—the idea being that when the bristles are half clear, the user realizes it is time to replace the toothbrush. This approach has the advantage of not requiring the user's active intervention at the outset of use because the change in the toothbrush occurs because of its use.

SUMMARY OF THE INVENTION

[0006] In this invention, a package provides two or more toothbrushes providing one or more indicators representing sequential service periods. Preferably, the sequential service periods add up to an integer of years and ideally add up to one year for a peculiar reason. Manufacturers and/or merchants holding toothbrushes in inventory are clearly motivated to sell inventory quickly and not hold it for long periods. If the sequential service periods of the dated toothbrushes of this invention added up to a period substantially different than one year, there would be a time when a buyer would not buy a particular package of sequentially dated toothbrushes because it would be out of date. Such packages would presumably have to be greatly discounted to be sold readily.

[0007] Thus, this invention preferably comprises a package of two or more toothbrushes having one or more indicators thereon indicating different service periods of equal duration where the service periods are sequential and add up to one full year. Ideally, the package comprises three or more toothbrushes.

[0008] It is an object of this invention to provide a package of dated toothbrushes.

[0009] A further object of this invention is to provide a method encouraging use of sequentially dated toothbrushes during the service periods indicated thereon.

[0010] A more specific object of this invention is to provide a package of sequentially dated toothbrushes in which the service periods of the toothbrushes add up to a full year.

[0011] These and other objects and advantages of this invention will become more apparent as this description proceeds, reference being made to the accompanying drawings and appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 is a plan view of a package of dated toothbrushes in accordance with this invention;

[0013] FIG. 2 is a plan view of another package of dated toothbrushes in accordance with this invention;

[0014] FIG. 3 is a broken view of a set of toothbrushes, taken from their package, showing another type of indicator designating service periods for the toothbrushes;

[0015] FIG. 4 is a broken view of another set of toothbrushes, taken from their package, showing another type of indicator designating service periods for the toothbrushes;

[0016] FIG. 5 is a broken view of a set of toothbrushes, taken from their package, showing two different types of indicators designating service periods for the toothbrushes; and

[0017] FIG. 6 is a broken view of another set of toothbrushes, taken from their package, showing another type of indicator designating service periods for the toothbrushes.

DETAILED DESCRIPTION

[0018] Referring to FIG. 1, there is illustrated a package 10 which may be of any suitable design and is illustrated as having a plastic base 12 which has been deformed to provide one or more recesses 14 for receiving a plurality of toothbrushes 16', 16", 16"". The package 10 is closed by a cover or sheet 18 which is preferably transparent and sealed to the base 12.

[0019] Inside the package 10 are at least two and preferably either three or four toothbrushes 16'-16"" for reasons more fully apparent hereinafter. The toothbrushes may be of any suitable type, such as conventional toothbrushes, toothbrushes that are an attachment to an electric motor, toothbrush attachments to a manual handle or water nozzle type attachments to a source of pressure. The toothbrushes are conveniently essentially identical having a body 20 having a handle end 22 and a bristle end 24 providing bristles 26.

[0020] The toothbrushes 16'-16"" each provide one or more indicia or indicators 28 designating a service period for the toothbrush. The service periods are sequential, i.e. the toothbrush 16' shows a service period of January through April, the toothbrush 16" shows a service period of May through August and the toothbrush 16"" shows a service period of September through December. The indicators 28 may designate only the beginning and end of the service

period or may designate all months of the service period as shown in **FIG. 1**. In the alternative, the indicators may designate only the beginning of the service period or the end of the service period as discussed hereinafter.

[0021] The indicators **28** may be of any suitable type, such as word or abbreviation shown in **FIG. 1** where the designated service period is stated in months in which the toothbrush is to be used. It will be seen that either three or four toothbrushes is ideal because the total duration of the sequential service periods is ideally one year because of inventory reasons and the duration of the service periods is preferably equal for simplicity. Thus, three toothbrushes having sequential service periods of four months each add up to one year. Similarly, four toothbrushes having sequential service periods of three months add up to one year. Providing two toothbrushes gives each a service period of six months duration, which is longer than desired. Conversely, six toothbrushes give a service period of two months duration, which is too short. Five toothbrushes is not preferred because the service periods, if equal, would be awkward.

[0022] The indicator **28** shows all of the months of the service period and shows the beginning and end in either the names of months or their abbreviations. As used herein, a word is either the complete word, such as January, or an abbreviation, such as Jan. As will be more fully apparent hereinafter, the service period may be designated by showing the starting date and/or showing the ending date. As will be more fully apparent hereinafter, the service period indicator may alternatively comprise one or more letters, numbers, combinations of letters and numbers, colors, symbols or figures in two or three dimensions and the like, located at any suitable position or positions on the toothbrush. The package **10** preferably, but not necessarily, includes a label **30** in any suitable location having instructions stating that the individual toothbrushes **16** are to be used during the service periods designated by the indicators **28** and then discarded. Because the service periods shown by the indicators **28** cover one complete year, the user is induced to use the toothbrushes **16** in sequence and discard each toothbrush as its service period expires. An important feature of the method of this invention is instructing users, or potential users, of the meaning of the indicators **28** on the toothbrushes. This may be accomplished by labeling on the package **10**, such as the label **30**, by advertising material included separately inside the cover sheet **18** or by advertising not connected to the package **10**. It will be apparent, of course, that the indicators **28** may indicate the starting date of the service period, the ending date of the service period, or any other point of the service period, such as the mid-point.

[0023] Referring to **FIG. 2**, a similar package **32** having a plastic base **34** which has been deformed to provide one or more recesses **36** for receiving a plurality of toothbrushes **38**, **38'**, **38''**, **38'''**. The package **32** is closed by a cover or sheet **40**, preferably transparent, sealed about its periphery to the base **34**.

[0024] Inside the package **32** are at least two and preferably either three or four toothbrushes for reasons explained previously. The toothbrushes are conveniently essentially identical having a body **41** having a handle end **42** and a bristle end **43** providing bristles **44**.

[0025] The toothbrushes each provide one or more indicia or indicators **46** designating a service period for each toothbrush. The service periods are sequential, i.e. the toothbrush **38'** shows a service period of the first quarter of the year, the toothbrush **38''** shows a service period of the second quarter of the year, the toothbrush **38'''** shows a service period of the third quarter of the year, and the toothbrush **38''''** shows a service period for the fourth quarter.

[0026] The package **32** preferably, but not necessarily, includes a label **48** at any suitable location having instructions stating that the individual toothbrushes are to be used during the service periods designated by the indicators **46** and then discarded. Because the service periods shown by the indicators **46** cover one complete year, the user is induced to use the toothbrushes in sequence and discard each toothbrush as its service period expires. An important feature of the method of this invention is instructing users, or potential users, of the meaning of the indicators **46** on the toothbrushes. This may be accomplished by labeling on the package **32**, such as the label **48**, by advertising material included separately inside the cover sheet **40** or by advertising not connected to the package **32**.

[0027] Referring to **FIG. 3**, a set **50** of toothbrushes **52** is illustrated as having been removed from its package, the upper half of the toothbrushes **52** having been deleted for purposes of illustration. The toothbrushes **52** each include a body or handle end **54** providing one or more indicators **56** thereon indicating a service period, the service periods being sequential and ideally adding up to a complete year. The indicators **56** are numbers designating months at the beginning and end of the service period although the indicator may be numbers designating each month of the service period.

[0028] Referring to **FIG. 4**, a set **58** of toothbrushes **60** is illustrated as having been removed from its package, the upper half of the toothbrushes **60** having been deleted for purposes of illustration. The toothbrushes **60** each include a body or handle end **62** providing an indicator **64** thereon indicating a service period, the service periods being sequential and ideally adding up to a complete year. The indicators **64** are the names of the months designating either the end or the beginning of the service period.

[0029] Referring to **FIG. 5**, a set **66** of toothbrushes **68** is illustrated as having been removed from its package, the lower half of the toothbrushes **68** having been deleted for purposes of illustration. The toothbrushes **68** each include a body or bristle end **70** having one or more indicators **72** in any suitable location, preferably on the side opposite the bristles indicating a service period, the service periods being sequential and ideally adding up to a complete year. The indicators **72** are patches of different color designating the seasons, e.g. white is winter, green is spring, red is summer and yellow is autumn. The service periods are accordingly sequential and add up to a complete year. The user is induced to use the toothbrushes sequentially during the designated season and then discard each toothbrush in turn by suitable instructions. It might be thought that one could simply provide three or four toothbrushes of different color in a single package, without suitable instructions, and accomplish the aims of this invention. Nothing could be further from the truth. The indicators **72** have to be of a different color than the body of the toothbrush and suitable instruc-

tions on and/or in the package become necessary. Otherwise, there is nothing to inform or remind the user of the significance of the colored indicators 72. In addition, or in the alternative, the toothbrushes 68 may have indicators 74 designating the sequential service periods. The indicators 74 are illustrated to be words designating the seasons.

[0030] Referring to FIG. 6, a set 76 of toothbrushes 78 is illustrated as having been removed from its package. The toothbrushes 78 each include a body or handle end 80 having one or more two or three dimensional figures or symbols thereon indisputably indicating a service period, the service periods being sequential and ideally adding up to a complete year. A suitable two dimensional figure could be, for example, a drawing of a snowflake, pumpkin or the like. The symbols are indisputable symbols of the seasons, such as a snow man 82 for winter, a helical spring 82' for spring, a baseball player 82" for summer and a pumpkin 82''' for autumn. It might be thought that one could simply provide three or four toothbrushes having different symbols thereon in a single package, without suitable instructions, and accomplish the aims of this invention. Nothing could be further from the truth. The symbols have to be indisputably indicators of sequential service periods, of which the seasons are the obvious choice. Similarly, the symbols might be indisputable symbols of holidays such as Christmas, Easter, July 4 and Labor Day. The user is induced to use the toothbrushes sequentially during the designated season and then discard each toothbrush in turn by suitable instructions.

[0031] The provision of instructions is particularly important in situations where the service period indicators on the toothbrushes are susceptible of alternative interpretations, such as the colors 72 and the symbols 82, 82', 82", 82'''.

[0032] Although this invention has been disclosed and described in its preferred forms with a certain degree of particularity, it is understood that the present disclosure of the preferred forms is only by way of example and that numerous changes in the details of operation and in the

combination and arrangement of parts may be resorted to without departing from the spirit and scope of the invention as hereinafter claimed.

I claim:

1. A method of packaging dated toothbrushes of the type having an indicator thereon indicating a service period, comprising

selecting a first toothbrush having an first indicator designating a first service period;

selecting a second toothbrush having a second indicator designating a second service period sequential to the first service period; and

placing the first and second toothbrushes in a single package and sealing the same.

2. The method of claim 1 further comprising instructing potential users that the indicators on the toothbrushes designate sequential service periods.

3. The method of claim 2 wherein there is at least one additional toothbrush having a third service period sequential to the second service period, the service periods are of equal duration and add up to one year.

4. A method of packaging dated toothbrushes of the type having an indicator thereon indicating a service period, comprising

selecting a plurality of toothbrushes, each having an indicator designating different service periods, the service periods adding up to one year; and

placing the toothbrushes in a single package and sealing the same.

5. The method of claim 4 further comprising instructing potential users that the indicators on the toothbrushes designate sequential service periods.

6. The method of claim 5 wherein the service periods are of equal duration.

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