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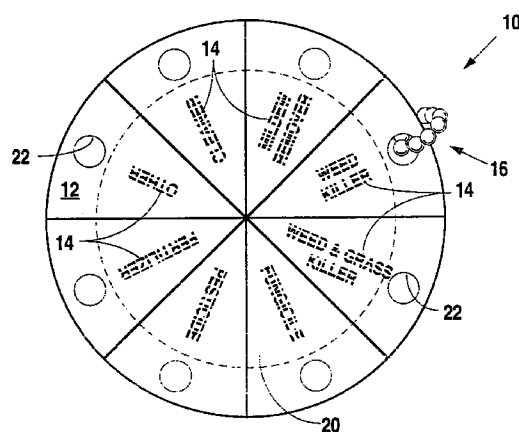
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(54) **Mnemonic device**

(57) A device (10) for assisting memory recall of preselected information includes a body having a plurality of predefined indicator marks (14) placed thereon, each being unique and distinct with respect to each other, and a means (22) associated with each one of the indicator marks (14) by which the device can be selectively attached to an article such as a container or key retainer. The placement of the attachment means (16) is such that the attachment point of the memory-assist device (10) is unambiguously associated with only a single one of the indicator marks (14).



**Fig. 2**

**EP 0 750 863 A1**

## Description

### Technical Field

This invention relates generally to a device for selectively providing a visible indicator that serves as a memory aid, and more particularly to such a device that can conveniently be attached to an article such as a container or key chain.

### Background Art

It is often desirable to have a simple reminder of a required future action, for example a reminder of when the next oil change in a car is due, when the next lawn treatment should be applied, or air filters serviced. The current practice of relying on posted notices, such as stickers on a car door indicating the time for the next oil change or notes posted in various other locations, as a reminder of other tasks to be performed at a future time, have only been partially successful. Often the notices are posted in a location not normally noticed in our daily activities, such as on the door jamb of a car or inside an air filter housing. At other times, important notices are placed in very observable locations, such as the inside upper corner of a windshield where we may become so used to seeing the sticker that we do not pay attention to its message. Around the home, many people post notices on a refrigerator door, and then fail to carry out the action when due because the message becomes buried in the midst of other messages posted on the door.

Also, around the home, garage, farm or ranch, there has been a long-felt need for a simple and effective device to identify the contents of a can or bottle. For example, does a gas can contain regular gas or a gas-oil mixture? If a mixture, is it 20:1 or 50:1? If a can or tank contains a previously mixed chemical used in farming or gardening, is it fertilizer, herbicide, pesticide, fungicide, or something else? With respect to engines or motors that use different weight oil in different seasons of the year, is the current oil 10 weight, 30 weight, or multi-viscosity, and when is it due for change?

Thus, it can be readily appreciated that there are numerous situations, often occurring daily, in which it would be helpful to have a device that assists the memory in recalling specific information about the contents of a container. If the contents of a container are misidentified the consequences could, at the very least, be bothersome, and at the worst, catastrophic.

Furthermore, temporarily marking a container with pen, chalk, crayon, etc. is not good practice. For example, the contents of the container may be changed, but the prior contents indication may still be observable. Stick-on labels or tape can become detached or unreadable.

Thus, it can be readily appreciated that there are numerous situations and occasions when it is desirable that one be faithfully reminded of the need to perform a

task or take a particular action at a specified time, or of important information regarding the contents of a container. It can also be appreciated, perhaps from one's own personal experience, that the present memory assist schemes and reminder devices often fail in their intended purpose.

The present invention is directed to overcoming the problems set forth above. It is desirable to have a simple and inexpensive device for selectively indicating the time at when a particular task or action should be carried out, or reminded of other specific information. Specifically, it is desirable to have such a device that can be easily carried in a pocket or purse so that it is almost always readily available and is even actually handled several times a day, or alternatively, attached to a container or article by a conventional key chain or key ring. Also, it is important that such a device will, by the very position at which it is attached to the key chain or key ring, readily bring to mind the desired information.

### Summary of the Invention

In accordance with one aspect of the present invention, a device for assisting memory includes a body portion comprising a single planar structure having a plurality of predefined unique indicants, or identifying marks, placed thereon, and a separate means associated with each of the indicants for selectively attaching the body portion to an article. Each of the means is unambiguously associated with only a single one of the predefined indicants and the selection of said means for attachment of the body portion to the article distinctly identifies the unique indicant associated with the selected means.

### Brief Description of the Drawings

Fig. 1 is a perspective view of a device, embodying the present invention, for selectively indicating a characteristic of a container;

Fig. 2 is a bottom view of the device of Fig. 1, showing the indicating marks and means by which the device is attached to a container;

Fig. 3 is a plan view of the body portion of an alternate arrangement of the indicating device embodying the present invention;

Fig. 4 is a plan view of the body portion of another alternate arrangement of the indicating device embodying the present invention;

Fig. 5 is a sectional view taken along the line 5-5 in Fig. 4; and,

Fig. 6 is a plan view of a key tag representing the preferred embodiment of the present invention;

Fig. 6 is a perspective view of an alternative arrangement of the device embodying the present invention, as shown in Fig. 1, in which the measuring cup is removably attached to the body portion of the device; and

Fig. 7 is a cross-sectional view of the alternative arrangement of the device embodying the present invention shown in Fig. 6.

### **Best Mode for Carrying Out the Invention**

As shown in drawings, devices representing alternative or related embodiments of the present invention are generally identified by the reference number 10. Broadly, the mnemonic, or memory-assisting device 10 includes a body portion 12 having a plurality of predefined indicants or identification marks 14 disposed thereon, and a means 16 associated with each of the indicants 14 for selectively attaching the device 10 to the container. The term "container", while not specifically shown in any of the drawings, is used herein in a broad sense and includes, by way of example but not limited to, bottles, cans, spray apparatuses, engines crankcases, and machines having fluid storage or collecting chambers such as hydraulic fluid supply tab. The preferred embodiment of the present invention is shown in Fig. 6 in which the mnemonic device, in the form of an identification tag carried on a key retainer, is indicated by the reference numeral 40. The term "key retainer" as used herein and in the claims means is broadly applied and means any structure, such as a chain, ring, wire, cable, tie, string or other device capable of retaining, or holding, a key. It is not necessary that a key be actually disposed on the retainer.

In the embodiment shown in Figs. 1 and 2, the mnemonic device 10 is an integral part of a volumetric measuring device, such as a measuring cup 18. The memory-assist device 10 actually forms the base of the cup and has a rim, or flange extending radially outwardly from the cup base. Preferably the cup and flange are formed of a molded plastic material, such as polyethylene or polycarbonate, and the indicants 14, for example as shown in Fig. 2, are raised letters or symbols that are formed on the bottom of the mnemonic device 10 during the molding process. Alternatively, the indicating marks 14 may be stamped, painted, etched, scribed, attached by adhesive, or otherwise placed upon the indicating device 10. Also, if desired, the device 10 may be molded or formed separately and then assembled, such as by snapping together mating grooves and ridges provided on the mnemonic device 10 and the measuring cup 18.

By way of illustration, the indicants 14 shown in Fig. 2 appropriately identify various concentrated liquid or granulated materials that are typically mixed with water prior to use around a home, garden, farm or ranch. Quite often, not all of the mixed solution is used, and rather than 'dumping' the leftover mixture, it is frequently

stored, either in its dispensing container such as a sprayer, or in the mixing container. After a few days, if not properly marked, it is not uncommon for one to be less than certain what is in the container. The present invention overcomes this problem.

Each of the indicants 14 are positioned within a respective predefined surface area 20 which, in the illustrative example shown in Fig. 2, is in the form a pie-shaped segment. Importantly, each of the predefined surface areas 20 having a respective one of the indicants 14 placed thereon, has a separate one of the means 16 for selectively attaching the device 10 to a container. In this example, the means 16 is an aperture 22 extending through each of the pie-shaped segments 20. A conventional tie member, such as the ball-snap key chain shown in Figs. 1 and 2, or alternatively, a key ring, a wire twist tie, a plastic tie, or similar connector may be inserted through the aperture 22 associated with the indicant 14 that correctly corresponds with the contents of a container, and then attached, or fastened to the handle, nozzle, or other part of the container. In this manner, the contents of the container can be readily ascertained by simply looking at the mnemonic device 10 and observing the identifying mark 14 next to the aperture 22 by which the device 10 is attached to the container.

Alternatively, the volumetric measuring device 18 may be separately formed apart from the base, or body portion, on which the indicants 14 are disposed. For example, as shown in Figs. 7 and 8, the measuring cup 18' may be inverted with the open top of the measuring cup removably attached to the body portion 12'. In this arrangement, the body portion 12' becomes a mounting base for the measuring cup 18'. The body portion 12' has a planar bottom surface and is essentially planar in structure with the exception of a raised lip 32 that may be formed as separate raised tabs, a continuous raised ridge or, as shown in Fig. 8, be formed on the outer edge surface of a centrally disposed raised or stepped area. The lip 32 is shaped to at least partially abut and frictionally engage the inner surface, or rim, 34 of the open end of the cup 18'. Alternatively, the lip 32 may be disposed on the inner peripheral edge surface of a raised flange area of the body portion 12' by which arrangement an inwardly facing lip snaps over, i.e. frictionally engages, an outer surface of the rim of the cup 18'. Also, the removable attachment of the measuring cup 18' to body portion 12' may be provided by mating threads, or tabs and grooves, formed respectively in selected internal or external rim surfaces of the cup 18' and the engagement lip provided on the base 12'.

Importantly, the apertures 22' and the means 16' associated with each of the indicants for selectively attaching the assembled indicating device 10 to a container are provided in the peripheral region of the body portion 12'. This arrangement advantageously positions the apertures 22' and the attachment means 16' outside the central area of the body portion 12' at a location where each attachment means can be visually associ-

ated, unambiguously, with a single one of the indicants 14. As in the earlier arrangement, the preselected indicants 14 may be conveniently formed on the bottom surface of the body portion 12'. In either arrangement, the volumetric measuring utensil 18,18' and the body portion 12,12' may have a shape other than the circular shape illustrated in the drawings.

An alternative arrangement of the indicants 14 on the mnemonic device 10 is shown in Fig. 3. In this arrangement, which may be used with either a volumetric measuring device 18 such as shown in Figs. 1 and 7, or with a flow control device such as a conventional funnel or nozzle, the indicants 14 identify various fuels and fuel mixtures. This arrangement is particularly useful when more than one type of fuel is used at the same location.

Another example of a mnemonic device 10 embodying the present invention is shown in Figs. 4 and 5. In this example, the device 10 is essentially a flexible flat disk 24 having a curved lip 26 extending angularly from the bottom of the disk, and a curved notch 28 at one edge of the disk. The top and bottom edges of the disk, as viewed in Fig. 4, may be bent upwardly to form a curved trough to direct fluid, such as oil, through a filler opening in an engine or machine. When bent, the curved lip is deformed to a smaller radius, and when inserted into a hole having a diameter less than the free shape of the lip, expands outwardly into biased contact with the side of the opening. This spring-like action retains the disk 24 in its flexed, or bent, shape, with the right side of the disk, as viewed in Fig. 5, at a higher elevation than the left, or notched side, thereby forming a trough-shaped channel to guide the flow of fluid toward the notch and into the opening. As can be appreciated, in this arrangement the memory-assist device 10 is useful for controlling spills and drips when adding, or replacing, fluids and simultaneously indicating the time, e.g., date, day, week, month or year, when the fluid was added or replaced. Furthermore, this embodiment may be suitably attached by a ring, key chain or other suitable connector to an oil or hydraulic fluid dip stick on an engine or machine.

An alternate means 16 associated with each of the indicants 14 for selectively attaching the mnemonic device 10 to a container is indicated by hidden lines in Fig. 4 and in solid detail in Fig. 5. In this embodiment, the attachment means 16 includes a mechanical button-type snap connector, with a male portion 30 of the snap permanently attached in close proximity to each of the indicants 14. As best shown in Fig. 4, the snap member 30 may be placed immediately under, or on the opposite side of, each of the predefined surface areas 20 associated with a respective one of the indicating marks 14. In this arrangement, the snap connector may be attached directly to a container, and the characteristics of the contents of the container indicated by attaching the female portion of the connector to a selected one of the male portions 30. Alternatively, a plurality of the female portions of the connector could be mounted on the mne-

monic device 10 and a single male portion connected to the container.

In a similar manner, the means 16 associated with each of the indicants 14 for selectively attaching the mnemonic device 10 to a container or other structure may comprise a conventional matable clasp, such as a mechanical spring-closure hook, a hook-and-loop fabric fastener, or other known fastening device. However, whichever fastening device is used, it is essential that the memory-assist device 10 be capable of selective attachment to the container or structure in such a manner that the attachment point, or position, of the device 10 be unambiguously associated with only a single one of the identifying marks 14.

The mnemonic device 10 embodying the present invention may also be used to indicate an operational characteristic of an article itself, such as whether or not it is "in service", "out of service", on "standby", the next service date, or other operational state. In this embodiment, the indicants 14 on the body portion 12 would accordingly separately identify the predefined operational characteristics or states and have a means 16 associated with each of the separate indicants 14. Also, if desired for purposes other than identifying a characteristic of a specific container, the memory-assist device 10 could be attached by one of the above connectors to a fob carried on a key ring.

In the preferred embodiment of the present invention, shown in Fig. 6, the mnemonic device has a body portion consisting of a single planar structure, and is generally indicated by the reference numeral 40. Although preferably having a circular disk shape, the body portion may have an oval, rectangular or other shape. Importantly, the body portion is divided into discreet sectors 42, each of which has a specific indicant 14 unambiguously placed within the boundaries of the sector. As illustrated in Fig. 6, the indicants 14 indicate month of the year, each month being separately placed in a respective sector 42. Also, the mnemonic device 40 has a means 44 associated with each of the indicants 14 for selectively attaching the body portion to a preselected member, for example, a key retainer 46 such as a key chain or key ring. In the preferred embodiment, the means 44 associated with each of the indicants 14 is a simple circular aperture extending through the body portion of the mnemonic device 40 and positioned within each designated sector 42 adjacent the indicia 14 disposed within the respective sector. The body portion of the memory-assist device 40 is easily formed of injection moldable plastic, stamped metal, or other materials. The indicia 14 may be integrally formed with the body portion, i.e., formed at the time of molding or stamping, or imprinted after forming.

By attaching the key chain 46 through a selected aperture associated with one of the indicants 44, the mnemonic device 40 serves to bring to instant recall the month in which a preselected event is scheduled to occur, or a future act carried out. For example, if the next car or truck oil change is due in August, the key

chain 46 is connected through the hole 44 adjacent the "AUG" reference mark. Thus, each time a person uses a key carried on the key chain 46, the mnemonic device 40 will bring "AUG" to the attention of the user, and trigger the user's memory to the fact that an action, e.g., a vehicle oil change, is due in August. Similarly, the indicia 14 could be numbers representing the odometer mileage at which certain actions should be taken. For example, if scheduled maintenance of a vehicle is due at 5000 km intervals, the indicia 14 would be "5000", "10,000", "15,000", etc. Also, as an aid to more specific recall, the side of the body portion opposite the indicia markings may carry the logo or name of a particular service garage, auto dealer, or oil brand.

In all of the above embodiments, it can be seen that it is necessary that the separate means associated with each of said indicants for selectively attaching the body portion to an article, whether the article be a key retainer, container, machine, or other structure, be unambiguously associated with only a single one of the predefined indicants. This enables the mnemonic device embodying the present invention, solely by its point of attachment, to distinctly identify a selected single one of the unique indicants.

### **Industrial Applicability**

The present invention provides an effective and economical tool for assisting the memory in recalling the contents, or characteristic of the contents, of material in a container, or a reminder of the time at which future acts are to be carried out. In the preferred embodiment, the mnemonic device may be conveniently carried in a pocket or purse thereby providing a virtually constant reminder of the message indicated by the selected indicia which is identified by the position at which a key retainer is attached to the mnemonic device. Also, the memory-assist devices are useful as an advertising tool on which appropriate messages or symbols may be appropriately and conveniently displayed. Also, the indicants may be displayed on both sides of the body portion and corresponding advertising displayed in association with the indicants.

Importantly, the mnemonic devices embodying the present invention are easily formable of inexpensive, readily moldable or stamped plastic or metallic materials.

Other aspects, features and advantages of the present invention can be obtained from a study of this disclosure together with the appended claims.

### **Claims**

1. A mnemonic device, comprising:

a body portion comprising a single planar structure having a plurality of predefined indicants disposed thereon, each of said indicants being unique with respect to each other; and

a separate means associated with each of said indicants for selectively attaching said body portion to an article whereby each of said means is unambiguously associated with only a single one of said predefined indicants and the selection of said means for attachment of the body portion to said article distinctly identifies the unique indicant associated with the selected means.

2. A mnemonic device, as set forth in Claim 1, wherein said body portion has a circular disk shape and said means associated with each of said indicants for selectively attaching said body portion to an article consists of a circular aperture adapted to receive a key retainer therethrough.
3. A mnemonic device, as set forth in Claim 1, wherein said device is a flow control utensil and said body portion is integrally formed with said flow control utensil.
4. A device, as set forth in Claim 1, wherein said body portion has a plurality of predefined surface areas each having a respective one of said indicants disposed thereon, and at least a portion of a respective one of each of said separate means associated with each of said indicants is positioned within each of said surface areas.
5. A device, as set forth in Claim 4, wherein said means associated with each of said indicants comprises:
  - an aperture formed in each of said predefined surface areas; and
  - a single detachable connector adapted to extend through a selected one of said apertures.
6. A device, as set forth in Claim 1, wherein each of said separate means associated with each of said indicants comprises a matable clasp member positioned in unambiguous proximity to a respective one of said indicants, and a single mating connector adapted to engage a selected one of said clasp members.
7. A device for selectively indicating a characteristic of an article, comprising:

a body portion having a plurality of predefined indicants disposed thereon; and

a separate means associated with each of said indicants for selectively attaching said device to said article whereby the selected attachment of the body portion to said article distinctly identi-

fies the predefined indicant associated with the selected means.

8. A device for selectively indicating a characteristic of the contents of a container, comprising:

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a volumetric measuring utensil having measuring indicia disposed thereon;

a body portion having a substantially planar surface with a plurality of predefined indicants disposed thereon, said body portion being attached to said measuring utensil; and

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means associated with each of said indicants for selectively attaching said device to said container, said means being disposed at a peripheral region of said planar body portion.

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9. A device, as set forth in Claim 8, wherein said body portion is detachably connected to said volumetric measuring utensil.

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10. A device, as set forth in Claim 8, wherein said means associated with each of said indicants comprises:

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an aperture formed in each of said predefined surface areas; and

a single detachable connector adapted to extend through a selected one of said apertures.

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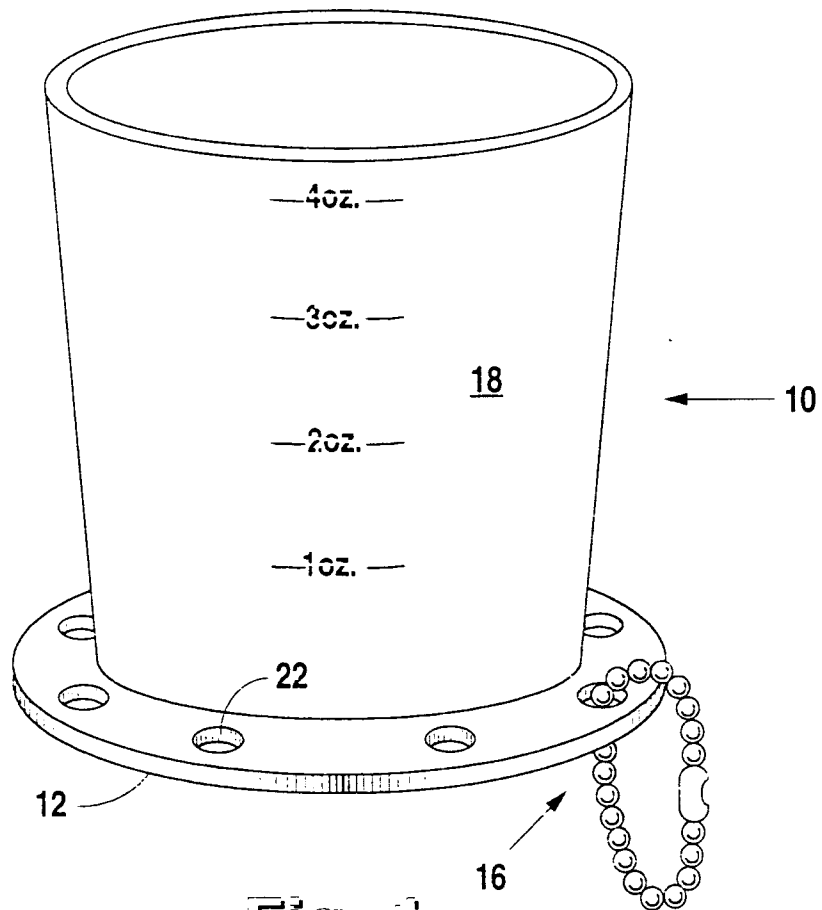


Fig. 1

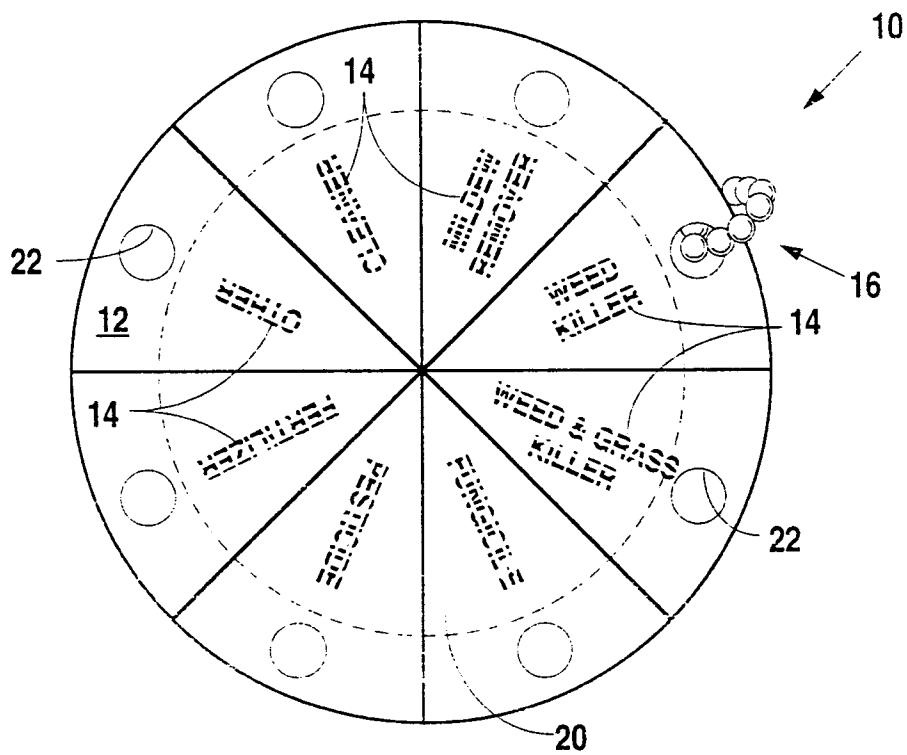


Fig. 2

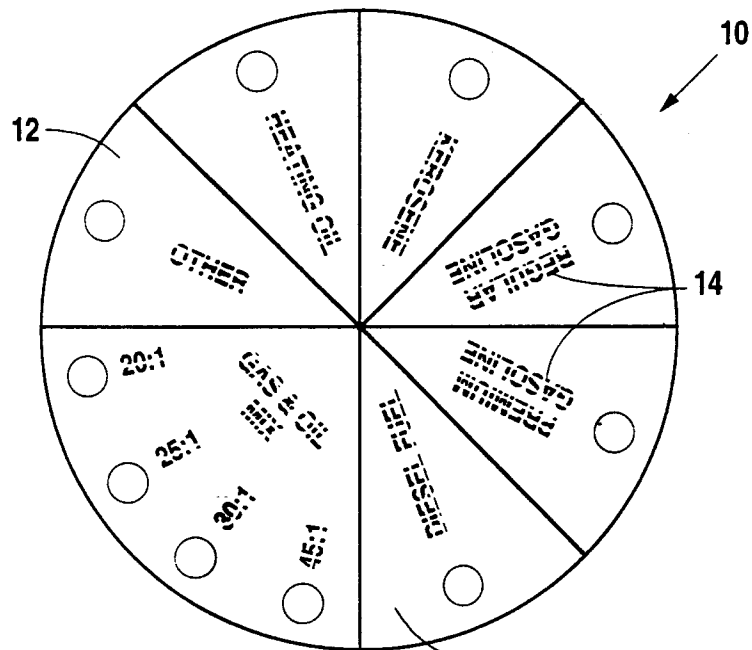


Fig. 3

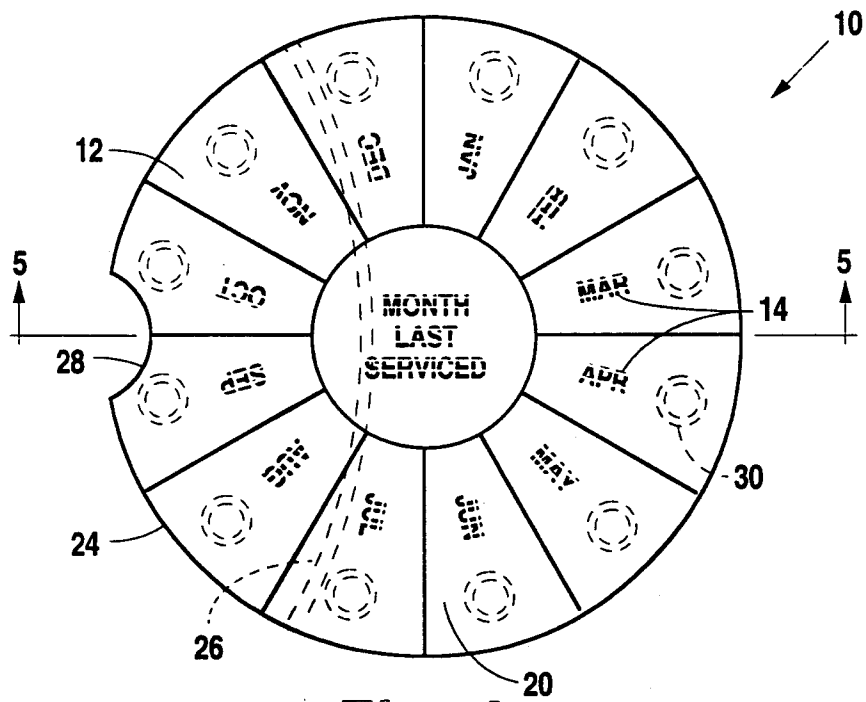


Fig. 4

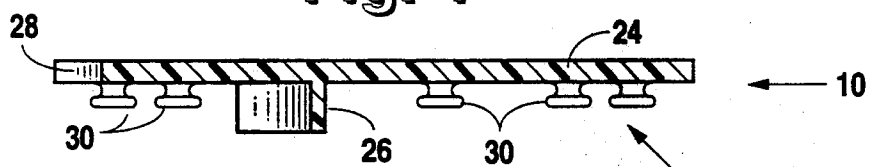


Fig. 5



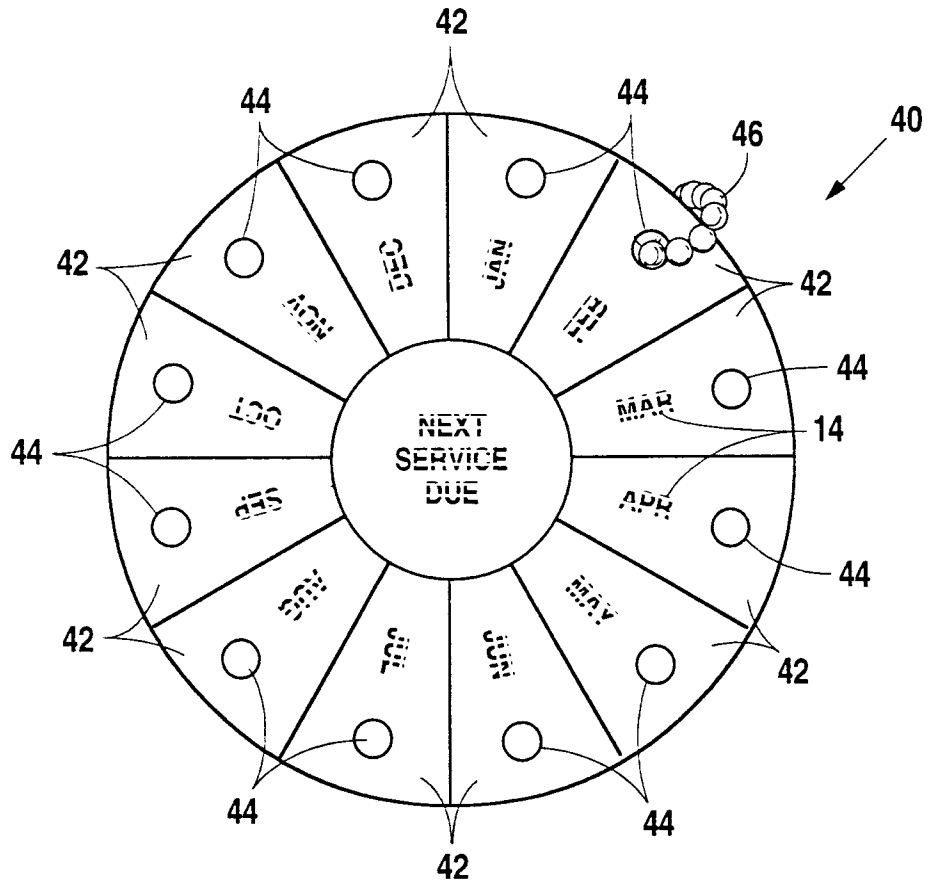


Fig. 6

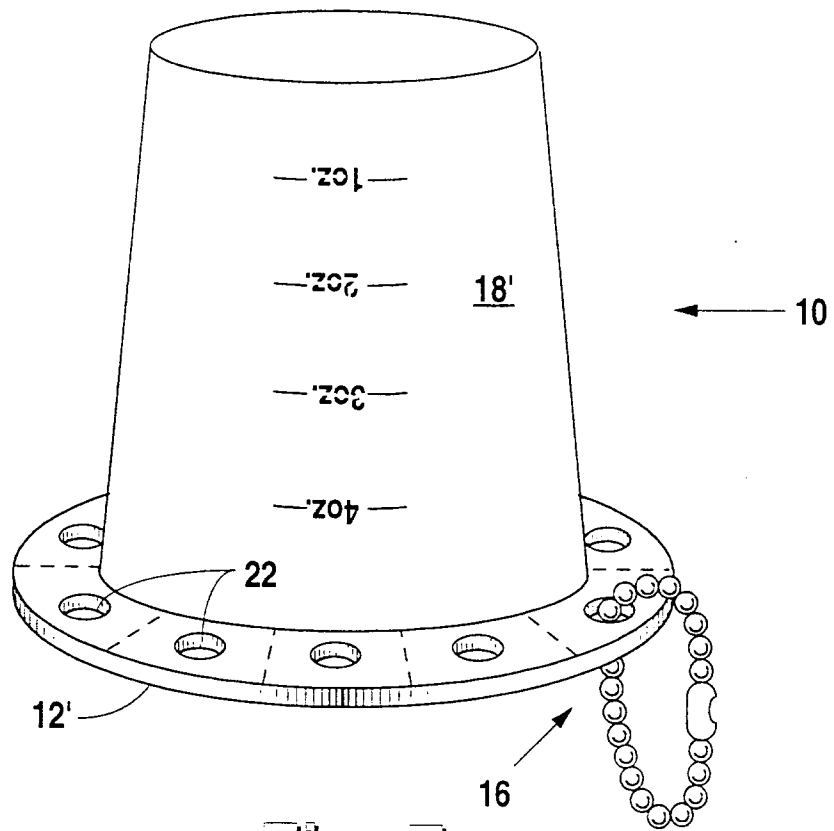


Fig. 7

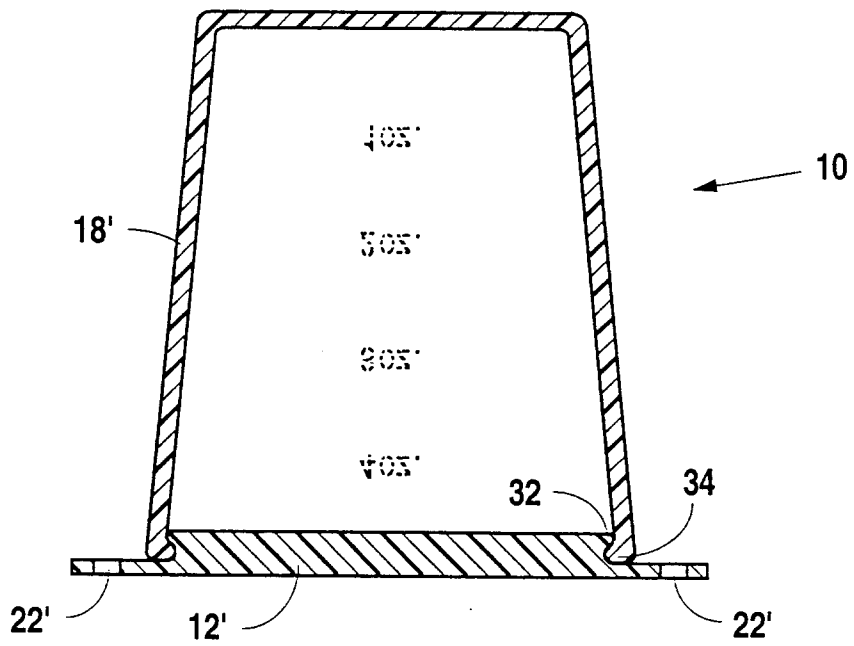


Fig. 8



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# EUROPEAN SEARCH REPORT

Application Number  
EP 96 25 0009

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	DE-U-85 22 043 (BERENDSOHN AG) * the whole document *	1,2,4,5,7	A44B15/00 G09F11/23
X	US-A-2 507 794 (H. F. LONGNECKER) * the whole document *	1,2,4,5,7	
X	US-A-1 948 358 (ANTON REIL) * the whole document *	1,2,4,7	
A	US-A-4 680 882 (JESSE E. WATSON) * column 1, line 6 - line 24 * * column 5, line 41 - line 49 * * figures 1,7 *	6,8,9	
A	DE-U-89 13 262 (MELITTA-WERKE BENTZ UND SOHN) -----		
The present search report has been drawn up for all claims			<b>TECHNICAL FIELDS SEARCHED (Int.Cl.6)</b>  A44B G09F A61J
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>15 October 1996</b>	Examiner <b>Fairbanks, S</b>
<b>CATEGORY OF CITED DOCUMENTS</b> X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... & : member of the same patent family, corresponding document			

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