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(54) FIRST USE FLOW-DELAY MEMBRANE FOR POURABLE CONTAINERIZED MOTOR OILS AND OTHER VISCOUS FLUIDS

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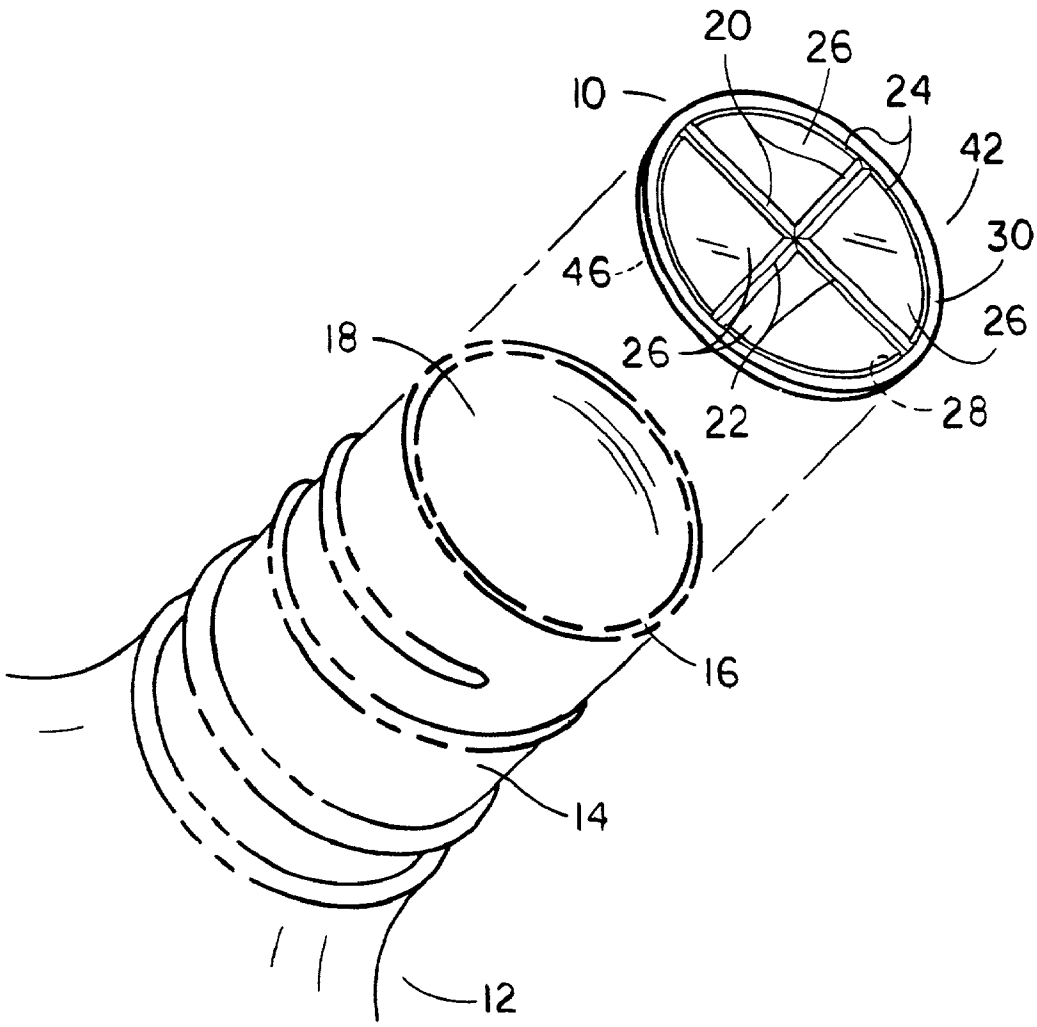
(57) **ABSTRACT**

The present invention is a flexible disc-like membrane that is burstable on demand. The membrane is adapted to accommodate an accommodating container (approximately 32 fl. oz.) for automotive type motor oils and other viscous fluids. The membrane serves to contain a fluid content within a container at first use, while the container (with cap removed) is being positioned for pouring and until the consumer manually initiates the membrane to burst so as to release the contained fluid into an engine or other equipment. The present invention improves container content pour-ability by allowing the consumer to manually initiate the release of a fluid content to a free-flowing action at the proper time as to avoid fluid content spillage without the need for the use of a funnel or other pouring assistance.



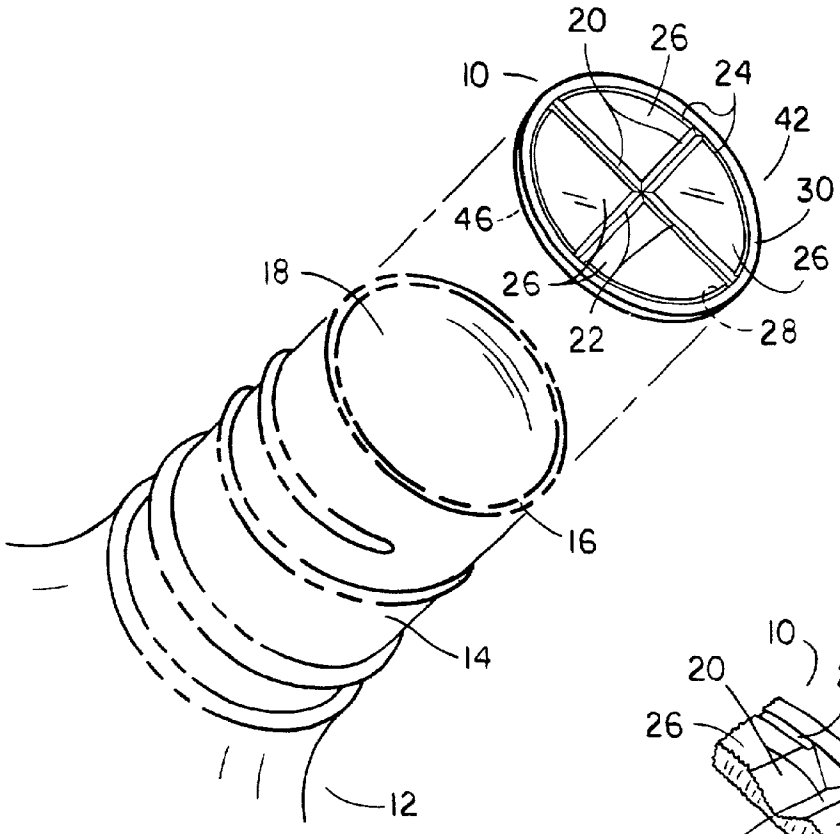


FIG. 1

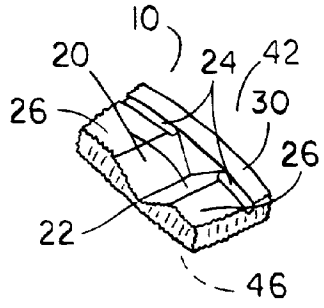


FIG. 2

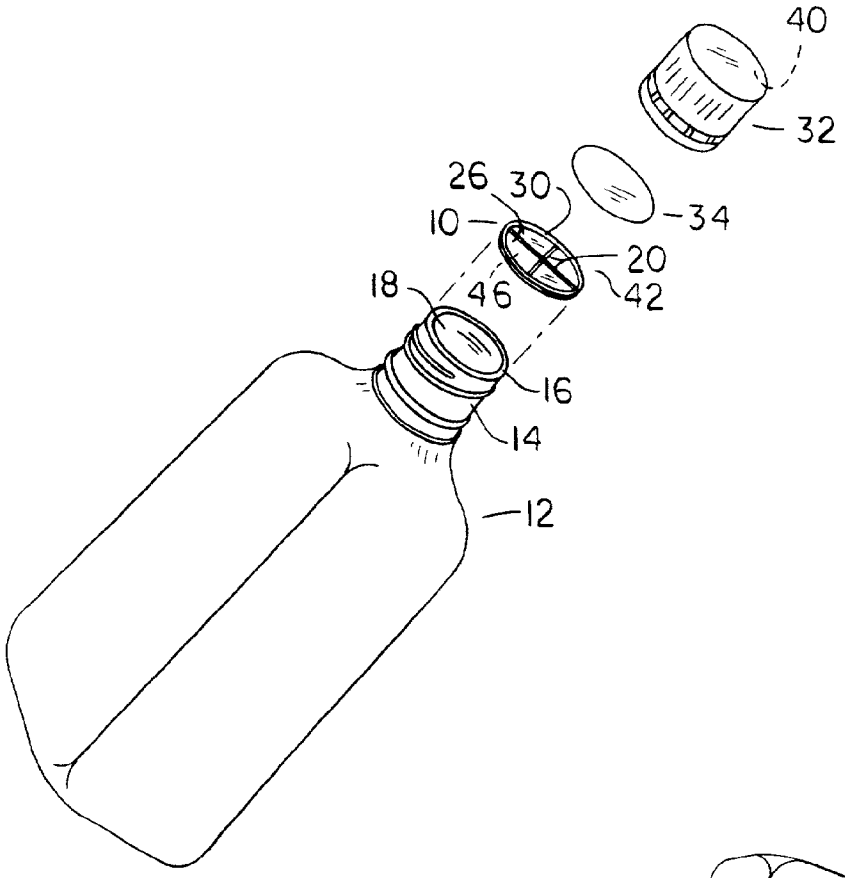

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FIG. 3

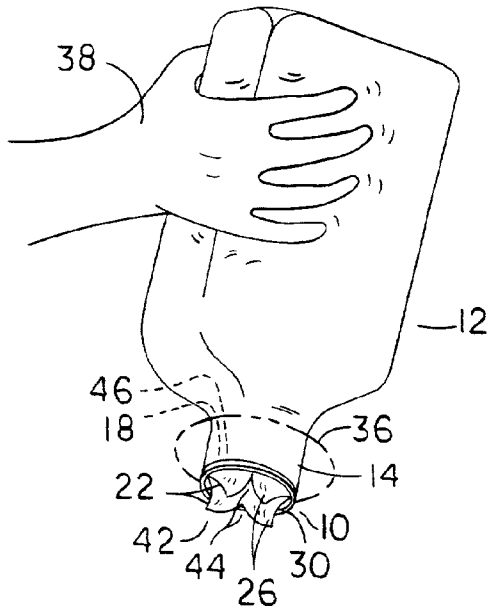
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FIG. 4

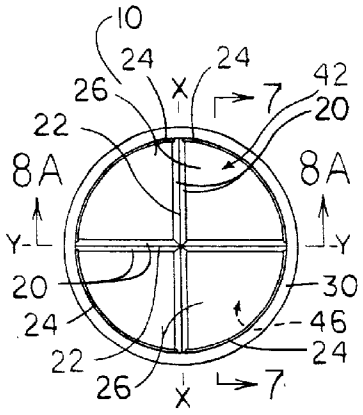

FIG. 5

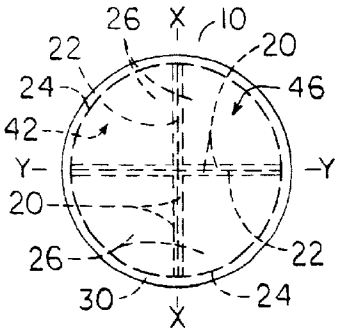

FIG. 6

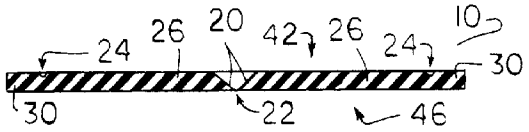

FIG. 7

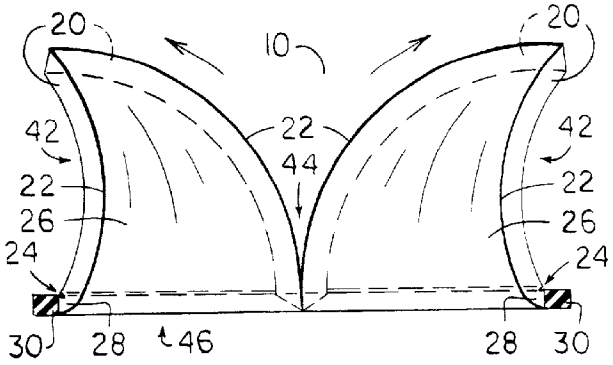

FIG. 8B

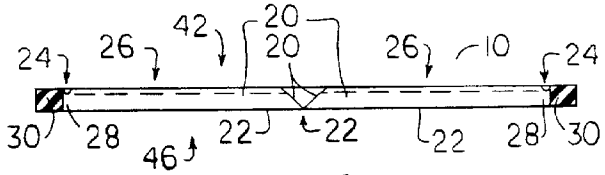

FIG. 8A

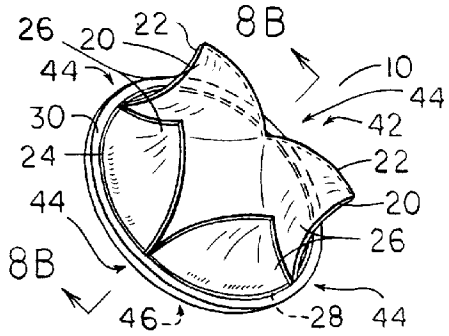

FIG. 9

FIRST USE FLOW-DELAY MEMBRANE FOR POURABLE CONTAINERIZED MOTOR OILS AND OTHER VISCOUS FLUIDS

BACKGROUND OF THE INVENTION

[0001] 1. Field of Invention

[0002] The present invention relates to common containers (approximately 1 U.S. quart—32 fl. oz.) for automotive type motor oils and other viscous fluids where a burstable membrane is adapted to accommodate an accommodating container to postpone the first use free-flowing action of a containerized fluid in a manner that avoids fluid content spillage when pouring the fluid content into an engine or other equipment.

[0003] 2. Description of Prior Art

[0004] The current use of high density polyethylene (plastic) rectangularly shaped containers (approximately 32 fl. oz.) for motor oil and like fluids with an offset or centrally located tubular spout and a circular spout opening has improved ease of pour-ability for consumer usage to some degree over former use of cylindrical composite fiber containers that had no spout or spout opening. The invention of (Doering, U.S. Pat. No. 4,877,142) discloses a polyethylene rectangular container (approximately 32 fl. oz.) for motor oil with an offset tubular spout, as does the design of (Kearse et al., U.S. Pat. No. D352,904) and the design of (Bridger et al., U.S. Pat. No. D337,946). The disclosure of (Frazer, U.S. Pat. No. D314,509) includes a substantially rectangular container with a centrally oriented tubular spout. These containers all have provided some improvement to containerized fluid pour-ability but there is still a need for further improvement, especially at first use when the container is at maximum fullness of content. The prior art rectangular containers mentioned and others still lend themselves to content spillage at the beginning of pouring action because when rotating a container (with the usual cap removed) from the normal position (spout opening upward) to the inverted position for pouring (spout opening downward) there is an uncontrolled outward surge of the container content before the opening end of the container spout can be placed fully within the oil fill or other fluid fill opening of an engine or other equipment. Some of the prior art containers are particularly designed with offset and/or angular spouts to allow pouring to begin by rotating a container from the normal position (spout opening upward) to the horizontal position for pouring (spout horizontal) to align the opening end of the container spout with the engine oil or other fluid fill opening, thereby allowing a slower emptying of the container content to reduce uncontrolled content surge and reduce content spillage. These containers remain vulnerable to first use content spillage at the beginning of pouring, partially because of the containers' fullness of content and partially because of obstructions encountered on the engine or other equipment (hoses, belts, brackets, etc.). Most engines have fluid fill intake openings that are less than accessible to positioning a container fully in a pouring position (inverted or horizontal) to begin pouring before content spillage can occur. In most cases only after a portion of the container contents have been emptied can the container be handled with relative ease, as when the contents of a container are only partially emptied at the first use application, i.e. the pouring action of a container content is stopped before emptying all of the content at the first use application, at some later time the pouring action is re-started with the unused content of the container for a second application with minimal chance of content spillage for the second application. Therefore it is still the first use of the individual container that is most likely to cause content spillage without the use of a funnel or other pouring assistance.

[0005] The invention of (Maguire, et al., U.S. Pat. No. 5,419,467) discloses a two-piece on/off pouring spout able to be coupled to some types of common containers for motor oil or like fluids. This prior art is relatively inexpensive and improves container content pour-ability by allowing the container to be inverted before the content flow is released, but this invention has to be continually coupled and uncoupled from one container to another, i.e. the average automotive engine oil change usually requires 3 to 5 separate (32 fl. oz.) oil containers. In addition, this invention as with funnels or other pouring assistance devices will retain an oily film which has to be continually cleaned of product oil or like fluid and further has to be continually cleaned of dust, and foreign particles that tend to settle an oily surfaces.

[0006] In the case of small engines such as lawn mowers or other equipment where the oil fill intake opening is smaller than the average 32 fl. oz. container spout opening and where such equipment requires only one or less than one 32 fl. oz. container of oil to fill the equipment, the present inventions' primary use (first use delay of fluid content free-flow) may be by-passed if desired. Puncturing (popping-open) the flow delay membrane (of an accommodating container) inwardly with thumb or forefinger after the container cap removal and before positioning the container for pouring will allow the container to be used in the conventional manner, using a funnel or some form of pouring assistance to guide the uncontrolled content surge when pouring the fluid content. Even when the primary use of the flow delay membrane is occasionally by-passed, the present invention serves a secondary function by replacing and serving as the usual seal for the container when the container is originally filled, sealed and capped. However most oil and related fluid container manufacturers now produce container sizes specifically for small engines such as a 20 fl. oz. container for lawn mowers and like equipment.

[0007] The intended consumer usage of the present invention is automotive and industrial by improving containerized oil and related fluid pour-ability, but other uses may apply. The present invention can be manufactured and applied inexpensively enough to be used once and then discarded with the accommodating container when emptied. Most motor oil and like fluid containers are emptied at first use, i.e. the average automotive engine crankcase capacity for oil fill is from 3 to 5 U.S. quarts (96 fl. oz. to 160 fl. oz.), thus in the case of a 4½ U.S. quart (144 fl. oz.) capacity engine oil fill, 4 individual 1 U.S. quart (32 fl. oz.) accommodating containers would be emptied at first use and a 5th 1 U.S. quart (32 fl. oz.) accommodating container is only partially emptied at the first use. In this case the consumer temporarily recaps the partially emptied 5th container until the next use. The 5th partially emptied container can later be uncapped and then completely emptied with far less chance of content spillage during a second use because of the previously removed quantity of oil at the first use of the 5th container even though the flow delay membrane of the 5th container was ruptured at the first use of the 5th container.

SUMMARY OF THE INVENTION

[0008] The present invention is a first use flow delay membrane to postpone the first use free-flowing action of a pourable viscous fluid (motor oil and other fluids) from an accommodating container (approximately 1 U.S. quart—32 fl. oz.), until such container can be properly positioned for pouring as to avoid fluid content spillage without the need for the use of a funnel or other pouring assistance device. The flow delay membrane serves as a temporary diaphragm by blocking the container content free-flow while the consumer inverts the container (positions the container spout opening end downward) and until the consumer can place the container spout opening end fully within the oil fill or other fluid fill intake opening of an engine or other equipment, allowing the consumer to initiate, on demand, the rupture of the membrane, thereby allowing the free-flow action of the fluid content to begin after the accommodating container is properly positioned for pouring.

[0009] The flow delay membrane is a flexible, circular, disc-like membrane that includes radial grooves and diametric grooves and further includes separation seams along the diametric grooves for the membrane to be ruptureable (burstable) on demand. The present invention is diametrically dimensioned to accommodate the variant spout opening diameters of random variable types of containers (usually but not limited to 32 fl. oz.). A fluid filled and cap sealed accommodating container having the flow delay membrane in place is opened (container cap removed), thereby exposing the top side of the flow delay membrane intact, the container is then properly positioned for pouring. The consumer can, at this point, manually compress (squeeze) the container to pressurize the fluid content within the accommodating container, which in turn pressurizes the inside (bottom side) of the flow delay membrane causing the membrane to yield (rupture) radially outward from the diametric center of the membrane along the separation seams, thus releasing the gravity free-flow of the previously restricted container fluid content directly into the fluid fill opening of an engine or other equipment, thereby avoiding undesired content spillage and eliminating the need for the use of a funnel or other pouring assistance device.

[0010] The present invention is sufficiently inexpensive to be used once and then disposed of along with the accommodating container when emptied; can replace the usual seal (leak seal) of the accommodating container; and further does not interfere with the usual capping (cap closure) material or process of the accommodating container. Accordingly several objects and advantages of the present invention are to provide:

[0011] (a) A flow delay membrane that is adapted to the usual spout opening end rim of a motor oil or other viscous fluid common container.

[0012] (b) A flow delay membrane that can replace some types of usual seals (plastic or composite fiber) that are sometimes placed snuggly within and flush to the inside top of the usual cap of the container, and a flow delay membrane that can replace other types of usual seals (plastic, composite fiber, or metallic foil) that are sometimes affixed to the container usual spout opening end rim (for sealing only) at the time of the container filling and capping process.

[0013] (c) A flow delay membrane that can be incorporated into a common container for motor oil or other viscous fluids at the time of the container filling without changing the usual filling, sealing and capping process that the fluid filling manufacture uses to originally fill, seal and cap the container.

[0014] (d) A flow delay membrane that serves to avoid content spillage when pouring a fluid content, and a flow delay membrane that eliminates the need for the use of a funneling (flow guiding) device or other supplementary pouring assistance when pouring a fluid content.

[0015] (e) A flow delay membrane that improves pour-ability of a contained viscous fluid from an accommodating container at first use by delaying the natural free-flowing action of the contained fluid until, (with the usual cap removed) the container can be rotatively inverted (spout opening end positioned downward) and until the container can be maneuvered to having the container spout opening end being placed fully within the fluid fill opening of an engine or other equipment.

[0016] (f) A flow delay membrane whereby the consumer can manually initiate the free-flowing action of the contained fluid from an accommodating container, at the consumer's readiness, directly into the fluid fill opening of an engine or other equipment.

[0017] (g) A flow delay membrane that can be manufactured and applied cheaply enough to be discarded along with the accommodating container once the container contents have been emptied.

[0018] (h) A flow delay membrane that allows the normal air flow into an accommodating container where the normal airflow helps to facilitate a container content free-flow normally from a common container, hence normal air flow being allowed into the accommodating container by way of the open flow delay membrane once the accommodating container has been positioned for pouring and the flow delay membrane has been ruptured, and a flow delay membrane that can be by-passed (if occasionally desired) by punching through the membrane with thumb or forefinger before positioning the accommodating container for pouring to enable the use of the accommodating container in the conventional manner by employing a supplementary pouring assistance device.

[0019] A further object and advantage of the present invention is to provide a flow delay membrane that becomes secured against the inside top of the usual cap of an accommodating container by the usual capping of the accommodating container when the fluid filling manufacturer factory seals (caps) the container, whereby the flow delay membrane cannot be accidentally or intentionally ruptured before the factory emplaced cap is removed by the consumer. These and other objects and advantages will become apparent from the detailed description and drawings, which follow.

BRIEF DESCRIPTION OF THE DRAWINGS

[0020] **FIG. 1** is a perspective view of the flow delay membrane and a phantom outline perspective of the spout, spout opening and end rim of an accommodating container

(partially shown container) for motor oil or related fluid (approximately 32 fl. oz.) to which the flow delay membrane is projected to be attached.

[0021] **FIG. 2** is a broken-out partial view on an enlarged scale of the flow delay membrane perspective of **FIG. 1** at a V-groove end.

[0022] **FIG. 3** is a view of an accommodating container for motor oil or related fluid (approximately 32 fl. oz.), the flow delay membrane projected to be attached to the accommodating container, a container usual seal and a container usual cap, all in an exploded perspective.

[0023] **FIG. 4** is a perspective of an accommodating container (approximately 32 fl. oz.) for motor oil or related fluid, the flow delay membrane being attached in place to the accommodating container, the accommodating container being hand held with the accommodating container in the inverted position for pouring (spout opening end downward) and with the spout opening end being fully within a motor oil or other fluid fill opening, (fluid fill opening shown in phantom outline) while the container is being manually compressed (squeezed) by hand to pressurize the container contents, thereby causing the flow delay membrane to rupture (pop-open). The flow delay membrane is shown ruptured (popped-open), the container content (not shown).

[0024] **FIG. 5** is a plan view of the top of the flow delay membrane showing the flaps, the separation seams and the circumference ring formed by the V-grooves communicating with the U-grooves (the membrane shown intact).

[0025] **FIG. 6** is a plan view of the bottom of the flow delay membrane of **FIG. 5** (all distinguishing features hidden).

[0026] **FIG. 7** is a section on an enlarged scale of the flow delay membrane (off centered view) shown in tact as indicated by line **7-7**.

[0027] **FIG. 8A** is a section on an enlarged scale of the flow delay membrane (centered view) shown intact as indicated by line **8A-8A**.

[0028] **FIG. 8B** is a section on an enlarged scale of the flow delay membrane (centered view) shown ruptured (popped-open) as indicated by line **8B-8B**.

[0029] **FIG. 9** is a perspective view of the flow delay membrane shown ruptured (popped-opened).

DETAILED DESCRIPTION OF THE INVENTION

[0030] As illustrated and described by the drawings and other reference the present invention is a substantially flat disc-like diaphragmatic membrane **10**. Membrane **10** is flexible and is adapted to accommodate an accommodating container **12**. Container **12** having an approximate capacity of one U.S. quart (32 fl. oz.) for containing motor oil or other fluids. Membrane **10** is accommodated at the end of a threaded tubular spout **14** of container **12** (**FIGS. 1 and 3**). More specifically, membrane **10** is permeated to a circular rim **16** of spout **14** where rim **16** defines and surrounds a circular opening **18** which is the fill or discharge opening at spout **14** of container **12** (**FIGS. 1 and 3**). Container **12** is normally positioned for filling, transport and storage with opening **18** of spout **14** facing upward and where opening **18** is normally regarded as the top of the container. Container **12** is normally comprised of plastic (polyethylene) and is usually rectangular in shape. Membrane **10** is comprised of a synthetic latex rubber or rubber-like material that is compatible with common automotive fluids such as motor oil and related fluids and is compatible with container **12** (the accommodating container) to which membrane **10** is to be accommodated. An average size for a preferred embodiment of the present invention is approximately $^{15}/_{16}$ inches in diameter and approximately $^{3}/_{64}$ inches in thickness (major portion thickness), but not limited to these dimensions. The true diameter, thickness and relative shape of the present invention is dictated by the variable spout opening end sizes and spout opening end shapes of the many diverse types of containers (approximately 32 fl. oz.) to which the present invention is to be adapted.

[0031] Molded into and defining the topside of membrane **10** is a plurality of diametric grooves **20** (preferred embodiment) along a plurality of axes of membrane **10** where grooves **20** intersect each other at the diametric center of membrane **10**. For illustration purposes, grooves **20** are shown along the X-axis and the Y-axis of the preferred embodiment of membrane **10** (**FIGS. 5 and 6**) with grooves **20** continuing the major portion diameter of membrane **10** (**FIGS. 1, 3, 5, 6, 8A, 8B** and **9**). From the diametric center of membrane **10**, grooves **20** are in a radiate form extending outwardly and are V-shaped in cross section in the preferred embodiment but not limited to this form or shape. The depth of grooves **20** is through the major portion thickness of membrane **10** forming a plurality of separation seams **22** along and relative to grooves **20**, with seams **22** being the remaining portion thickness of membrane **10** along grooves **20**. The preferred V-shape (in cross section) of grooves **20** serves to create a clean straight debris free separation along the longitudinal centers of grooves **20** at seams **22** when membrane **10** is ruptured (popped-open). Grooves **20** and seams **22** shown in (**FIGS. 1, 2, 5, 6, 7, 8A, 8B** and **9**). Seams **22** shown intact (**FIGS. 1, 2, 5, 6, 7,** and **8A**) and shown separated (**FIGS. 4, 8B** and **9**). In combination with grooves **20** there is molded into membrane **10** a plurality of radial grooves **24** (U-shape in cross section) in communication with grooves **20** (**FIGS. 1, 2, 5, 6, 8A, 8B** and **9**) which forms and defines a plurality of symmetrically radiate and substantially triangular pop-open flaps **26** (flaps **26** shown in all FIGS.). The preferred U-shape of grooves **24** serves to define and facilitate of plurality of bending bases **28**, one base **28** at each flap **26** of membrane **10**. Bases **28** at flaps **26** of membrane **10** where membrane **10** is shown ruptured (popped-open), shown in (**FIGS. 8B and 9**). Bases **28** at flaps **26** of membrane **10** where membrane **10** is shown intact, shown in (**FIGS. 1 and 8A**). Grooves **20** communicating with grooves **24**, in addition to defining flaps **26**, serve to form and define a circumference ring edge **30** including and encircling membrane **10** (ring edge **30** shown in all FIGS.). The depth of grooves **24** is shallow leaving the major portion thickness of membrane **10** at base **28** (**FIGS. 8A and 8B**) to insure that flaps **26** do not separate from ring edge **30** at base **28** when membrane **10** is ruptured, membrane **10** shown ruptured (**FIGS. 8B and 9**).

[0032] Membrane **10** is adapted to accommodate an accommodating container, (after the container has been normally filled with a fluid) by permeating ring edge **30** of membrane **10** flush to rim **16** at spout **14** of container **12** thereby sealing opening **18** of the container spout and

allowing the normal capping (process and material) of container **12** (filling and capping not shown). Membrane **10** **(FIGS. 1 and 3)** is shown in the projected attaching position to container **12**, the attached position of membrane **10** to container **12** is shown in **(FIG. 4)** with membrane **10** ruptured. A threaded usual cap **32** **(FIG. 3)**, when threadedly mated to spout **14** there provides compression to the accommodated membrane (membrane **10**) at a top-side **42** of membrane **10** (top-side **42** shown all FIGS.) further sealing container **12** and thereby preventing membrane **10** from being ruptured before cap **32** is removed by the consumer, (cap **32**, not shown mated to spout **14**). Membrane **10** can serve as and replace a thin wafer-like usual seal **34** **(FIG. 3)**. Seal **34** in some applications is a plastic or composite fiber material that is placed snuggly inside cap **32** before container **12** is capped. In other applications seal **34** is a plastic, composite fiber, or metallic foil material that is affixed to rim **16** at spout **14** of container **12** before container **12** is capped. Both applications of seal **34** are for sealing only, (applications of seal **34** not shown).

[**0033**] Upon removing cap **32** from the accommodating container, membrane **10** serves to delay the gravity free-flow of the container fluid content (content not shown) while the accommodating container is being inverted and maneuvered to having the opening end (opening **18**) of spout **14** fully within a fluid fill usual opening **36** of an engine or other equipment, which is the proper pouring position for the pouring action of the container fluid content to begin conveniently **(FIG. 4** opening **36** in phantom outline). Once the container is maneuvered fully into a proper pouring position, the consumer can then manually initiate membrane **10** to rupture thereby releasing the free-flow of the container content **(FIG. 4** shows membrane **10** as ruptured, free-flow of container content not shown). Content spillage from a common container (without membrane **10**) occurs mostly at first use when the container is at peak fullness and while the container is being maneuvered and is usually encountering obstacles on the engine or other equipment, i.e. hoses, belts, brackets etc. (content spillage and obstacles not shown).

[**0034**] The present invention prevents the gravity free-flow of the container fluid content while container **12** is being inverted and maneuvered fully into a proper pouring position until, at the consumers' readiness, container **12** is manually compressed (squeezed) by a consumer hand **38** **(FIG. 4)** to initiate the rupture of membrane **10** thereby allowing the container fluid content free-flow to begin (container content free-flow not shown). Manually compressing (squeezing) container **12** pressurizes the container fluid content (content not shown) thereby transferring pressure to a bottom-side **46** of membrane **10** (bottom-side **46** shown all FIGS.) causing the membrane to rupture at and along seams **22**, whereby flaps **26** of membrane **10** pop-open radially outward from the diametric center of membrane **10**, membrane **10** shown popped-open **(FIGS. 4, 8B** and **9)**. The outward pop-open action of flaps **26** causes grooves **24** to close, in cross section **(FIG. 8B)**, and in turn assists in the radial bending action of flaps **26** at bases **28** further allowing the outward swing travel of flaps **26** within membrane **10** when the membrane is ruptured **(FIG. 8B)**. Once container **12** is properly positioned for pouring and membrane **10** is ruptured (popped-open), membrane **10** then releases the fluid content of container **12** to a gravity free-flowing action (content free-flow not shown) for complete or partial emptying of container **12** at the first use of the accommodating container. In the case of partial emptying of the accommodating container at the first use, container **12** can be inversely positioned from the pouring position (the spout opening end downward) back to the normal position (the spout opening end upward) to end the first use before complete emptying of container **12** with far less chance of content spillage because of reduced content at the end of the first use, and container **12** can be later re-used at a second or further use with less chance of content spillage at the second use because of reduced content within container **12** at the start of the second use even though membrane **10** was previously ruptured at the start of the first use of container **12** (emptying of container **12** not shown).

[**0035**] Membrane **10** of the accommodating container can be manually by-passed, (after the usual cap removal of the accommodating container) where the consumer manually and inwardly punches-open membrane **10** of container **12**, using thumb, forefinger or other object to enable the use of the accommodating container conventionally without membrane **10** intact at the first use of container **12**, if occasionally desired, (punching-open membrane **10** of container **12** not shown). Membrane **10** cannot be prematurely ruptured through inadvertently or intentionally compressing the accommodating container (manually or otherwise) as long as the factory emplaced cap **32** remains threadedly mated to spout **14** of container **12**, since an inside top area **40** **(FIG. 3)** of cap **32** normally compresses against a top-side **42** **(FIG. 3)** of membrane **10** when cap **32** is threadedly mated to spout **14** of the accommodating container thereby preventing the untimely rupture of membrane **10** (cap **32** not shown mated to spout **14** of the accommodating container).

[**0036**] The normal airflow into the spout opening of any of the common containers mentioned and others assist in allowing the outward natural free-flow of the fluid content from a common container when the container usual cap is removed and the container is inverted (inward air flow and outward content free-flow not shown). When container **12** with membrane **10** in place and intact is inverted; properly positioned for pouring; and membrane **10** is manually initiated to rupture, membrane **10** then allows the normal air flow into container **12** through a plurality of vertexial areas **44** formed by flaps **26** of membrane **10** when ruptured **(FIGS. 4, 8B** and **9)** to assist in the outward natural free-flow action of the accommodating container fluid content when pouring (air flow and fluid content free-flow not shown).

[**0037**] Now having described a preferred embodiment of the present invention this description should not be construed as limiting the scope of the invention but as illustrations of the preferred embodiment, for example, the V-shaped grooves and the U-shaped grooves (in cross section) of the flow delay membrane may be of different shapes or depths; the flow delay membrane may be composed of other material; the pop-open flaps of the flow delay membrane may be of other or uncommon shapes without departing from the intended purpose and scope of the present invention. Therefore the spirit and scope of the invention should be limited only by the appended claims and their legal limitations rather than by the illustrations and descriptions given.

I claim:

1. A substantially flat body of material having a perimetrical portion and a core portion therein, for providing assis-

tance in pouring a viscous fluid from an accommodating container, therewith said body of material comprising:

(a) a diaphragm membrane means wherein said membrane means is adapted to accommodate said container at a substantially circular opening of a tubular spout therein, for providing a seal to restrict said fluids within said container, thereby replacing the usual seal of said container; and

(b) said membrane means is adapted to accommodate said container at said opening therein, for allowing the usual closure of said container;

(c) wherein the improvement comprises a plurality of yielding flap means within said membrane means for allowing said membrane means to yield in an outward radiate manner therefrom said core portion thereupon primary employment of said membrane means, henceforth allowing said membrane means to be nonrestrictive, thereby releasing said fluid therein said container to a natural flowing action therefrom said container in a timely convenient manner thereupon said employment of said membrane means, thus preventing nuisance spillage of said fluid, therefore rendering conventional supplementary pouring relief articles to be nonessential.

2. The body of material according to claim 1 wherein said membrane means comprises a pliable material, thereby allowing said flap means to bend outwardly in a radial manner thereupon said employment of said membrane means.

3. The body of material according to claim 1 wherein said membrane means is a solid, disc-shaped configuration comprising a circumferential portion, a central portion and two substantially parallel opposing sides and includes on one side a plurality of diametrical grooves wherein said diametrical grooves communicate each other and said central portion in an intersecting manner and said diametrical grooves communicate said circumferential portion in an intersecting manner, therewith including on said one side respective said diametrical grooves, a plurality of separation seams whereby said separation seams provide a predetermined yielding course of said flap means within said membrane means.

4. The body of material according to claim 3 wherein said membrane means further includes on said one side a plurality of substantially radial grooves wherein said radial grooves communicate said diametrical grooves in an intersecting manner, whereas said radial grooves parallel said circumferential portion respectively in a concentric manner therefrom said central portion, whereby said radial grooves provide assistance in the outward bending action of said flap means thereupon said employment of said membrane means.

5. The body of material according to claim 1 wherein the diameter of said membrane means is adapted to accommodate said container at a variable rate diameter of said opening, wherein normally said membrane means is approximately 15/16 inches in diameter to accommodate a usual diameter of said opening.

6. The body of material according to claim 1 wherein the major portion thickness of said membrane means is adapted to accommodate a variable rate diameter of said membrane means, wherein normally said thickness of said membrane means is approximately 3/64 inches being proportional to a diameter of about 15/16 inches therein said membrane means.

7. A substantially flat body of material having a perimetrical portion and a core portion therein, for providing assistance in pouring a motor oil and like fluid therefrom a container of variant capacities for containing said fluid, wherein the usual of said capacities is approximately 32 fluid ounces, therewith said body of material comprising:

(a) a diaphragm membrane means wherein said membrane means is durably affixed to said container at a substantially circular fill and discharge usual opening of said container at the open end of a tubular spout therein said container, said membrane means is affixed to said container at a substantially circular rim of said opening thereafter filling said container with said fluid, thus sealing said fluid within said container, thereby allowing said membrane means to supersede the usual seal of said container; and

(b) said membrane means is affixed to said container at said rim of said opening wherein said membrane means is fitted flush with the perimeter of said rim, thereby allowing the normal capping of said container;

(c) wherein the improvement comprises a plurality of yielding flap means within said membrane means for allowing said membrane means to fracture radiately outward therefrom said core portion thereupon first use of said membrane means, henceforth allowing said membrane means to release said fluid previously restricted therein said container, to a gravity free-flowing action therefrom said container in a timely convenient manner thereupon first use of said membrane means, thus preventing random scatter of said fluid, therefore obsolescing the usual flow-guiding and flow-controlling pouring assistance supplements.

8. The body of material according to claim 7 wherein said membrane means comprises a flexible material, thereby allowing said flap means to become radially curved in an outward bending manner therefrom said core portion thereupon said first use of said membrane means.

9. The body of material according to claim 7 wherein said membrane means is a solid, substantially circular body comprising a circumferential portion, a central portion and two substantially parallel opposing sides and includes on one side a plurality of diametrically linear grooves along the major portion diameter of said circular body, wherein said Linear grooves communicate each other and said linear grooves communicate said central portion in an intersecting course, and wherein said linear grooves communicate said circumferential portion in an intersecting course, therewith including on said one side respective said linear grooves a plurality of separation seams whereby said separation seams provide a predesignated separating form of said flap means within said membrane means.

10. The body of material according to claim 9 wherein said membrane means further includes on said one side a plurality of radially curved grooves, wherein said curved grooves communicate said linear grooves in an intersecting course, whereas said curved grooves parallel said circumferential portion respectively in a concentric manner therefrom said central portion, and said curved grooves provide assistance in the outward bending action of said flap means thereupon said first use of said membrane means.

11. The body of material according to claim 7 wherein said membrane means is normally about 15/16 inches in diameter.

12. The body of material according to claim 7 wherein said membrane means is normally about 3/64 inches in thickness.

13. A substantially flat body of material having a perimetrical portion and a core portion therein, for providing convenience in pouring a motor oil and like fluid therefrom a container of variable measure capacities for containing said fluid, wherein the usual of said capacities is about 32 fluid ounces, therewith said body of material comprising:

(a) a diaphragm membrane means wherein said membrane means is permanently secured to a usual fill and dispense opening of said container at an unsealed end of a tubular spout therein said container, said membrane means is secured to said container at a circumference rim of said unsealed end of said tubular spout thereupon filling said container with said fluid, subsequently sealing said fluid within said container, thereby allowing said membrane means to serve as and replace the usual seal of said container; and

(b) said membrane means is secured to said container at said rim wherein said membrane means is adapted to equal the outside diameter of said rim allowing the usual capping of said container;

(c) wherein the improvement includes a plurality of yielding flap means within said membrane means for allowing said membrane means to fissure radiately outward therefrom said core portion thereupon first use of said membrane means, hence allowing said membrane means to release said fluid therein to a free-flow pouring action therefrom said container in a timely, convenient manner thereupon said first use of said membrane means, thereby avoiding undesired spillage of said fluid, and providing an alternative for individual extension items of pouring assistance.

14. The body of material according to claim 13 wherein said membrane means is composed of a synthetic latex rubber that is compatible with said container and said fluid, wherein said rubber allows said flap means to deflect radially outward therefrom said core portion thereupon said first use of said membrane means

15. The body of material according to claim 13 wherein said membrane means is a solid, substantially circular form comprising a circumferential portion, a central portion and two substantially parallel opposing sides, therewith including on one side a plurality of diametrically straight grooves continuing the major portion diameter of said circular form, wherein said straight grooves communicate each other in an intersection course and said straight grooves collectively communicate said central portion in an intersecting course and wherein each end of said straight grooves communicate said circumferential portion in an intersecting course, therewith including on said one side a plurality of separation seams respective to the long axial center of said straight grooves, wherein said separation seams provide a predetermined sectoral yielding path of said flap means within said membrane means.

16. The body of material according to claim 15 wherein said membrane means further includes on said one side a plurality of radially circular grooves wherein said circular grooves communicate each end of said straight grooves in an intersecting course, whereas said circular grooves parallel said circumferential portion concentrically therefrom said central portion, wherein said circular grooves assist in the outward bending action of said flap means thereupon said first use of said membrane means.

17. The body of material according to claim 13 wherein the diameter of said membrane means is adapted to accommodate variable rate diameters of said rim, wherein the usual diameters of said membrane means is approximately 15/16 inches to accommodate the usual outside diameter of approximately 15/16 inches of said rim.

18. The body of material according to claim 13 wherein the major portion thickness of said membrane means is adapted proportionally to variable diameters of said membrane means, wherein the usual diameter of said membrane means is approximately 15/16 inches, therewith the usual major portion thickness of said membrane means is approximately 3/64 inches.

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