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Container with rotating hinged lid

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A container with a hinged lid with a rotating function. The lid can be rotated on the hinge to store the lid under the container without detaching the lid from the container while in storage. The hinge is located at the midsection of a flexible extension extending from one side of the lid to the side of the container. The user can rotate the lid on its hinge up to 360 degrees, without detaching the lid. The user can rotate the hinge at a 180-degree angle the lid from its normal closing position to place the lid under the container for easy storage or for food service. Thus the lid never becomes separated from its matching container and therefore the user always has the appropriate lid for the container, and does not have to search for an appropriate lid with each use of a container. The container is made of a durable plastic and is dishwasher, refrigerator, freezer and microwave safe.

**EXMPL-FIGURE:** 1**NO-DRWNG-PP:** 7

**SUMMARY:****BACKGROUND OF INVENTION**

[0001] The present invention is a container having a lid, wherein a rotating hinge to allow for easy storage of the container attaches the lid.

[0002] There are many options for food storage and reheating available on the market. There are containers intended for oven, microwave, and refrigerator storage, which are constructed of a heavy glass. There are disposable plastic dishes as are available for microwave dinners that are intended to be used once and cannot be reused for additional storage or reheating. There are also containers available for long and short-term use for freezing, refrigerating or microwaving leftover food.

[0003] U.S. Pat. No. 5,520,306 issued to Umiker on May 28, 1996 shows a receptacle made of plastic material and having hoop handle connected by integral hinges. Umiker's invention is unlike the present invention because it does not provide a hinged lid that can rotate to the underside of the container, and it is not intended for food storage.

[0004] U.S. Pat. No. 5,941,412 issued to Mahoney on Aug. 24, 1999 shows a detachable hinge system for containers. Mahoney's invention is unlike the present invention because it is detachable and it does not have a mechanism for rotating the lid on a hinge to allow for compact storage of the container and lid together.

[0005] U.S. Pat. No. 6,010,025 issued to Bertani, et al., on Jan. 4, 2000 shows a lid for containers such as tins and the like, having a double line of weakness. Bertani's invention is unlike the present invention because the lid is not hinged, and it does not provide an attached lid that can be stored under the container while still attached.

[0006] U.S. Pat. No. 6,164,485 issued to Hilton on Dec. 26, 2000 shows a container lid. Hilton's invention is unlike the present invention because it is a detachable lid for beverage cups, a hinged member does not attach it, and it cannot be turned on a hinge to be stored under the container while still attached.

[0007] Japanese patent no. 11,070,967 issued to Takamitsu on Mar. 16, 1999 shows a hinged cap on a container. Takamitsu's invention is unlike the present invention because it does not provide a lid or cap that can be rotated along its hinge to place the lid under the container for easy storage.

[0008] None of the related art supplies a container, primarily for food storage, and has a hinged attached lid that can be folded under the container for storage.

**SUMMARY OF INVENTION**

[0009] The present invention is a container with a hinged lid with a rotating function. The lid can be rotated on the hinge to store the lid under the container without detaching the lid from the container while in storage. The rotating portion of the lid is located at the midsection of a flexible extension extending from one side of the lid to the side of the container. The hinge allows the user to rotate the lid up to 360 degrees, without detaching the lid. The user can rotate the hinge at a 180-degree angle from its normal closing position to place the lid the container for easy storage, and food service.

[0010] The lid is attached to the container by a flexible plastic strip, which is bisected by the rotating hinge. The rotating hinge has two intersecting parts, one attached to one half of the flexible plastic strip and the second attached to the second half of the flexible plastic strip. The two intersecting parts of the rotating hinge allow the user to rotate the lid piece a full 360 degrees and cannot be detached from each other.

[0011] In this manner the lid is always attached to the container that it fits. This solves the problem of losing a lid or not finding the correct container for the lid. Yet the receptacle, with its attached lid, can conveniently be stacked for easy storage or loaded into a dishwasher for easy cleaning. The lid and receptacle are made of a plastic that is dishwasher, refrigerator, freezer and microwave safe.

**DRWDESC:****BRIEF DESCRIPTION OF DRAWINGS**

[0012]FIG. 1 shows a side view of the container with the lid closed.

[0013]FIG. 2 shows a side view of the container with the lid open.

[0014]FIG. 3 shows a side view of the container with the lid turned at a 90-degree angle.

[0015]FIG. 4 shows a side view of the container with the lid turned at a 180-degree angle.

[0016]FIG. 5 shows a side view of the container with the lid placed under the container.

[0017]FIG. 6 shows a cutaway top view of the rotating hinge.

**DETDESC:****DETAILED DESCRIPTION**

[0018] The present invention is a container with a lid attached by flexible plastic strap bisected by a rotating hinge. The rotating hinge has two intersecting pieces one on each half of the flexible plastic strip. The rotating hinge allows the user to rotate the lid fully 360 degrees from the position that the lid closes onto the container to the position where the lid can be concisely stored under the container, and back again.

[0019]FIG. 1 shows a side view of the container (10) with the lid (20) closed on the receptacle (30). The lid (20) has the first half of the flexible plastic strip (25) molded to one side. Along the bottom of the lid (20) is an interlocking rim (50) to attach the lid (20) to the receptacle (30) of the container (10). The interlocking rim (50) connects with the extended rim (60) of the receptacle (30). The receptacle (30) has the second half of the flexible plastic strip (35) molded on one side. The first half of the flexible plastic strip (25) is attached to the second half of the flexible plastic strip (35) by intersection at the rotating hinge (40).

[0020] As is shown the interlocking rim (50) and the extended rim (60) create a secure closure between the lid (20) and the receptacle (30). The lid (20), receptacle (30), first and second halves of the flexible strips (25, 35), rotating hinge (40), interlocking rim (50) and extended rim (60) are made of a strong molded plastic that is dishwasher, freezer, refrigerator, and microwave safe. As is shown the rotating hinge (40) allows the container (10) to be used or stored without loss of the lid (20) from the receptacle (30). FIG. 2 shows the container (10) with the lid (20) open from the receptacle (30). Additionally, FIG. 2 shows the first and second halves of the flexible strips (25,35), rotating hinge (40), the interlocking rim (50) and the extended rim (60) as described in FIG. 1.

[0021]FIG. 3 shows the lid (20) turned at a 90-degree angle from the starting position as shown in FIG. 2. FIG. 3 shows the beginning of the process of turning the lid (20) by means of the first half of the flexible strip (25) and the rotating hinge (40) to ultimately store the lid (20) under the receptacle (30). It also shows the second half of the flexible

strip (35), the interlocking rim (50) and the extended rim (60) as described in FIG. 1.

[0022]FIG. 4 shows the lid (20) turned at a 180-degree angle from the starting position as shown in FIG. 2. This is the second step in the process of turning the lid (20) by means of the first half of the flexible strip (25) and the rotating hinge (40) to ultimately store the lid (20) under the receptacle (30). FIG. 4 also shows the second half of the flexible strip (35), the interlocking rim (50) and the extended rim (60) as described with FIG. 1.

[0023]FIG. 5 shows the lid (20) as stored under the receptacle (30). The lid (20) by means of the first half of the flexible strip (25) and the rotating hinge (40) rotates through the steps shown in FIGS. 2, 3, and 4, to the resting or storing position under the receptacle (30). The first half of the flexible strip (25) in this position closes parallel to the second half of the flexible strip (35). FIG. 5 also shows the extended rim (60) as explained with FIG. 1.

[0024]FIG. 6 shows a cutaway close up view of the first and second halves of the flexible strips (25, 35) and the rotating hinge (40). The circular knob (27) of the first half of the flexible strip (25) communicates fixedly with the circular receiver (37) of the second half of the flexible strip (35). The circular knob (27) and circular receiver (37) are the functioning parts of the rotating hinge (40). The circular knob (27) can rotate within the circular receiver (37) to allow the lid (20) to rotate 360 degrees relative to the receptacle (30), as is shown in FIGS. 1-5.

[0025] The receptacle (30) and lid (20) can be used for storage of any item. For example, the receptacle (30) can be used in a garage or workroom to hold nails, screws, drill bits or the like. The receptacle (30) could also be used in a child's room or daycare to hold crayons, markers, play dough, putty or building blocks and the like. The receptacle (30) is not limited to use in the kitchen or storage of food items.

[0026] The present invention is not limited to the sole embodiments described above, but encompasses any and all of the embodiments in the following claims.

#### **ENGLISH-CLAIMS:**

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1. A container, comprising: a receptacle; a flexible strip, communicating with said receptacle; and a lid communicating with said flexible strip.
2. A container as in claim 1, wherein said flexible strip has a first and a second half.
3. A container as in claim 2, wherein said first half and said second half of said flexible strip communicate by means of a rotating hinge.
4. A container as in claim 3, wherein said rotating hinge is constructed of a circular knob at one end of said first half of said flexible strip and a circular receiver at one end of said second half of said flexible strip.
5. A container as in claim 4, wherein said rotating hinge can rotate a full three hundred and sixty degrees.
6. A container as in claim 5, wherein said rotating hinge allows a user to place said lid under said receptacle.
7. A container as in claim 6, wherein said lid fixedly communicates to said receptacle by means of said first half and said second half of said flexible strip.
8. A container as in claim 7, wherein a user can place said lid on top of said receptacle.
9. A container as in claim 8, wherein said receptacle has receiving grooves to attach said lid.
10. A container as in claim 9, wherein said lid has receiving grooves to attach to said receiving grooves of said receptacle.

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11. A container as in claim 10, wherein said receptacle, said lid, said flexible strip, said circular knob, said circular receiver and said receiving grooves are constructed of a material that is dishwasher, freezer, microwave and refrigerator safe.

12. A container as in claim 11, wherein said receptacle can be used for the storage of food.

**LOAD-DATE:** April 11, 2006