



BeachBUB

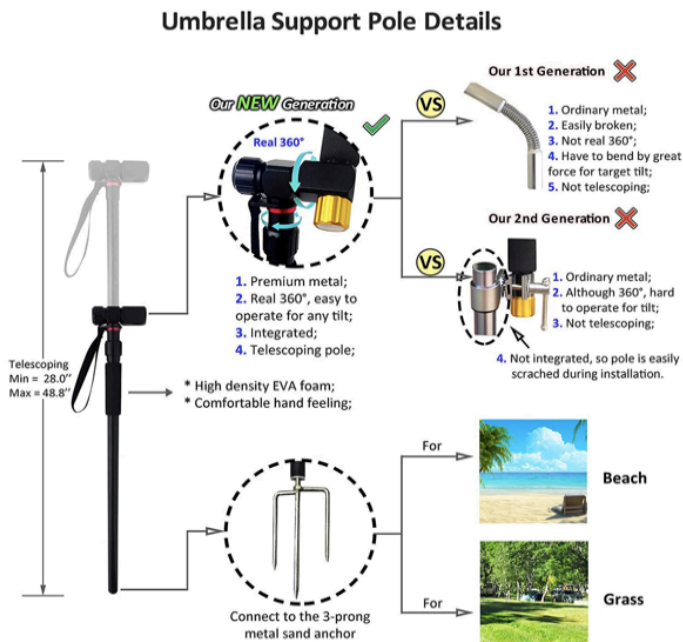
Patent^x Case Study 005
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The primary purpose of a beach umbrella is to protect the user from excessive sun. Photographs of some typical examples appear below.



Almost all commercially available beach umbrellas work adequately when the weather is calm. Many, however, are unable to withstand significant amounts of wind. Prior to 2009, a few companies offered for sale umbrellas specifically designed to be usable in windy conditions. A few are shown below.





Sunphio Large Windproof Beach Umbrella, Sturdy and UV Protection, Portable Sun Shade Best for Camping, Picnic, Sand, Patio and More, 2 Metal Sand Anchor, 1...



In 2009, Bill Schermerhorn developed what he claimed was a superior design for a wind-resistant beach umbrella. The genesis of his invention is described in the following article.

John Osborne
 “Inventor takes on sun, wind with beachBUB
 umbrella base conceived in Naples”
 Naples Daily News
 May 22, 2014

Some inventions are made in the shade. That was the case for the beachBUB, a beach umbrella base which traces its origins to Naples.

Five years ago on Mother's Day, Bill Schermerhorn and his wife, Christine, were sitting on Vanderbilt Beach outside the Ritz-Carlton, watching a woman struggle with her beach umbrella, when inspiration struck.

"It was a sunny, windy day," recalled Schermerhorn, a business-products company owner who splits his time between Naples and Colfax, N.C. "The lady upwind from us was trying to secure her umbrella with one of those traditional screw contraptions, and not having much success."

After five minutes of watching the woman wrestle with her umbrella, Schermerhorn said, the woman finally completed her task and sat down in her beach chair before opening a book.

"That was when a gust of wind came along and almost tore her umbrella from the sand, causing her to grab onto the pole to keep it in place,"

he said. When the same thing happened a few moments later, Schermerhorn decided he needed to step in and get involved.

"Since we were sitting downwind of her, I knew we wouldn't be able to relax until the umbrella was stabilized, so I went over and asked her if I could help," he said. Once Schermerhorn had dug a deep hole in the sand to keep the pesky umbrella from going anywhere, he returned to his patch of beach and did a little reconnaissance work.

"It was a blustery day, and a lot of umbrellas were up, but they were closed," he said. "One of the umbrellas even flew down the beach and hit a family. I thought to myself: there's got to be a better way."

Following that train of thought to patio umbrellas and how they work, Schermerhorn envisioned what would eventually become the beachBUB, which stands for "beach umbrella base."

"Patio umbrella stands have a big base -- 60 to 80 pounds -- and they do a great job," he said. "I began thinking about how I could get a stand like that on the beach that's easy to transport."

Upon returning home that day, Schermerhorn visited a local home improvement store and a fabric store and started tinkering with a prototype.

"I made it out of a fabric similar to the blue tarp people use for gardening," he said. "The next day I took it to the beach ... and it worked great."

"The beachBUB tarp has three wings and a hole in the middle," he explained. "With a one-time setup, you take your pole and the collar we include and anchor it by screwing in three hook-bolts, like a Christmas tree stand."

From there, Schermerhorn said, all you need to do is poke your umbrella pole three or four inches into the sand, attach the wings and add sand.

"The beachBUB weighs less than a pound and is very simple to transport," he said. "We have testimonials from 5-year-olds to 85-year-olds saying how easy it is to set up, and we've tested it with an 11-foot Ocean Master umbrella in 42 mph winds and it stays rock solid."

Schermerhorn has sold more than 500 units while test-marketing the beachBUB at a farmer's market on the corner of Vanderbilt Beach and Airport-Pulling roads, which encouraged him to continue pursuing the idea.

"The response was overwhelming," he said. "We did our first production run last year, and we're getting ready to do our second production run now."

An illustration of the invention appears below.



An explanation of how it works is provided in this video:
<https://www.youtube.com/watch?v=lsPyYl7cPCw>.

Many patents filed prior to 2009 address various aspects of the technology of umbrellas, but you may assume that only one is relevant to Schermerhorn's innovation. It is set forth in the Appendix.

In class, you will work in small groups to draft an application for a U.S. utility patent that Schermerhorn might have filed in 2009. To prepare for this exercise, you should read pages 33-42 and 67-82 in the [WIPO Patent Drafting Manual](#).

United States Patent [19]

Archer

[11] 4,296,693

[45] Oct. 27, 1981

[54] BEACH UMBRELLA SUPPORT

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[21] Appl. No.: 10,407

[22] Filed: Feb. 8, 1979

[51] Int. Cl.³ A47B 41/04; A47B 35/00

[52] U.S. Cl. 108/28; 108/50; 248/158; 248/DIG. 10

[58] Field of Search 108/28, 26, 50; 248/158, 346, 545, 523, DIG. 10

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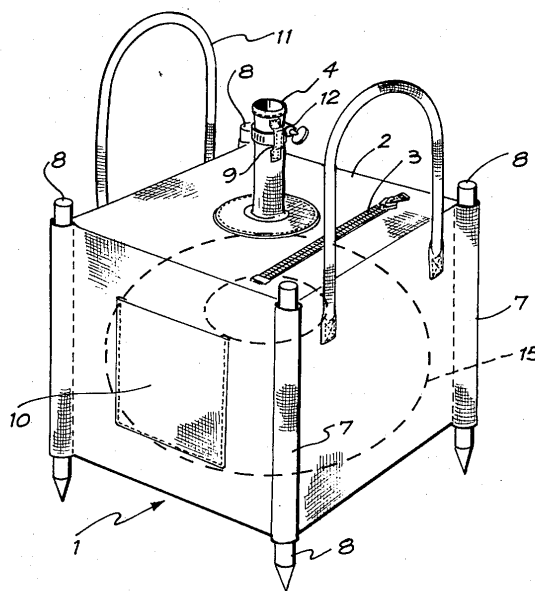
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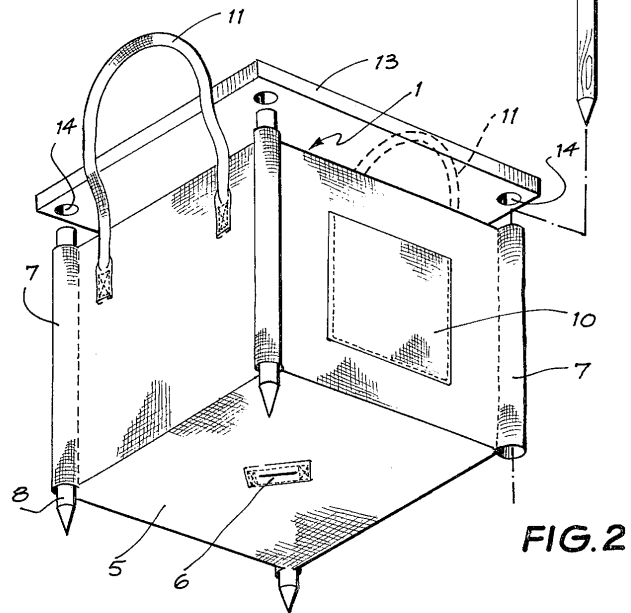
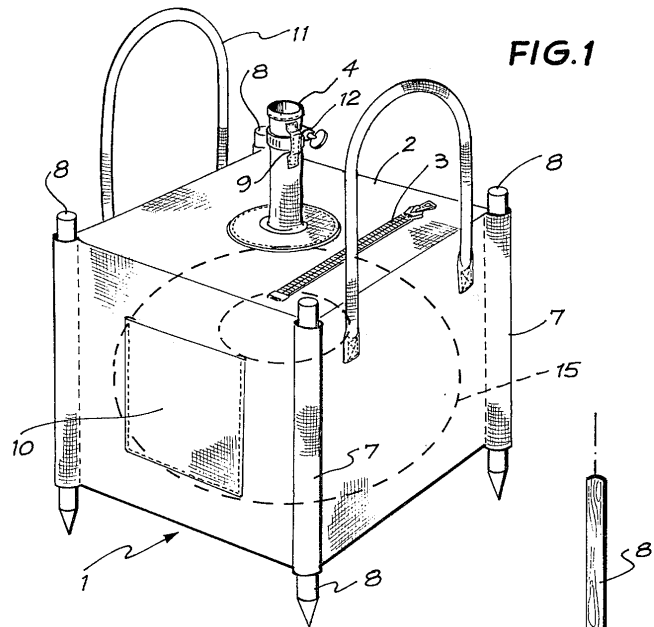
Attorney, Agent, or Firm—Emory L. Groff, Jr.

[57] ABSTRACT

A beach umbrella support is formed by a collapsible container which can be filled with solid or liquid material to give it stability. Means are provided to retain the beach umbrella shaft in the container and the container itself can be provided with handles and pockets to double as a beach bag. Corner rods can be provided for additional stability and a table top can also be provided.

3 Claims, 2 Drawing Figures





BEACH UMBRELLA SUPPORT

The invention relates to an umbrella support and more specifically to a support for a sun shade commonly called a beach umbrella.

Such umbrellas are generally provided with a spiked shaft which is pushed into the beach sand. As the sand is rather loose, the umbrella can easily be turned over by a moderate breeze and serious accidents have been the result of such umbrellas being blown along the beach.

Various attempts have been made already to overcome these drawbacks by providing the spike with a thread to screw the umbrella shaft into the ground. Various types of plates at the spiked end have also been proposed, but none of these arrangements have proved to be successful, as in many cases the umbrella is first rotated by the wind thereby loosening its hold in the ground. It then requires only a minor wind force to topple the umbrella and drive it along the ground.

It is also known to provide a heavy stand for such umbrellas when the latter are used as sun shades on concrete surfaces. These stands consist generally of a heavy bottom plate of iron with a tube extending upwards therefrom to receive the umbrella shaft. The weight and size of such stands make them, however, unsuitable for use at the beach.

It has also been proposed to use a bag which can be filled with sand to stabilize the beach umbrella but such arrangements were also not successful.

It is an object of the present invention to provide a beach umbrella support which is easily transportable, prevents rotation of the umbrella by the wind and subsequent lifting and toppling over.

This object is achieved according to the invention by a beach umbrella support comprising a flat bottom collapsible container adapted to receive solid or liquid material, a tubular member extending centrally from the top of said container and adapted to receive the shaft of a beach umbrella, means to clamp said beach umbrella shaft to said tubular member and a central opening in the bottom of said container large enough to allow the beach umbrella shaft to pass therethrough.

One embodiment of the invention will be described hereinafter in more detail in connection with the drawings in which:

FIG. 1 is a perspective top view of a beach umbrella support according to the invention and

FIG. 2 is a bottom perspective view of the support shown in FIG. 1.

In this particular embodiment the container 1 forming the main support for the beach umbrella, has a substantially cubic shape, made from a heavy canvas or plastic material, so that it can be filled with sand. In case water is to be used as stabiliser a doughnut shaped bag 15 of waterproof material can be inserted in the container.

The top part 2 of the container has an opening closed by a zip fastener 3 which allows the container 1 to be filled or emptied. A tubular member or sleeve 4 is arranged centrally on the top part 2 of the container 1 and has an internal diameter large enough to receive an umbrella shaft with a loose fit. The tubular member or sleeve 4 is preferably made of the same material as the container. The bottom part 5 of the container has a

reinforced slot 6 wide enough to allow the beach umbrella shaft to be pushed therethrough.

In some cases it is advantageous to facilitate filling of the container 1 by providing the four vertical edges with sleeves or pockets 7 retaining four vertical rods 8, which not only serve to stabilize the collapsible container 1 while it is filled, but can also serve as supports for a table top 13, which may be placed on top of the container after it has been filled.

This table top 13, which is made of any suitable material, has a central hole fitting over the abovementioned sleeve 4 and may have four recesses 14 engaging the corner rods 8 of the container 1.

The shaft of the beach umbrella is pushed through the sleeve 4 and the opening 6 in the bottom part 5 of the container and a clamp 9 with thumb screw 12 on the sleeve 4 secures the umbrella shaft in the sleeve 4 preventing any longitudinal as well as any rotating movement of the umbrella.

The container 1 can be made big enough to safely support a beach umbrella in normal wind forces, as it occupies only a very small space when it is in the collapsed state. It has been found that a container of one cubic foot will be sufficient for normal requirements.

If the container is made water tight or provided with a water tight insert as mentioned above the umbrella support can be used also in all places where sand is not readily available. It must be understood that other material, for example rocks, can also be used as filling.

The container 1 can be provided with additional pockets 10 and handles 11 so that it can be used as a beach bag before the beach umbrella is erected.

The foregoing detailed description deals only with one embodiment of the invention. It must be understood however, that modifications can be made in the shape of the container and the fixture of the umbrella shaft therein within the scope of the present invention.

I claim:

1. A support for the shaft of a beach umbrella comprising a flat bottom collapsible container adapted to receive solid or liquid material, said container having a top part with a filler opening therein, a tubular member extending centrally from the top part of said container and adapted to receive the shaft of said beach umbrella, means to clamp said beach umbrella shaft to said tubular member, a central opening in the bottom of said container large enough to allow said beach umbrella shaft to pass therethrough and a doughnut shaped water-tight insert in said container.

2. A support for the shaft of a beach umbrella comprising a flat bottom collapsible container adapted to receive solid or liquid material, said container having a top part with a filler opening therein, a tubular member extending centrally from the top part of said container and adapted to receive the shaft of said beach umbrella, means to clamp said beach umbrella shaft to said tubular member, a central opening in the bottom of said container large enough to allow said beach umbrella shaft to pass therethrough, a sleeve at each of the four vertical corners of the container and a rod in each of said sleeves extending beyond the top and the bottom of said container.

3. A support for the shaft of a beach umbrella according to claim 2 and including a table top mounted on said rod, said table top having a central opening fitting over the beach umbrella shaft, and said rods engaging corresponding recesses in said table top.

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