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Kampus Sungai Petani

Faculty of Administrative
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TORCH BOTTLE

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ABSTRACT

A torch bottle is a product that combines a torchlight and a bottle, which makes it easy for people to carry both items at a time. Since the Covid-19 pandemic, it has become a trend for people to do recreational activities such as jungle trekking, hiking, night walk, night patrol, and camping. Torch Bottle is specially designed for those people who like to do recreational activities. The objective of this torch bottle is to make it easier for people who want to bring a water bottle and torchlight at the same time especially adventurous hikers who love taking night walks in the jungle, and patrol guards to use during their night patrol. The function of the product is to help consumers to see better at night while still allowing them to drink water from the bottle. The torch bottle can be used by four different age group generations such as Baby Boomers, Generation X, Millennial, and Generation Z. The product is designed in a cylinder shape with a portable torchlight under the bottle. The novelty of this product is the torchlight can be removed when the bottle is washed. Besides, the torchlight from the bottle can be turned on using batteries or a thin-film solar panel. Thus, the product is sustainable because it saves energy by using solar panels. It is also coated with stainless steel which makes it environmentally friendly, durable, safe, and corrosion-resistant. This innovation is a great way of reducing the cost of the product since the production cost of the two products which are water bottles and torchlight is higher.

Keywords: Torch Bottle, Water bottle Torchlight, Ez Water bottle Torchlight

PRODUCT DESCRIPTION

Torch Bottle is a specially designed product for commercial purpose in Malaysia. This product makes it easier for users to travel, or doing adventurous activity, especially for hikers. This is because, they can minimize items to bring while climbing by carrying a Torch Bottle which is equipped with light at the bottom of the bottle. The product offers a wide range of product from various companies available in Malaysia. Not only that, this product also gives many advantages to climbers as they buy and use it as their equipment when doing extreme activities such as hiking or camping. They no longer need to carry many items such as bottle and torchlight separately, as this product is a combination of both items. Besides that, the package is available with many options and provide opportunities for hikers. Furthermore, the sale and

purchase of the product is also simple with several ways such as via online web, hypermarket, or hotline.

OBJECTIVES

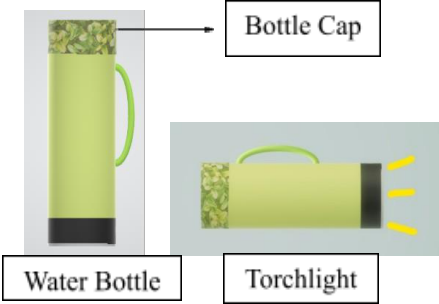
1. To introduce new innovative products into the market.
2. To provide high quality and useful product to consumers.
3. To reach the target market with an eco-friendly product.

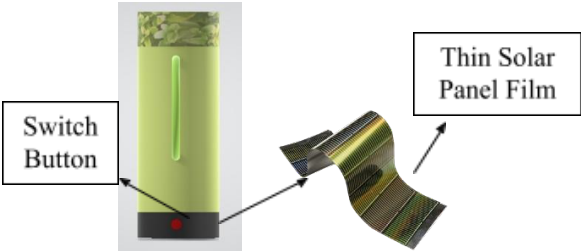
NOVELTY AND UNIQUENESS

“Torch Bottle” is the first bottle in Malaysia that includes a torchlight that is easy for consumer to use it, cost-effective, and price guaranteed. Electricity was not used to create light until the nineteenth century. Joshua Lionel Cowen, the founder of the American Eveready Battery Company, introduced the modern battery-powered flashlight in 1898 (Ahmstead, 1997). Over the last century, technological advancements have resulted in hundreds of distinct styles and functions for torchlights. Torchlights, for example, are now available with rechargeable batteries that may be used repeatedly. Other lamps are made for specific tasks, such as operating underwater or in extreme temperatures. A torchlight is a battery-operated light source that may be carried around. One or more dry cell batteries are stacked in a line inside a battery compartment that forms the light's handle in a typical configuration. A switch mechanism located between the batteries and the lamp controls the flow of electricity from the batteries to the bulb at the front end of the light. Based on our research, we conclude that torchlight have many benefits to people doing daily activities. In this case, we have come out with one product to innovate into a multi - purpose product. This product is combined with bottled water, with a light bulb placed at the bottom of the bottled water. This bottle can be used by hill climbers, and they no longer have to carry heavy bags because the bottled water is equipped with a lamp underneath. It can make it easier for them if the weather gets dark, especially in the forest. In this case, they no need to worries to bring more equipment for hikers.

DESIGN OF THE PRODUCT

Table 1. Product Design

NO.	DESIGN	EXPLANATION
1.		Consists of two items: i. Water bottle: Can fill the bottle with any types of water such as mineral water, juice and many more. ii. Torchlight: Can be used as a light source.

2.	 Switch Button Thin Solar Panel Film	The torchlight is covered with thin solar panel film. The thin solar panel film can be used to replace the battery and save the battery's energy. The switch button is placed on the torchlight so the torchlight can still be used if it was removed from the bottle.
3.	 Removable Torchlight	The torchlight is removable. It is to avoid contact with water when washing the bottle.
4.	 Battery Compartment	There is a battery compartment on the torchlight.

SPECIAL CRITERIA

1. User-Friendly.

Torch Bottle is a user-friendly product. This is because Torch Bottle is easy to use by all generations. Furthermore, the Torch Bottle has a button that the users can easily press to switch on the torchlight. Aside from that, the torchlight may be removed if the user needs to wash the bottle.

2. Eco-Friendly.

Torch Bottle is an eco-friendly product. This is due to the Torch Bottle's thin-film solar panel, which may conserve energy and serve as a battery substitute. Not only that, but the Torch Bottle is also a sustainable product because of its stainless-steel coating, which is more ecologically friendly, durable, safe, and corrosion-resistant.

3. Unique Design.

Torch Bottle has a unique design. This is because the Torch Bottle is a combination of a water bottle and a torchlight. It also has a thin-film solar panel that covers the torchlight and serves as an energy saver for the batteries.

USEFULNESS AND IMPACT

Torch Bottle is a combination of a water bottle and a torchlight. This indicates that the product may be used as a water bottle in which users can fill their beverages, as well as a torchlight in which users may use as a source of light at night. Not only that, but the Torch Bottle is made of stainless steel and is lighter in weight, making it ideal for travel, hiking, sports, and other activities. The impact of this Torch Bottle is that it may assist users to reduce bag weight, especially when engaging in recreational activities. As a result, it is an ideal product for people of all ages to use.

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