

## **Special Umbrella for hot climates**

Innovator: Miss. Supriya Chhotray

### **1. The context of use**

In some of the 30 districts of Orissa, summers are extremely hot and the ambient temperature goes up to 46 degree centigrade and in mining areas such as Talcher and Jarsugudha it goes up to 50 degree centigrade.

For many years, there have been multiple deaths due to heat stroke and its lethal effects. As years go by, the situation has only become worse and it is difficult for people to go outside.

The innovator, a student, decided to come up with a simple low cost universal solution for the common man to address this issue.

### **2. Working principle**

The Innovator has designed a modified umbrella designed to monitor temperature and take suitable action to prevent heat strokes

When the atmospheric temp increases beyond 37c, the mercury column in the thermometer attached to the handle of the umbrella will rise and immediately set off an ringing alarm.

This is the signal for the user to spray water on his head, face or body from a bottle anchored to the umbrella to cool down

### **3. Innovation highlights**

The innovation lies in combining simple elements such as a umbrella, a thermometer, an audio alarm and a spraying water bottle to make a effective life saving package.

### **4. Compare innovation to competing products by efficiency, cost and utility**

This product is a far more effective and calibrated solution to beat the heat wave than a simple umbrella with its premise of remedial water spray action at right heat levels.

### **5. List the current and proposed applications of innovation**

This is especially of great use for people who are on the road for a long time, for old people and children with low heat tolerance and for those sitting and selling goods on the road.

### **6 Brief descriptions of construction mentioning major parts**

The components consist of a thermometer, the umbrella along with one water bottle.

### **7. Current design shortcomings and further work planned**

### **8. List of accessories if any and their functions**

This has no accessories to enhance or achieve functioning

### **9. What is the need/benefit of this product for local community**

This is a effective yet simple solution, universally applicable to all hot geographical zones and consists of simple components being put together with an audio alarm.

**10. Any special highlights of the innovation or additional information**