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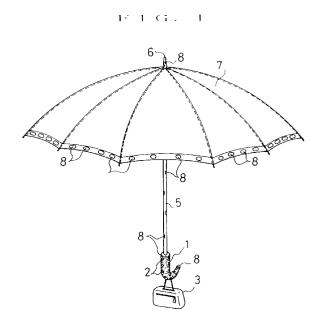
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#### (54) An umbrella.

(57) A plurality of through-holes (2) are formed in the handle (1) of an umbrella, so that the handle (1) has a good slip-prevention performance even when it is wet or held by a wet hand. The through-holes (2) help keep the handle (1) clean, free of accumulation of water and dirt. An elongated, eg. oval or rectangular canopy (7) makes the umbrella unique in design. Other embodiments have the ferrule (6) offset with respect to the canopy (7).



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The present invention relates to an umbrella which has a handle with a good slip-prevention performance and a novel design and which, when its screen or canopy is raised or spread, ensures that a person holding the umbrella, and particularly his or her shoulder, is protected against rain.

As is known, an umbrella generally has a screen of cloth or a canopy having an almost circular form in plan view with a plastic handle mostly shaped like a letter J or formed into a cylinder. There are few umbrellas available having a unique design and most umbrellas are designed only for utilitarian purposes.

Let us consider an umbrella having a canopy which is roughly circular in plan view. When a person holds the umbrella handle with his or her right hand, the left shoulder is more likely to become wet than the right because the area of the left shoulder covered by the canopy is smaller than that of the right shoulder. Another disadvantage of such conventional umbrellas is that the surface of the handle is formed so as to be smooth and slippery using a plastic material, and that they employ similar designs so that it is not easy for the user to distinguish his or her umbrella.

Viewed from one aspect the present invention provides an umbrella characterised in that the handle of the umbrella has a plurality of through-holes.

For enhanced uniqueness and variety of design to make the umbrella enjoyable and appealing, preferred embodiments are further characterised in that the through-holes in the handle are removably fitted with small personal articles such as a bag and a pass holder and that the handle or other portions are attached with jewels.

In preferred embodiments, to alleviate the fatigue of hand after long hours of holding the umbrella, the handle is embedded with magnets.

Viewed from another aspect, the present invention provides an umbrella characterised in that the canopy is elongated in plan view. Preferably a canopy which is roughly oval or rectangular in plan view is attached to the ribs to form the umbrella so that a person holding the umbrella by one hand can protect both of his or her shoulders from becoming wet. In this case, a ferrule may be located at the center of the canopy or, to effectively prevent the wetting of a shoulder on the side opposite to the hand holding the umbrella, a mostly oval or rectangular canopy may be fitted to the ribs in such a manner that one side of the canopy with respect to the ferrule is longer than the other.

Viewed from another aspect, the present invention provides an umbrella characterised in that the handle and canopy are arranged so that the distance in plan view from the handle to the edge of the canopy is greater in one direction than in another.

Embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings, wherein:- Figure 1 is a perspective view of an umbrella shown as one embodiment of this invention;

Figure 2 is a perspective view of the handle of the umbrella of Figure 1;

Figure 3 is a vertical cross section of the handle of Figure 2;

Figure 4 is a perspective view of another example of an umbrella handle which may be used with the embodiment of Figure 1;

Figure 5 is a view from below showing one example of emblem securely attached to the handle of the umbrella shown in Figure 4;

Figure 6 is a plan view showing another example of a canopy in a further embodiment; and

Figure 7 is a partial cross section showing an example connection between a rib and a spreader.

As shown in Figures 1 to 3, an umbrella according to a first embodiment has a plastic handle 1 shaped like a letter J with a plurality of through-holes 2 formed therein. The handle 1 may be formed into other shapes, such as a cylinder shown in Figure 4, and its material is not limited to plastics.

Each through-hole **2** is basically circular in cross section as shown in Figure 3 but may be formed into any other shape, for example, a square, polygon or drum shape depending on the design used.

The through-holes 2 are formed so that the adjacent ones do not communicate with each other. As shown in Figure 1 and 2, they may be arranged staggered so that their axes are perpendicular to but do not contact each other. Though not shown, the through-holes may be arranged with their axes in parallel. Or they may be formed in a desired pattern or formation according to a design adopted. It is also possible to communicate the adjacent through-holes 2 with each other in the shape of a cross or make the handle interior hollow to make the through-holes 2 communicate with one another.

In this way, the handle 1 is formed with a plurality of through-holes 2 so that when the handle is wet or held by a wet hand, the through-holes 2 help clear water from the handle surface. The through-holes 2 also allow the facing parts of the palm to fit therein when the handle is gripped by hand, thus providing a substantially improved anti-slip effect.

The rain water that entered into the throughholes 2 will automatically flow out when a person releases his or her hand from the handle 1. This eliminates an unpleasant experience one might have with the umbrellas with closed holes, in which water accumulates together with dirt or dust, making the handle unclean. The through-holes also facilitate the quick drying of the handle.

Further, it is possible to removably attach to the through-holes **2** small articles such as a small accessory bag **3** shown in Figure 1 and a transparent pass holder **4** shown in Figure 3.

Suspending small articles from the handle in this

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fashion enhances the uniqueness of design and provides a clear marking for a user to easily recognize his or her umbrella. With the pass holder 4 attached to the umbrella handle, a person can go through a ticket gate without bothering to take the pass out from his or her pocket. This is very convenient. An umbrella cover (not shown) may be put in the accessory bag 3 so that it will not be lost and can be used to accommodate the wet umbrella to prevent it from dripping water while walking indoors. The through-holes therefore improve the usefulness of the umbrella.

The handle **1** also has embedded therein multiple pieces of permanent magnet **G** with a certain gauss to heal the fatigue of hand after long hours of holding the umbrella.

A specified number of thinly sliced artificial jewels 8 are securely fitted to the handle 1, shaft 5, ferrule 6 and canopy 7. The artificial jewels 8, in the case of handle 1 as shown in Figure 2 and 3, are secured to the end of the handle 1 and the upper connecting portion with the shaft 5. When the handle 1 is formed cylindrically as shown in Figure 4, the artificial jewel 8 may be secured to the bottom of the handle. Or, instead of the artificial jewel, an emblem 9 engraved with a name or pattern may be attached as shown in Figure 5.

The artificial jewels 8 are thinly sliced and bonded to the surfaces of the shaft 5 and the ferrule 6. The canopy 7 made of waterproof cloth or synthetic resin sheet is attached with a plurality of thin-sliced jewels on the outer side. In this embodiment, it is possible to fit the artificial jewels to the tips of the ribs.

Arranging artificial jewels 8 and emblems 9 at appropriate locations of each component of the umbrella adds novelty to the design and provides the feeling of a high-grade product. At the same time, the unique design of the umbrella and the user's name attached on it prevents the user from taking a wrong umbrella. When this umbrella is used at night time, light is reflected by artificial jewels 8 and emblems 9 so that a car driver can easily find a person with the umbrella walking on the street, improving the user's safety.

The canopy 7 made of waterproof cloth or synthetic resin sheet is oval in plan view as shown in Figure 1. It may be formed into a roughly rectangular shape as shown in Figure 6. Making the canopy rectangular or oval in this way allows the user to walk easily through crowded places and also effectively eliminates a drawback experienced with umbrellas with a round canopy that the user's legs and back easily get wet. At the same time, the unique shape of the canopy sets the umbrella apart from those having a conventional design.

The canopy **7** is fitted over the ribs **10** in such a way that one side **7a** of the canopy with respect to the ferrule **6** is longer than the other **7b**. This effectively protects a shoulder on the side opposite to the hand holding the umbrella against rain. Further, since the

canopy 7 can be turned to set the longer side 7a over the right-hand shoulder or left-hand shoulder, the umbrella can be used by any person, right-handed or lefthanded.

When the canopy **7** is formed rectangular or oval, the lengths of ribs **10** vary, rendering the umbrella out of balance when closed. This problem is solved by forming the canopy **7** with a flexible waterproof cloth or, as shown in Figure 7, by changing the locations of the connecting portions **12** between the ribs **10** and the spreaders **11**, both made of high-tension steel material, according to the lengths of the ribs **10** to keep a good balance.

The advantages of the illustrated embodiments may be summarized as follows. Since a plurality of through-holes are formed in the handle of the umbrella so that adjacent through-holes do not communicate with each other, the handle offers a good slipprevention effect and is clean, free of accumulation of water and dirt. When a small article is suspended from the through-hole or jewels are fitted, the umbrella becomes unique in design and easily identifiable by the user. This effectively prevents the user from mistaking a wrong umbrella for his or hers and also enhances the value of the product. When the handle is fitted with magnets, they help alleviate the fatigue of hand, contributing to a good health. Furthermore, since an oval or rectangular canopy in plan view is fitted over the ribs, the shoulder can be protected against rain if the umbrella is held by one hand.

Thus, in at least preferred embodiments of the invention there is provided an umbrella which, when spread and held by one hand, protects both of the shoulders of a person holding it against rain; and there is provided an umbrella which has a handle with a very good anti-slip performance as well as a novel design, thereby substantially enhancing the value of the product.

#### Claims

- 1. An umbrella characterised in that the handle (1) is formed with a plurality of through-holes (2).
- 2. An umbrella as claimed in claim 1, wherein a said through-hole (2) in the handle (1) is removably fitted with an article (3,4) such as a bag (3) or pass holder (4).
- An umbrella as claimed in claim 1 or claim 2, wherein the handle (1) has magnets (G) embedded therein.
- An umbrella as claimed in any one of claims 1 to 3, wherein the handle (1) and/or other components of the umbrella are fitted with jewels (8).

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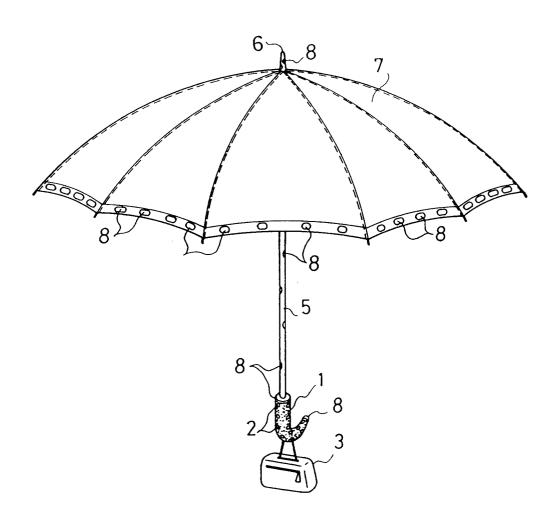
- **5.** An umbrella characterised in that the canopy (7) is elongated in plan view.
- **6.** An umbrella as claimed in claim 5, characterised in that a canopy (7) fitted over the ribs (10) is substantially oval or rectangular in plan view.

7. An umbrella as claimed in claim 5 or 6, wherein the canopy (7) is fitted over the ribs (10) in such a manner that one side (7a) of the canopy (7) with respect to a ferrule (6) is longer than the other (7b).

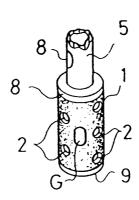
8. An umbrella characterised in that the handle (1) and canopy (7) are arranged so that the distance in plan view from the handle (1) to the edge of the canopy (7) is greater in one direction than in another.

**9.** An umbrella as claimed in claim 8, characterised in that the ferrule (6) is eccentrically located with respect to the canopy (7).

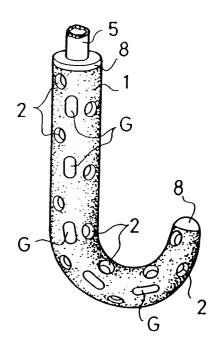
# F I G. 1



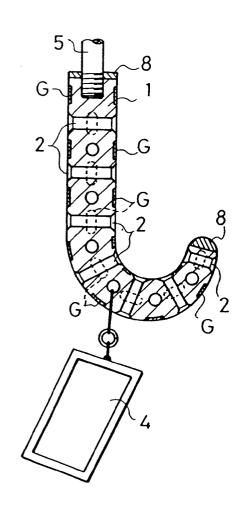
F I G. 4



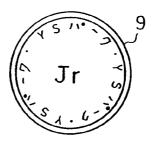
F1G. 2



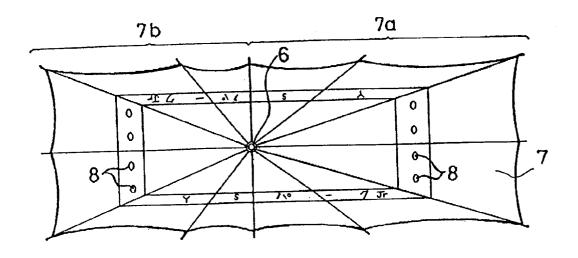
F I G. 3



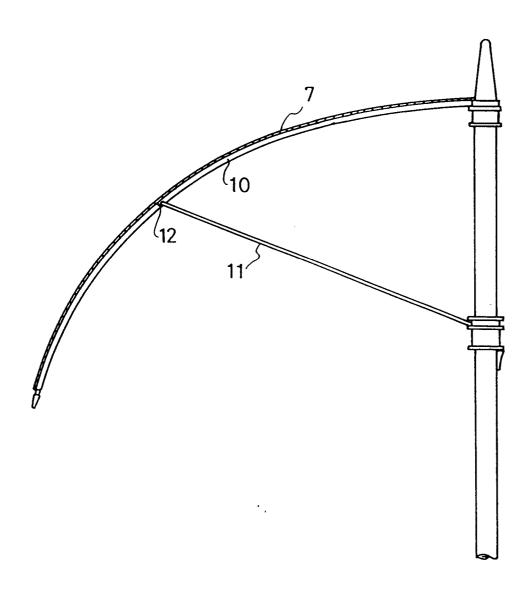
# F I G. 5



# F I G. 6



# F T G. 7





## **EUROPEAN SEARCH REPORT**

Application Number

EP 92 30 9987

Category	Citation of document with i	ndication, where appropriate,	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
K	DE-U-8 809 834 (FRI * the whole documen	EDEMANN)	1	A45B9/02 A45B3/00
4	DE-C-110 230 (WALTH * the whole documen	ER) t *	1,2	A45B11/00 A45B1/00
4	US-A-3 265 168 (ERH * column 3, line 39 *	ARD) - line 56; figures 3,4	3	
4	US-A-4 796 648 (GOU * column 5, line 32	 LTER) - line 41; figure 10 *	4	
(	DE-U-8 428 922 (KOR * figures 2,4 *	TENBACH)	5-9	
X	FR-A-613 635 (BETZE * the whole documen		5-9	
A	GB-A-1 596 314 (FUJIMOTO)			
				TECHNICAL FIELDS SEARCHED (Int. Cl.5)
				A45B A45C A61N
	The present search report has b	een drawn up for all claims  Date of completion of the search		Franklin
٦	THE HAGUE	11 FEBRUARY 1993		Example: SIGWALT C.
X : pari Y : pari doc	CATEGORY OF CITED DOCUMENT icularly relevant if taken alone icularly relevant if combined with and ument of the same category inological background	E : earlier patent do- after the filing di bther D : document cited i L : document cited fi	cument, but publ ate n the application or other reasons	lished on, or
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