

(21) Application No: 1513285.5
 (22) Date of Filing: 28.07.2015
 (30) Priority Data:
 (31) 1137180U (32) 11.02.2015 (33) ES

(51) INT CL:
 A45B 25/18 (2006.01) A45B 15/00 (2006.01)
 A45B 25/20 (2006.01)

(56) Documents Cited:
 GB 1424010 A1 WO 2006/004685 A2
 DE 004037087 A1 JP 2003033211 A1
 US 4022233 A1 US 20080163909 A1
 US 20050028451 A1
 "Full body umbrella", available on or before
 14.01.2013. Available at: <https://www.flickr.com/photos/92276883@N08/8379592839>

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(58) Field of Search:
 Other: WPI, EPODOC, INTERNET

(54) Title of the Invention: **High protection umbrella**
 Abstract Title: **An umbrella**

(57) An umbrella with an extension in the form of a panel that hangs from at least a portion of the periphery of the umbrella, the panel protects the body of the user against the elements such as rain. The umbrella 1 has a central pole 2 and a foldaway radial frame 4 covered in a waterproof material 5, the panel 6 may be permanently or detachably attached to the periphery 7 of the umbrella. The panel is preferably transparent, and made from the same material as the umbrella or from plastic. The panel may have fastening means 8 along the vertical edge so that panel may totally surround the user, and the height of the panel may also vary to allow partial or full lateral protection to the user.

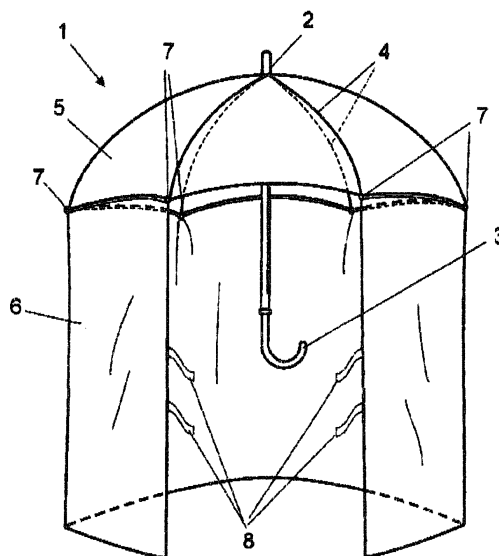


FIG. 1

This print takes account of replacement documents submitted after the date of filing to enable the application to comply with the formal requirements of the Patents Rules 2007.

At least some of the priority details shown above were added after the date of filing of the application.

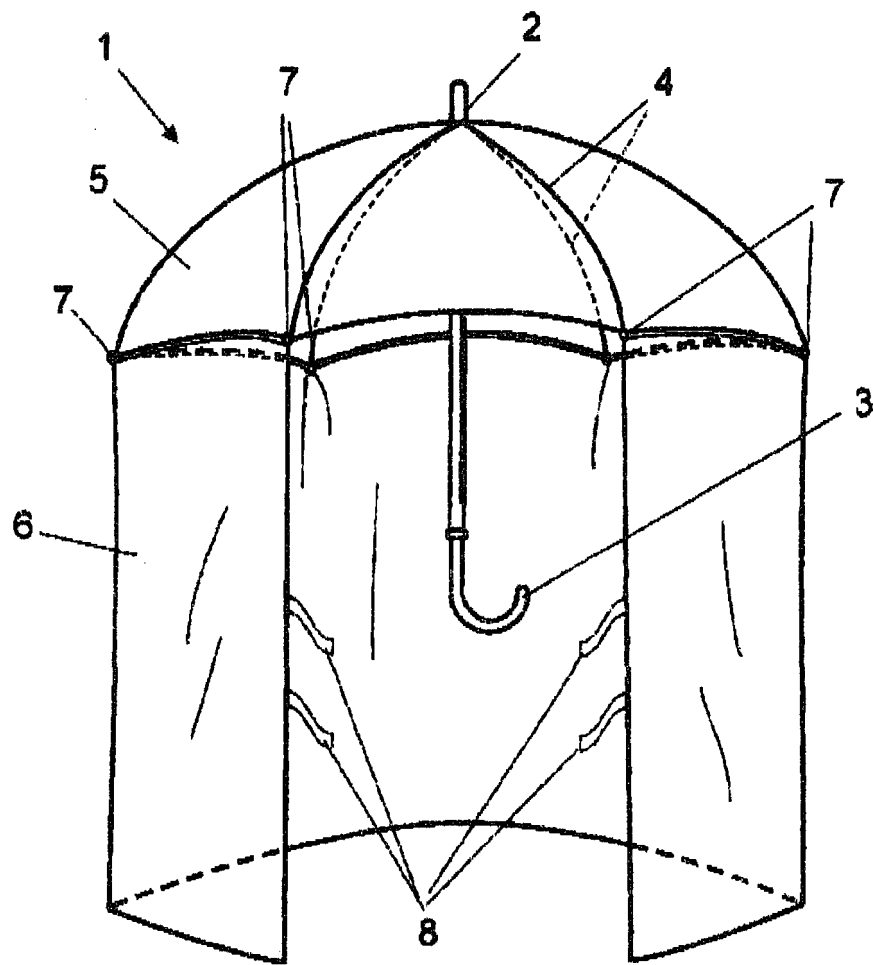


FIG. 1



The following terms are registered trade marks and should be read as such wherever they occur in this document:

Velcro

DESCRIPTION OF DESIGN

AN UMBRELLA WHICH OFFERS HIGH BODY PROTECTION AGAINST TORRENTIAL RAIN

The Purpose of the Design

The design, as described for the purposes of this official report, is a high protection umbrella to shield the bearer against torrential rain, particularly in situations where the rain is driven by directional wind. The advantages and specific details of the design will be detailed more fully later on. The invention is technically original and a complete novelty.

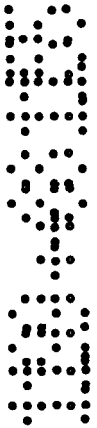
The intention of the high protection umbrella focuses specifically on shielding the user from rain and other types of inclement weather through a new design. Plastic, transparent skirting fastened to the edges of the material of the umbrella provides both vertical and horizontal/lateral protection for the user.

Areas where the design can be applied

It is intended that the invention/design be used for mass production within industry to produce the high protection umbrella for commercial sale to the public.

The Basics/Prerequisites of the Design

The high protection umbrella consists of a central stem supporting the upper part of the design. Attachments at the tips of the umbrella spokes support a transparent plastic curtain that once the umbrella is opened above the head of the user, folds down to protect the rest of the body. By holding the umbrella above the head in the normal way, the user is protected both from vertically falling rain or other inclement weather, and from rain – torrential or otherwise – that is blown horizontally by wind against the carrier, thus shielding the clothes and body of the user, and providing a significant advantage in comparison with a day to day or conventional style of umbrella.



It is for the very reason of providing total protection to the user that this new design incorporates see-through plastic curtaining, neatly attached to the hem of the material of the upper part of the umbrella. The transparency of the design means that the user's vision is not obscured at all by the high protective umbrella.

Use of a conventional umbrella fails to provide protection to the lower part of the body, resulting in skirts, trousers, shoes, socks and stockings becoming uncomfortably wet. Additionally, the conventional umbrella does not protect against water splashing the user's clothes whilst walking down a Street. An example is when water is thrown up from vehicles driving through roadside puddles spraying up onto the pavement and drenching passers-by, or water precipitating down from overhanging balconies, sign posts and shop fronts.

At the heart of this new design is the aim of providing high grade total protection for the user against all manner of unfavourable weather conditions. It is an enhanced design that has as yet not been seen in the market place.

DETAILED DESCRIPTION OF THE DESIGN

The high protection umbrella proposed by this revolutionary design is configured as a complete novelty. Its distinguishing characteristics are set out in the final claims that accompany this descriptive report.

Specifically, the umbrella has a central supporting axis acting as a handle. This supports a mechanism of folding spokes covered by impermeable material which can be flared and transparent but the design of the material and the manner in which it is secured over the spokes is not limited to this.

The umbrella has an extra fold of (transparent plastic) material attached to its outermost edges providing the user, not only with conventional vertical protection, but also with additional lateral protection.

This extra fold of material, is attached to the upper part of the material covering the spokes of the umbrella at the extreme outer edges. The extra fold can either remain permanently attached to the outer circumference of the umbrella edges or it can be detachable, through any manner of easy-to-use clips and fastenings – such as buttons, zips, velcro, and ties.



The lower fold of transparent plastic material, once attached and opened to roll down, runs right round the radial edges of the upper part of the umbrella. It is sufficiently long to cover at least half the body of the bearer, and if so desired it can even reach down to the floor. Simultaneously, the design allows the possibility of including fastenings for closing the vertical edges of the lower fold of transparent material so that the user is protected from inclement weather right the way round.

The foldaway lower part of the design can either be made of the same type of material as the upper part of the umbrella or of different material, but in either case all material should be waterproof.

This outline description of the high protection umbrella thus consists of an entirely new concept in structure, of – until now – unknown and untried features. The design perfectly suits its purpose of being a uniquely practical artefact, providing the manufacturer with an exclusive product for mass production and sale.

DESCRIPTION OF THE DRAWINGS

As further clarification, this report will be accompanied by descriptive drawings of the high protection umbrella. The drawings are representative of, but do not limit the design.

FIGURE 1 comprises the only official drawn representation of the design.

It shows a perspective of the design, indicating the different elements which should be pieced together to result in maximum advantage for the user.

THE MOST SUITABLE PRODUCTION/IMPLEMENTATION OF THE DESIGN

Through the numbering of the different elements of the design of the high protection umbrella, it is clear that several basic components are laid out for viewing but the construction and manufacture of the high protection umbrella are not limited to these elements. These will be described in more detail in the following text.

And so, as can be seen in Figure 1, the umbrella (1) in question is made up of a central pole (2) with a handle (3) acting as a central axis to the design and a foldaway spoked radial frame (4) covered with a waterproof material (5) right over the. The material can be flared to a greater or lesser extent, and transparent or otherwise, but the design is not limited by the outline representation of Figure 1. The cutting edge of the new design incorporates an additional fold of waterproof material which is attached to the extreme edges of the spoked structure (4) joined either right the way round the perimeter of the umbrella or attached to just parts of it.

The extra fold of material is fixed through an attachment mechanism (7). The fold-down material can either be sewn or heat soldered to the upper part of the umbrella, or attached through removable fastenings such as buttons, zip, velcro, ribbons/ties, clips, etc. It can be of variable length, protecting at least half the body measurement of the bearer.

Additionally, the extra foldaway material (6) also has means of being closed vertically (8) so that it can be sealed totally around the body of the user.

The extra foldaway material (6) will preferably be made of the same material as that of the upper part of the high protection umbrella, but it should in any event be waterproof and preferably transparent so as not to hinder the vision of the user.

The descriptive report and outline drawings contained in this presentation document are self-explanatory. Any person with key knowledge of the industry would be able to recognise its advantages and potential commercial value. It will be seen that apart from the basic structure of the high protective umbrella detailed here, there are potential variations of the design which can be tailored to meet the requirements of public use, as long as the fundamental design is not altered.

CLAIMS of the new design

1. High protection umbrella for shielding user from the rain consisting of a central axis (2) with a handle (3) which controls an internal mechanism for opening a series of radial spokes (4) covered by folding waterproof material (5) in the upper part of the design – flared and transparent to a greater or less degree. The distinguishing characteristic of the high protection umbrella is that it incorporates an extra fold of waterproof material (6) which is attached to the outer edges of the upper part of the umbrella (5) and/or to the ends of the umbrella spokes (4). This extra fold of material can be of varying length (1), giving lateral protection to at least half the body height of the user.
2. High protection umbrella as detailed in Claim 1, features the extra fold of material (6) only hanging from part of the radial perimeter of the umbrella (5).
3. High protection umbrella as detailed in Claim 1, features the extra fold of material (6) hanging from right round the entire perimeter of the outer umbrella edge.
4. High protection umbrella, as detailed in Claims 1 to 3, features the extra fold of material (6) attached to the outer edges of the umbrella through a fixed means, for example sewn on or heat soldered.
5. High protection umbrella, as detailed in Claims 1 to 3, features the extra fold of material (6) attached to the outer rim of the umbrella through removable means such as buttons, zips, Velcro, ties, clips, etc.
6. High protection umbrella, as detailed in Claims 1 to 5, features the extra fold of material (6) with a means of vertical closure (8) so that the vertical edges of the waterproof fold of material can be closed right around the body of the user.
7. High protection umbrella, as detailed in Claims 1 to 6, features the extra fold of waterproof material (6) being of the same material as that which covers the upper part of the umbrella.
8. High protection umbrella, as detailed in claims 1 to 7, features the extra fold of material being preferably see-through.



Application No: GB1513285.5

Examiner: Sally Vaughan

Claims searched: 1 at least

Date of search: 30 December 2015

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1, 3, 5 - 8	WO2006/004685 A2 (CHURCH) see whole document e.g fig 1, page 7 line 12 - page 9 line 20
X	1, 3 - 8	US2005/028451 A1 (KNOEPP) see whole document, e.g. paras 20 - 21
X	1, 2, 5 - 8	GB1424010 A1 (LIGHTNING FASTENERS LTD) see whole document, e.g. fig 1
X	1 - 4, 7, 8	JP2003033211 A1 (SAITAMA KENSO) see all figs, see also WPI Abstract Accession No. 2003-194430
X	1, 3, 5, 7, 8	US4022233 A1 (GRUNDMAN) see whole document, e.g. col 2 line 56 - col 3 line 4
X	1, 2, 5, 7, 8	US2008/163909 A1 (MCCULLOUGH) see whole document
X	1, 3, 4, 7, 8	DE4037087 A1 (SOLMS) see all figs, see also WPI Abstract Accession No. 1992-184400
X	1, 3, 5, 6, 8	"Full body umbrella", available on or before 14.01.2013. Available at: https://www.flickr.com/photos/92276883@N08/8379592839 See image and description.

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

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Worldwide search of patent documents classified in the following areas of the IPC

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The following online and other databases have been used in the preparation of this search report

WPI, EPODOC, INTERNET

International Classification:

Subclass	Subgroup	Valid From
A45B	0025/18	01/01/2006
A45B	0015/00	01/01/2006
A45B	0025/20	01/01/2006