

A container for an umbrella

The present invention relates to a waterproof container for holding an umbrella

Once used, umbrellas become wet, which can be inconvenient where a user has to continue carrying the umbrella around. As such, it is desirable to contain, or restrict, water runoff from an umbrella.

It is known to wrap an umbrella in a layer of disposable material, for example a thin light weight plastic such as cellophane. The material is ✓ wrapped around the umbrella several times, so as to create a waterproof barrier. However, on removal of the wrapped material, the previously-contained water is released uncontrollably, often over the user or surroundings.

To more permanently contain the water runoff, it is known to provide a waterproof drip-bag to hold a wet umbrella. The bags are provided in different sizes to accommodate different length umbrellas. The bags are sometimes branded, for example with a store logo. The bags are secured at the open ✓ end by fastenings such as hook-and-loop fastenings, drawstrings or elastic, to limit water egress. The bags are sized to be secured either around a whole umbrella, or around an umbrella canopy with a handle protruding. However, even with the drip-bag, removing the umbrella results in some water escaping.

To limit water escaping from the drip bag, it is known to use an inner, permeable bag inside of a larger, outer, waterproof bag. Water runoff from the umbrella passes through the inner bag and pools in the bottom of the outer bag. As the outer bag is larger than the inner bag, the umbrella is kept separated from the water. However, because the water is free to move within the outer bag, it can splash back onto the umbrella when the bag is carried.

According to the present invention, there is provided a container for an umbrella as set forth in claim 1.

By providing a restriction formed integrally with the waterproof, outer layer, the present invention prevents water from flowing freely within the waterproof bag and substantially restricts the water to the lower portion, away from the umbrella canopy.

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According to embodiments of the present invention, there are provided containers as set forth in claims 2 to 17.

The waterproof layer may comprise a flexible material. Where the container is not intended to be reusable, the flexible material may be biodegradable. Alternatively, the waterproof material may be rigid. The rigid layer can comprise a pair of telescoping tubes so that the container can be adjusted for umbrellas of different lengths. The join between the telescoping tubes is watertight fit, which ✓ may be provided by a watertight fit geometry, or by a waterproof seal between the tubes. One or both of the tubes may comprise longitudinal ridges which space the umbrella canopy from an inside surface of the tubes to prevent ✓ sticking and promote faster drying.

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Where the container is a flexible material, the restriction may comprise a crimped waist formed in the layer, for example by heat treatment or by using a glue. Such a crimped waist is easily and cheaply manufactured. While such a crimped waist might not entirely prevent water returning to the upper portion, it does substantially restrict it. The crimped waist can be provided with a drawstring to increase the restriction of water to the lower portion. ✓

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The container, whether flexible or rigid, may comprise a layer with a one-way valve such a valve almost entirely prevents water from re-entering the upper portion. The valve may be formed as part of the layer itself, by providing a plurality of layers with offset slits. The slits and space between the layers form a tortuous path between the upper and lower portions, restricting water flow. The plurality of layers can be of varying thickness, with a thinner layer or layers on top of thicker layer or layers. While the upper portion is empty, water runs normally through the path. When the umbrella is in-situ, it presses down on the layers; the thinner upper layers deform to widen the slits ✓ therein, aiding faster runoff. The thicker lower layers narrow the slits to prevent back-passage of water. There may be two different thicknesses of layers, or layers may become progressively thicker towards the lower portion. ✓

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The one-way valve may instead be one of a known form, extending through an otherwise waterproof restriction ✓ layer. The valve is disposed off-centre to avoid blockage by the umbrella. The layer may be reinforced with additional material to hold the umbrella.

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The one-way valve in either example may be reinforced with a glue to hold the umbrella in the upper portion.

The restriction may instead comprise a water-permeable layer of a type which allows water passage in only one direction. ✓

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The lower portion may include an absorbent insert to help keep water restricted therein. The insert may be of a material such as sponge, or may be a more absorbent material such as a super-absorbent polymer.

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The container may comprise a longitudinal handle, allowing the container to be easily carried sideways.

The upper portion may be flared, to aid water runoff to the restriction.

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The lower portion may comprise a resealable outlet, which allows the lower portion to be easily emptied.

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The container may be sealed at an outer end of the upper portion by a drawstring, clip, zip or other means. The container may be sized to receive the entire umbrella inside to fully cover it, or may only cover the canopy.

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Particular prior art arrangements and embodiments of the present invention will now be described, by way of example only, with reference to the following drawings.

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Fig. 1 shows a perspective view of a prior art bag.

Fig. 2A shows a perspective, isolated view of the inner bag of the prior art bag of Fig. 1.

Fig. 2B shows a perspective, isolated view of the outer bag of the prior art bag of Fig. 1.

Fig. 3 shows a perspective view of a container according to an embodiment of the present invention

Fig. 4 shows a perspective view of a container according to another embodiment of the present invention.

Fig. 5 shows a cutaway side ✓ view of a container according to another embodiment of the present invention.

Fig. 6 shows a cutaway side view of a container according to another embodiment of the present invention.

Fig. 7a shows a closeup isolation side view of a restriction according to another embodiment of the present invention.

Fig. 7b shows a closeup isolation side view of a restriction in use according to another embodiment of the present invention.

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Fig. 2 shows an example of a prior art bag² as described above. The bag² comprises an inner bag 4 disposed in an outer bag 6. An umbrella 8 is housed in the inner bag 4.

The inner bag 4 comprises a plurality of holes 10, which are permeable to water.

The outer bag 6 comprises a drawstring 12 to seal an outer end 14.

The umbrella 8 is placed into the inner bag 4, then the inner bag 4 is placed in the outer bag 6. The drawstring 12 is contracted to seal the outer end 14. ✓

Water runoff from the umbrella 8 passes through the holes 10 and into the outer bag 6, where it is contained by the sealed outer end 14.

Figs. 2A and 2B show the inner bag 4 and outer bag 6 respectively, in isolation.

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Fig. 3 shows a container 16 according to an embodiment of the present invention. The container 16 comprises a waterproof material layer 18 forming an upper portion 20 and a lower portion 22, separated by a restriction 24 formed of a crimped waist. The upper portion 20 is flared from a wider outer end 26 to the narrower restriction 24

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An outer end 26 is sealable by a drawstring 28. A longitudinally extending handle 30 is disposed on an outer side 32 of the container 16.

In use, an umbrella (not shown) is placed in the upper portion 20. The restriction 24 prevents the umbrella from entering the lower portion 22.

Water runoff from the umbrella enters the lower portion 22 via the restriction 24, where it is substantially contained.

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Fig. 4 shows another embodiment of a container 34 which is substantially similar. A lower drawstring 36 is provided about the restriction 38 to seal the lower portion 40 more effectively.

Fig. 5 shows another embodiment of a container 42. The restrictor 44 is a separator layer 46 with a slit 48. The lower portion 50 comprises an absorbent insert 52 to absorb water runoff.

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Fig. 6 shows another embodiment of a container 54, having a resealable outlet 56. The restrictor is a layer 58 with a one-way valve 60.

Water passes from the upper portion 53 through the one-way valve 60 into the lower portion 55 and is prevented from returning. The resealable outlet 56 can be opened to drain the lower portion 55 and re-sealed again for re-use.

Fig. 7a shows an embodiment of a restrictor 62 having a plurality of layers 64 with slits 66 and gaps 68 which form a tortuous path. Water travels along the path between an upper portion and a lower portion and is restricted from returning.

Fig. 7b shows another embodiment of a restrictor 70 similar to that of Fig. 7a, where the layers 72 have different thicknesses. The upper layers and lower layers deform to widen and narrow the slits therein respectively.

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| 1. A container for an umbrella, the container comprising:

a waterproof material layer forming an upper portion and a lower portion, the upper portion configured to house an umbrella canopy and the lower portion configured to hold water runoff; and

a restriction integrated with the waterproof layer and separating the upper portion from the lower portion so as to allow passage of water and prevent the umbrella canopy from entering the lower portion. ✓ | 1.5 |
| 2. The container of claim 1, wherein the waterproof layer comprises a rigid material forming two telescoping tubes, configured to be slideable relative to each other. | 1.5 |
| 3. The container of claim 2, further comprising a waterproof seal disposed on one of the tubes, configured to seal a space between the two tubes | 0.5 |
| 4. The container of claim 2 or 3, further comprising longitudinal ridges extending from an inside surface of at least one of the tubes. | 2 |
| 5. The container of claim 1, wherein the restriction comprises a crimped waist formed in the waterproof layer. | 1 |
| 6. The container of claim 5, further comprising a drawstring around the crimped waist. | 1 |

7. The container of any of claims 1 to 4, wherein the restriction comprises a layer comprising a one-way valve.
8. The container of claim 7, wherein the one-way valve comprises a plurality of layers having offset slits, the slits configured to form a tortuous path through the plurality of layers.
9. The container of claim 8, wherein the plurality of layers comprises an upper layer and a lower layer, the upper layer being thinner than the lower layer.
10. The container of claim 7, wherein the one-way valve is offset from a centre of the layer.
11. The container of any of claims 7 to 10, comprising a layer of reinforcing glue around the one-way valve.
12. The container of any of claims 1 to 4, wherein the restriction comprises a water-permeable membrane layer configured to allow water passage in only one direction.
13. The container of any preceding claim, further comprising an absorbent insert housed in the lower portion.
14. The container of claim 13, wherein the absorbent insert comprises a super-absorbent polymer.
15. The container of any preceding claim, further comprising a handle extending longitudinally along an outer side of the waterproof layer.
16. The container of any preceding claim, wherein the upper portion is flared so as to be wider in diameter at an upper, open end than at a lower end adjacent the restriction.
17. The container of any preceding claim, wherein the lower portion comprises a resealable outlet formed in the waterproof layer.

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Abstract

A container for an umbrella

A container 16 comprises a waterproof layer 18 forming an upper portion 20 and a lower portion 22 separated by an integrally formed restriction 24. Water runoff from an umbrella stored in the upper portion 20 can be restricted in the lower portion 22 to dry the umbrella.

[Fig. 3]

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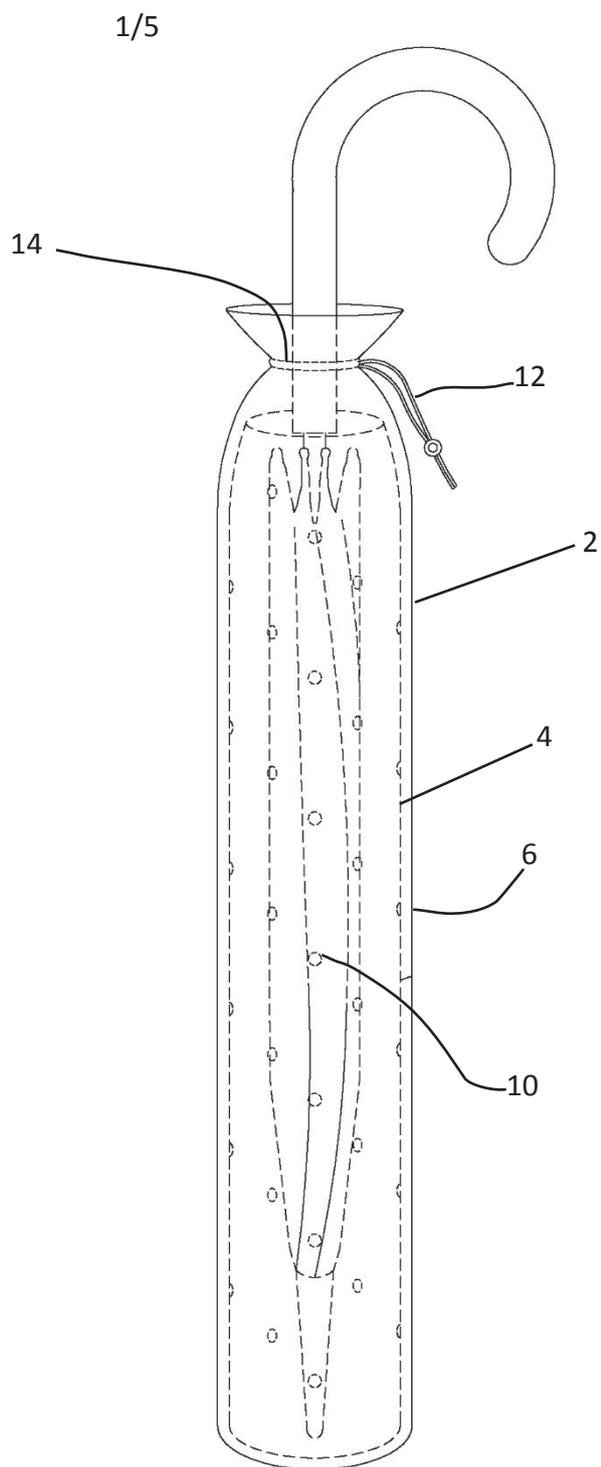


Fig 1
Prior Art

2/5

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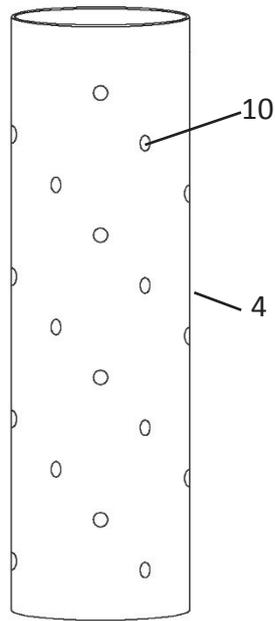


Fig. 2A

Prior art

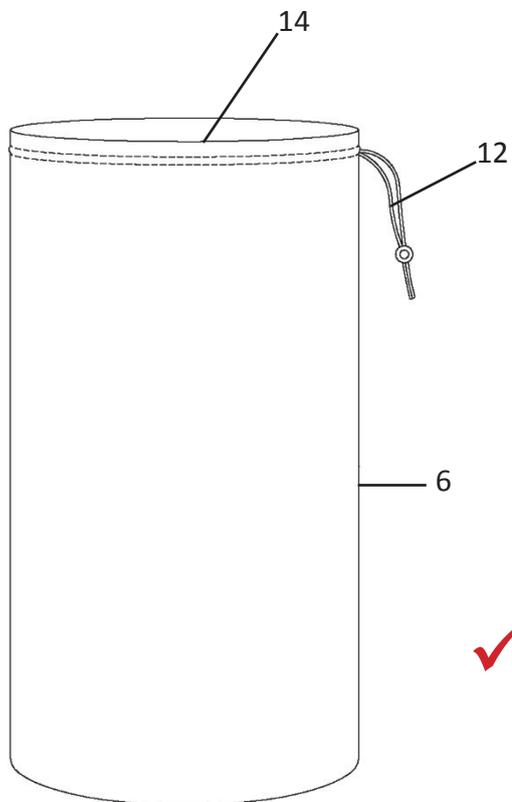


Fig. 2B

Prior art

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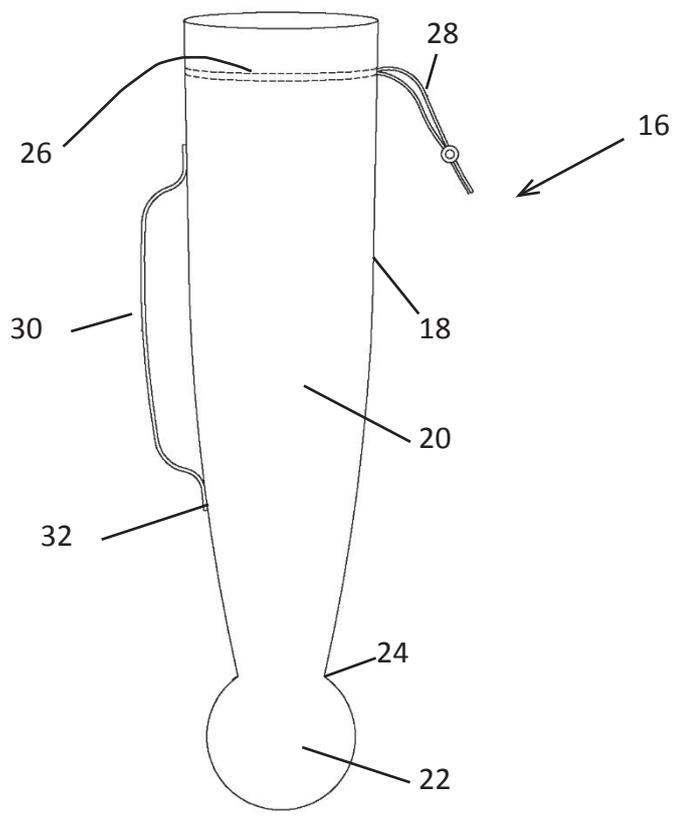


Fig. 3

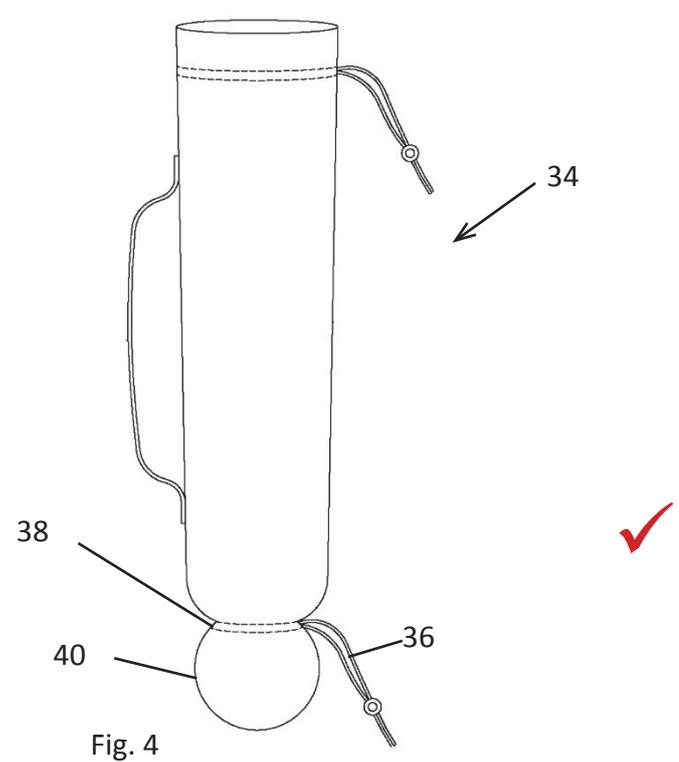


Fig. 4

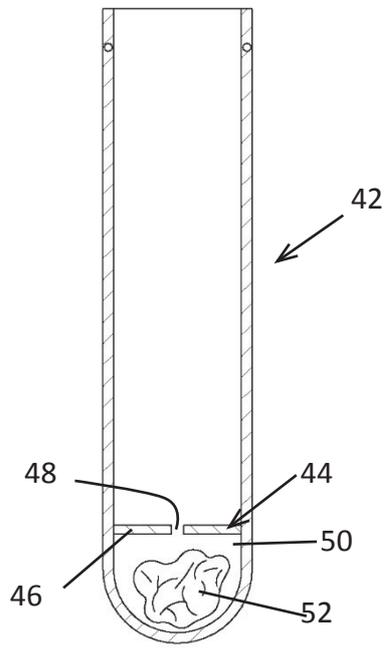


Fig. 5

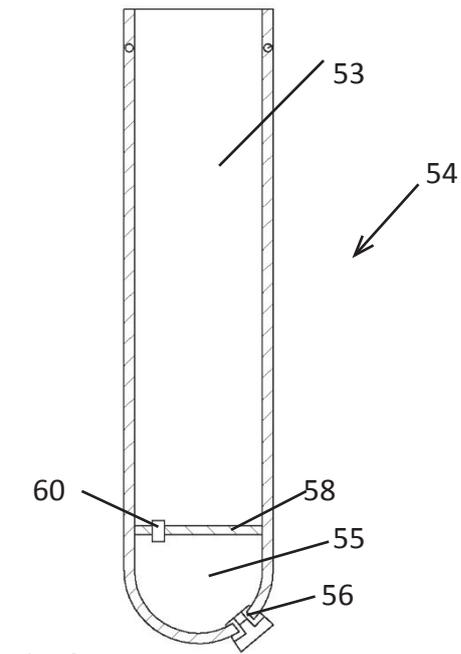


Fig. 6

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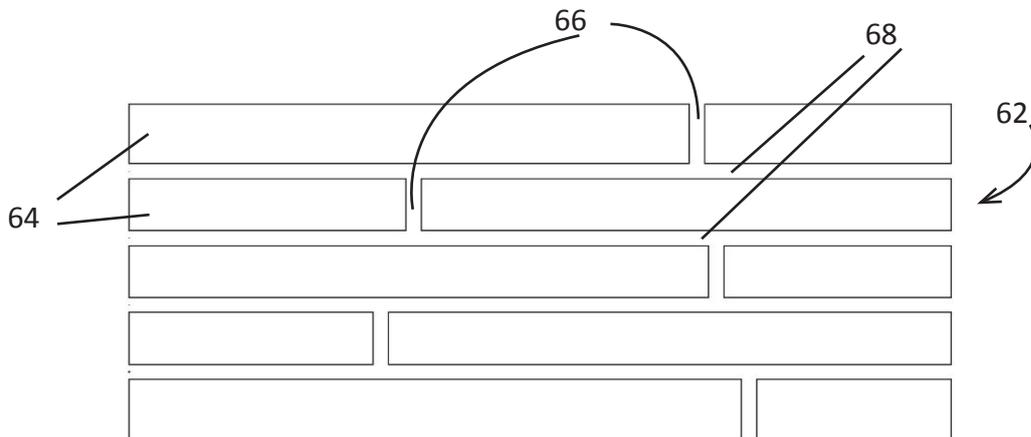


Fig. 7a

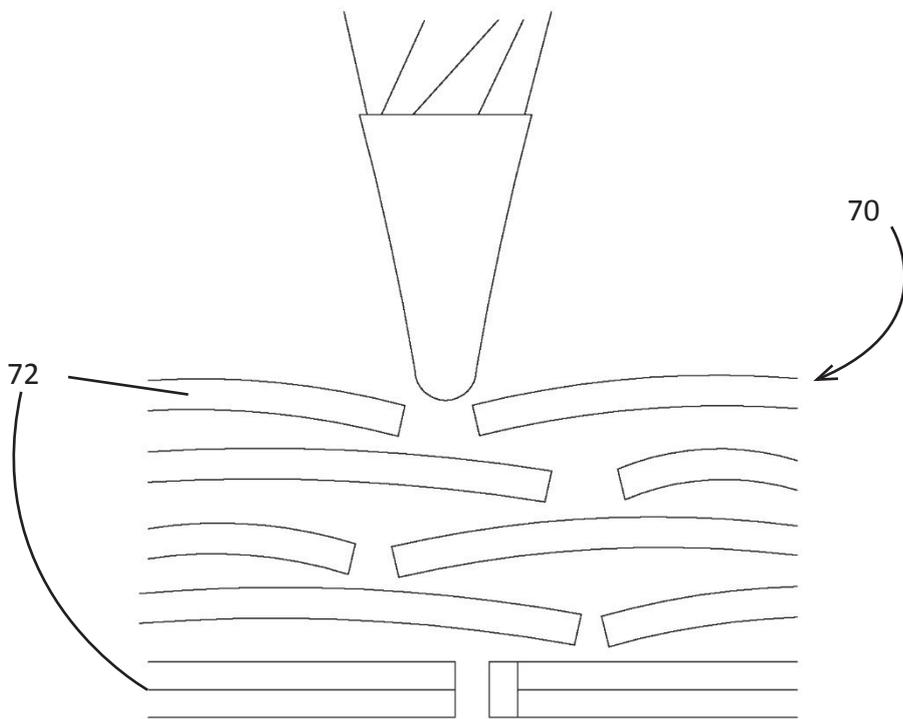


Fig. 7b

