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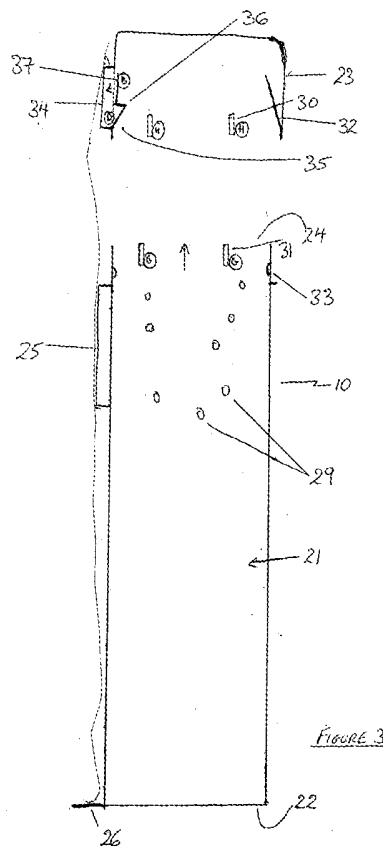
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**A01K 97/04** (2006.01)

(56) Documents Cited:  
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**CN 001137342 A**                    **JP 2003169608 A**  
**JP 2000224946 A**                   **US 4841664 A**  
**US 4696125 A**                    **US 4603502 A**  
**US 4047317 A**                    **US 20070044369 A**

(58) Field of Search:  
INT CL **A01K**  
Other: **ONLINE: WPI, EPODOC**

(54) Abstract Title: **Bait holder**

(57) A bait holder (10) for use in line angling comprises a container (11) to hold bait; the container (21) comprising a first attachment means (13) engageable to a hook, a second attachment means (check) attachable to a line or a hook, the container being openable to allow bait to be placed in the container (21), one or more apertures (29) allowing the scent of the bait to enter the surrounding water.



**GB 2459136 A**

The claims were filed later than the filing date but within the period prescribed by Rule 22(1) of the Patents Rules 2007.

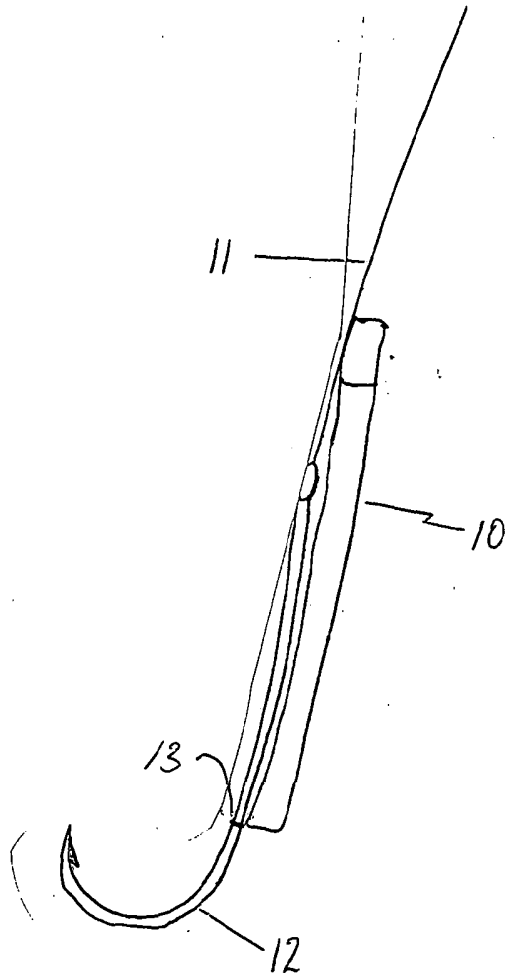


FIGURE 1

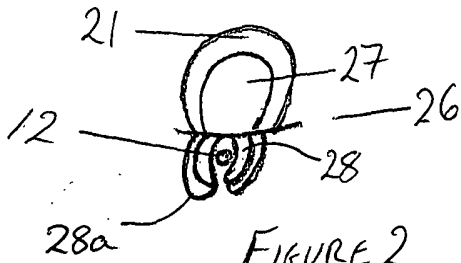


FIGURE 2

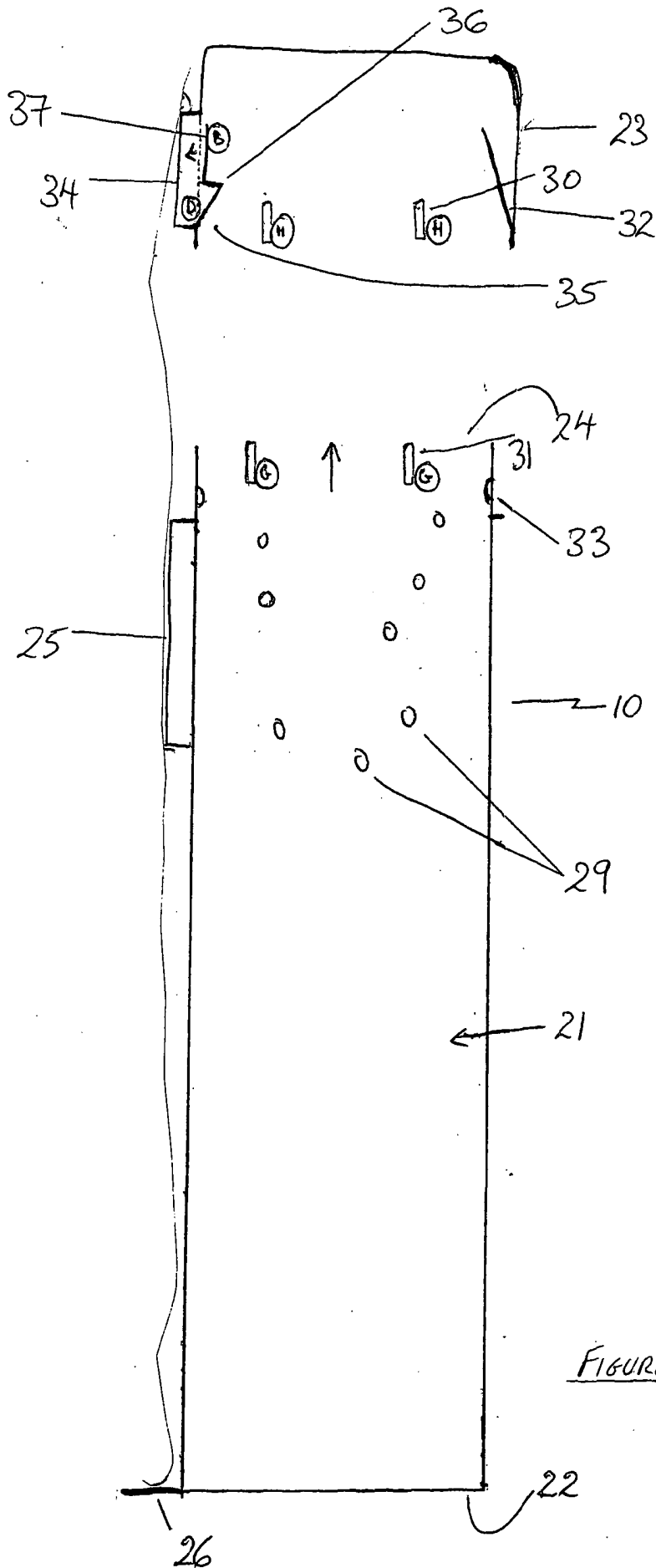


FIGURE 3

## A BAIT HOLDER FOR USE IN ANGLING

### Field of Invention

- 5 The present invention concerns a device for use when angling either in a salt or fresh water situation. In particular a device to assist in attachment of bait to a fishing line and hook is disclosed.

### Background to the Invention

10

Angling using a line having at one end a hook and bait is an extremely popular pastime and sport, having participants of all ages, around the world. As such a large number of devices are available to assist the angler and to improve the chances of catching a fish.

15

Although there are many variations on the activity, the majority have in common the use of a line with a hook attached at one end on which to catch the fish. One aspect therefore of central importance in angling is the means of attracting a fish onto the hook. The most common method is simply to  
20 “skewer” bait onto the hook. The bait then functions on a number of senses of the fish in order to attract the fish. For example the bait can resemble, or be formed to resemble an element of the fish’s diet. The fish is therefore or additionally attracted by a visual stimulus onto the hook. Alternatively, the bait can act as a scent stimulus through the release of chemical attractants into  
25 the water.

There are however a number of disadvantages associated with such a bait system. Firstly, not all materials are amenable to be used as bait. For example, if the bait is too soft or flowable then it will not be attachable to the

hook. Attempts to render such a bait more solid run the risk of the binder materials affecting the attractant properties of the bait.

5 Secondly, bait fixed initially over the hook point onto which it is hoped to attract the fish, has a tendency to work its way along the curve of the hook and into the gap of the hook. When a fish then bites on the bait it is not hooked and therefore escapes.

10 Thirdly, bait on a hook can be eaten by animals other than the fish sought. For example, it is well known that crabs may also be tempted to remove bait.

Fourthly, the release of a scent from the bait is not controllable and can lead to too rapid a loss of scent from the bait which renders it rapidly ineffective.

15 Fifthly, replacing bait can be a slow process.

It is therefore an object of the invention to provide a means of securing bait to a fishing line and hook which addresses the above problems.

## 20 Summary of the Invention

According to the invention there is provided a bait holder for use in line angling, the bait holder comprising a container to hold bait; the container comprising a first attachment means engagable to a hook,  
25 a second attachment means attachable to a line or a hook,  
the container openable to allow bait to be placed in the container,  
one or more apertures allowing the scent of the bait to enter the water in which a hook is placed.

The bait holder allows a wide variety of bait to be used in a more controlled manner.

5 Optionally, the container of the bait holder comprises a first portion to hold bait, the first portion being open at one end to enable bait to be added to or removed from the first portion, the container additionally comprising a closure cap, fittable over the first portion to close the container. The addition or removal of bait is thereby facilitated.

10 Conveniently, the cap has fins or projections engaging housings, recesses or holes in the first portion of the container to hold the cap and the first portion together. Additionally or further conveniently, the first portion of the container includes fins or projections engaging housings, recesses or holes in the cap to hold the first portion and the cap together.

15

Preferably, the first and second attachment means comprise a generally cylindrical tube, open at both ends, the tube slidably retaining an angling line. Optionally, the container including gripping means to grip a line within the cylinder and hold the bait holder in position. The or each tube preferably  
20 includes an elongate slot along its length to enable a line to pass inside the tube without having to dismantle the attachment means. Especially preferably, the or each tube has a spiral configuration allowing a line to pay from this outside around the spiral towards the spiral's centre and so be retained.

25 Optionally, the bait holder is formed into a shape to mimic the form of a food source of the particular fish to be caught. Further optionally, the bait holder is coloured to resemble a food source or alternatively to camouflage the bait holder.

### Brief Description of the Drawings

The invention will now be described with reference to the accompanying drawings which show by way of example only one embodiment of a bait holder. In the drawings:

Figure 1 illustrates the attachment of a bait holder to a hook and line;

Figure 2 illustrates an attachment means;

Figure 3 illustrates a bait holder.

### 10 Detailed Description of the Invention

The bait holder herein described can be easily attached and removed to and from a hook and line and enables a wide choice of bait to be included within its main body portion to enable the bait holder to act as a scent attractant. Additionally, the shape of the bait holder can be so shaped to act as a visual attractant to a fish. It is recognised that bait does not normally need to cover the barbed part of a hook, but merely attract the fish or other animal to the hook. Indeed certain species of fish are known to avoid bait on the barb of a hook.

20

In addition, an angler may employ one or more bait holders for different baits on the same line. This; again, increases the flexibility available to the angler to better target a species of fish. Moreover, the bait holder also enables an angler to employ both fresh or frozen bait, depending on which is the most convenient and applicable. It also allows a liquidised bait which has been frozen into a form suitable for use in conjunction with the bait holder.

25

As shown in Figure 1, the bait holder (10) is intended for attachment to the line (11) and hook (12) both of conventional type. The holder (10) is attached

to the line (11) and hook (12) at two points, although this can be varied if so desired. The lower attachment means (13) (see Figure 2) is attached to the hook (12) whilst the upper attachment means is attached to the line. Where convenient however and depending on the size of the hook and line employed, 5 both the upper and lower attachments may be attached to either or hook or the line. If so required the bait holder (10) can be so applied as to pass substantially around both the line (11) and the hook (12).

In use therefore, bait contained within the holder (10) attracts a fish to the 10 hook (12), which may or may not have additional bait thereon. Moreover, the holder (10) acts to protect the bait from being removed by other creatures or from being washed away.

Figure 3 shows a bait holder (10) in more detail. The bait holder (10) shown 15 is in two main portions, a lower container (21) closed at one end (22), and a cap (23). The cap (23) is fittable over the open end (24) of the container (21) to form a substantially enclosed volume.

The lower container (21) is formed of a soft plastics material, although other 20 materials can be used such as harder plastics or metal depending on the particular usage. In order to be of suitable size for use on a line, the diameter of the container (21) is around 1.2 cm and the length approximately 5.5 cm. Said length and diameter are quoted as being typical values. In general, the holder can have the length of from 3 to around 7 cm, depending on the 25 particular fish species to be attracted, or the line being used.

Around 3.5 cm from the closed end (22) of the container (21), a cylindrical tube (25) of length approximately 1 cm and diameter around 2.5 mm is located on the outside of the container (21). The diameter is sufficient to enable a line



or a hook to pass therethrough and is secured lengthways along the outside of the container (21). The internal volume of the tube (25) has a spiral configuration enabling a line to pass from the outside of the spiral to the inside thereby securing the line (11) in position during use, but rendering the line  
5 (11) easily insertable or removable by the user.

At the lower end of the container (21) a securing clip (26) (shown as (13) in Figure 1) projects from the container (21) and is so formed to enable a container (21) to be fixed to a hook or line. Typically, the clip (26) is attached  
10 to a hook which is generally made from rigid material such as metal and so provide a more secure base for attachment.

The clip (26) is shown in more detail in Figure 2, where the container (21) holding bait (27) therein is illustrated, not to scale. In order to grip the hook  
15 (12), the element (26) includes a hard plastic inner gripping portion (28) and a soft outer plastic portion (28a).

To allow the scent of the bait to more easily exit the holder (10), the container (21) includes a series of holes (29) connecting the inner volume of the container (21) to the outside. Through the use of holes of differing size and  
20 number, the user is able to control the release of bait into the water.

The cap (23) is of slightly larger diameter than the container (21) enabling the cap (23) to pass over the open end of the container (21). In principle, a general push-fit means is employed to hold the cap (23) and the container (21)  
25 in the correct relationship. In the embodiment shown, the closure means comprises two elements. Firstly, the cap (23) includes fins (30) on its inner surface which engage recesses in the container (21): resilient materials from which the holder (10) is formed enable the cap (23) and container (21) to give

slightly to enable engagement of the fins (30) and the recesses. Additionally, the container (21) has fins (31) to engage corresponding recesses in the cap. A further element is a spring (32) projecting diagonally upwardly from the inner surface of the cap (23). On engagement of the cap (23) with the container  
5 (21), the end of the spring (32) locates within a recess (33) in the outer wall of the container (21) to hinder removal of the cap (23).

In similar fashion to the tube (25) of the container (21) a further tube (34) is located on the outer wall of the cap (23). A section of the wall of the tube (34)  
10 adjacent cap (23) and which would engage the cap (23) is missing as is the corresponding section of the cap wall. These sections are removed is in order to include a line securing spring arm (35).

The spring arm (35) is fixed at a first end to the cap (23) and extends upwardly  
15 therefrom. An elbow (36) in the spring arm (35) acts to force the flat section (37) of the spring arm (35) against a fishing line within the tube (34), when the cap (23) is pushed onto the container (21).

In use therefore, the cap (23) is pushed onto the line (11), the line (11) passing  
20 within the tube (34) by means of a slot within the tube (34). Similarly, the container (21) is also attached to the line (11) which is passed within the tube (25); the hook (12) being already secured to the line (11). The container (21) is slid along the line (11) until it is in the required position with the securing clip (26) adjacent to the hook (12). The securing clip (26) is fitted onto the  
25 hook (12). Bait can then be inserted into the container (21) if this action has not already been performed. The cap (23) is pushed along the line (11) and secured over the container (21). As the cap (23) is pushed on, the wall of the container (21) pushes the elbow (36) of the spring arm (35) in an outwards

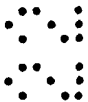
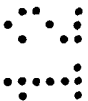
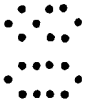
direction, which motion traps the line (11) between the flat section (37) of the arm (35) and the tube (34). The container is thereby secured in position.

Alternatively, the container (21) can be first slid onto the line (11), followed  
5 by the cap (23). The cap (23) then closes onto the container (21).

In addition to the above features, lights – such as beta lights – can be incorporated into the bait holder (10) enabling for example an angler, who is fishing at night, to detect movement of the bait holder (10) indicating a fish  
10 has been caught on the hook. Alternatively, the lights can function as an attractant for certain species of prey, such as squid.

CLAIMS

1. A bait holder (10) for use in line angling, the bait holder (10) comprising a container (11) to hold bait; the container (21) comprising  
 5 a first attachment means (13) engageable to a hook,  
 a second attachment means attachable to a line or a hook,  
 the container being openable to allow bait to be placed in the container (21),  
 one or more apertures (29) allowing the scent of the bait to enter the  
 10 water in which a hook is placed.
2. A bait holder (10) according to Claim 1, wherein the container (21) of the bait holder comprises a first portion to hold bait, the first portion being open at one end to enable bait to be added to or remove from the  
 15 first portion, the container additionally comprising a closure cap (23), fittable over the first portion to close the container (21).
3. A bait holder according to Claim 2, wherein the cap (23) has fins (30) or projections engaging housings, recesses or holes in the first portion  
 20 of the container to hold the cap and the first portion together.
4. A bait holder according to Claim 2 or Claim 3, wherein the first portion of the container includes fins (31) or projections engaging housings, recesses or holes in the cap (23) to hold the first portion and the cap  
 25 (23) together.
5. A bait holder according to any preceding Claim, wherein the first attachment means comprises a generally cylindrical tube (25), open at both ends, the tube (25) slidably retaining an angling line, the container



including gripping means to grip a line within the cylinder and hold the bait holder in position.

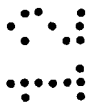
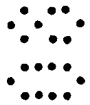
5 6. A bait holder according to Claim 5, wherein the tube includes an elongate slot along its length to enable a line to pass inside the tube without having to dismantle the attachment means.

10 7. A bait holder according to Claim 5 or Claim 6, wherein the tube has a spiral configuration allowing a line to pay from this outside around the spiral towards the spiral's centre and so be retained.

8. A bait holder according to any preceding Claim, wherein the bait holder is formed into a shape to mimic the form of a food source of the particular fish to be caught.

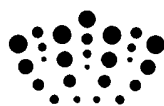
15 9. A bait holder according to any preceding Claim, wherein the bait holder is coloured to resemble a food source or alternatively to camouflage the bait holder.

20 10. A bait holder substantially as herein described with reference to and as illustrated in the accompanying drawings.



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**Application No:** GB0806684.7

**Examiner:** Mr Jason Scott

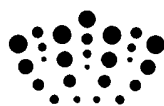
**Claims searched:** 1-10

**Date of search:** 27 March 2009

## 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,Y	X: 1-4; Y: 5-7	WO 2008/091140 A LEE See whole document and especially paragraph [59] concerning the scent, holes "h", line retention tube 26, and cap closures mechanisms in the exploded sections of figures 3-9.
X,Y	X: 1 & 8; Y: 5-7	WO 03/069988 A DING See whole document and especially figure 3 showing hook connector 34 and line connector 32 of a container for holding live bait with holes 16.
X,Y	X: 1, 8 & 9; Y: 5-7	JP 2003169608 A ASUKA See whole document and especially the English language abstract and the figures showing an apertured bait container intended for long line fishing.
X,Y	X: 1-4; Y: 5-7	JP 2000224946 A KUSASHIMA See whole document and especially the English language abstract and figures showing a bait container with apertures, hook and line connectors and detachable cap with fins for connection to the container.
X,Y	X: 1; Y: 5-7	CN 1137342 A LIU See whole document and especially the English language abstract and figure disclosing a permeable bait container attached to a hook and line.
X,Y	X: 1-4, 8 & 9; Y: 5-7	US 4841664 A BALDWIN See whole document and especially column 5 discussing the holes which allow water to pass through the bait container and thereby inherently allow scent to be passed to the surrounding water. The snap fit closure of column 6, line 2 inherently suggests projections which engage recesses.
X,Y	X: 1 & 9; Y: 5-7	US 4603502 A MACDONALD See whole document and especially the figures, column 3, lines 18-22 disclosing the flow of water through container apertures which would inherently pass scent to the surrounding water.
X,Y	X: 1; Y: 5-7	US 4047317 A PFISTER See whole document and especially column 2, lines 8-48 disclosing the passage of scent from the lure and attachments for a hook



		and a line.
Y	5-7	US 2007/044369 A FRANKLIN See whole document and especially paragraphs [0025] and [0026] disclosing a spiral structure for holding an item to a fishing line.
Y	5 & 6	US 4696125 A RAYBURN See whole document and especially the description of figure 2 (column 2, lines 50-59) teaching the mechanism of holding an item onto a fishing line.

**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<sup>X</sup> :

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

A01K

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

WPI, EPODOC

**International Classification:**

Subclass	Subgroup	Valid From
A01K	0097/04	01/01/2006