

TITLE: FISHING LURE

FIELD OF THE INVENTION

The present invention relates to fishing lures.

5 BACKGROUND TO THE INVENTION

Any discussion of the prior art throughout the specification should in no way be considered as an admission that such prior art is widely known or forms part of common general knowledge in the field.

10 A typical fishing lure is made of plastic shaped like a small fish, shrimp, bug or insect, and used as bait for catching fish. The lure is attached to a fishing line instead of live bait.

When selecting a fishing lure, an angler needs to consider a number of variables, such as the water environment in which a fishing lure is to be used, the type of fish which is sought to be caught, the type of fishing system within which the fishing lure
15 will be used, and the ease of use of a fishing lure. In addition, an angler may take into account his own or other peoples perceptions of what is attractive to a fish. For example, an angler may consider a style of motion of a fishing lure whilst in the water, to be particularly attractive to one or more types of fish. As a consequence, an angler often needs to carry a multitude of differing lures in order to ensure they have
20 available a lure of the colour, shape or other feature suitable for particular fishing conditions, location or fish species.

However, lures are relatively expensive owing to the need to individually decorate each lure shape. Furthermore, lures often have a limited lifespan due to damage caused by fish bites or scraping against rough surfaces such as rocks or snags
25 which at least partly destroy the decorative finish.

It is an object of the present invention to overcome or ameliorate at least one of the disadvantages of the prior art, or to provide a useful alternative.

SUMMARY OF THE INVENTION

To this end, a first aspect of the present invention provides a fishing lure; said
30 lure comprising:

a body;

an outer covering;

wherein said outer covering is shrunk onto said body.

Preferably, the body includes one or more attachment points which extend from the body.

Preferably, the body is moulded from a suitable plastics or rubber material.

5 Preferably, the body is shaped to mimic the shape of a bait for a fish.

In one preferred embodiment the body comprises more than one piece.

Preferably, the pieces are connected and articulated so as to allow movement relative to each other.

Preferably, the outer covering is decorated.

10 Preferably, the outer covering is formed from a heat shrinkable material.

Preferably, the outer covering is formed from a film.

In one embodiment, the outer covering is in the form of a sleeve which is passed over at least part of the body and then shrunk to conform to the body.

15 In an alternative preferred embodiment, the outer covering is in the form of a substantially flat sheet which is wrapped over the body.

Preferably, the body includes a channel or recess which receives a retaining member for retaining the outer covering on the body.

Preferably, free edges of the outer covering are located in the channel or recess and retained therein by the retaining member.

20 Preferably, the retaining member is compressible.

Preferably, the channel or recess extends substantially between the front and rear of the lure body.

In one preferred embodiment, the outer covering is formed from a light reflective material.

25 A second aspect of the present invention provides a method of making a fishing lure; said method comprising:

forming a body;

applying an outer covering to said body;

wherein said outer covering is shrunk onto said body.

30 Preferably, the method further includes the step of forming a frame to which the body is attached.

Preferably, the frame is formed from wire.

Preferably, the body is moulded from a suitable plastics or rubber material.

Preferably, the body is shaped to mimic the shape of a bait for a fish.

Preferably, the outer covering is decorated.

Preferably, the outer covering is formed from a heat shrinkable material and is shrunk onto the body by the application of heat.

5 Preferably, the outer covering is in the form of a sleeve which is passed over at least part of the body and then shrunk to conform to the body.

A third aspect of the present invention provides an outer cover for a fishing lure, the outer cover made from a shrinkable material.

Preferably, the outer cover is made from a heat shrinkable material.

10 Preferably, the outer cover is formed from a film

Preferably, the outer cover is in the form of a sleeve which is passed over at least part of a lure body and then shrunk to conform to the body.

Preferably, the cover is made from a film with a reflective surface capable of changing colours according to the incidence of light on the film.

15 Preferably, the outer cover is decorated.

Preferably, the cover has a printed design bearing fish-like or bait-like features.

Unless the context clearly requires otherwise, throughout the description and the claims, the words 'comprise', 'comprising', and the like are to be construed in an
20 inclusive sense as opposed to an exclusive or exhaustive sense; that is to say, in the sense of "including, but not limited to".

BRIEF DESCRIPTION OF DRAWINGS

Preferred embodiments of the invention will now be described, by way of example only, with reference to the accompanying drawings in which:

25 Fig. 1 depicts a frame over which a lure body is to be moulded;

Fig. 2 depicts a first embodiment of an uncovered lure body moulded over the frame depicted in Fig. 1;

Fig. 3 depicts an uncovered lure body comprising two portions, whereby the portions are connected together by means of an articulated joint so as to allow
30 movement relative to each other;

Fig. 4 depicts a lure cover or sleeve for fitment to a lure body;

Fig. 5 depicts the cover or sleeve depicted in Fig. 4 having been shrunk into position on a lure body;

Fig. 6 depicts a sectional view of a lure body, the body including a slot to receive an externally mounted device;

5 Fig. 7 depicts part of a flat strip of printed lure cover material;

Fig. 8 depicts a further embodiment of an uncovered lure body;

Fig. 9 depicts the lure body of Fig. 8 viewed from underneath;

Fig. 10 depicts cross-section B-B of the lure body illustrated in Fig. 9;

Fig. 11 depicts a perspective view of a lure cover consisting of tubular cover
10 pieces which have been separated from a continuous tubular shape; and

Fig. 12 depicts a length of a continuous strip of bait shapes with printed features.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Fig. 1 depicts a frame 10 of a fishing lure over which a lure body is moulded.
15 The frame includes attachment devices 12a, 12b and 12c for securing to a fishing line, one or more hooks, or additional lure elements. In another embodiment one or more attachment devices 12d may be separately formed and encased and anchored within the moulded material forming the lure body. In this preferred embodiment the sub
frame 10 is formed from metal wire or other suitable material, such as Kevlar. The
20 frame includes attachment devices such as rings or eyelets 12a, at the nose of the lure to facilitate attachment to a fishing line, and rings or eyelets 12b, 12c for the attachment of one or more hooks or additional lure elements. The lure may further include one or more devices 14 mounted on the frame and external to the lure body to cause the lure to exhibit certain characteristics, such as to travel to the desired depth
25 when trolled and/or to move in a certain way such as an erratic movement or a movement mimicking a wounded bait.

One or more additional devices 16 may be encased within the plastic matrix of a lure body or secured to the lure body. The device(s) 16 may, for example, be a noise making device or rattle, and/or weight and/or buoyancy device. The additional
30 device(s) 16 may be advantageously incorporated into the frame 10 at the time of manufacture.

Fig. 2 depicts an uncovered lure body 30 comprising one or more parts formed by encasing the frame 10 with a suitable material. In one preferred embodiment the body is formed from moulded plastic. Preferably the body 30 has a shape which mimics the shape of one or more species of bait. Attachment devices 12a, 12b, 12c
5 extend from the body 30. The lure body may also have one or more raised features, such as for example ridge 35, which act to assist in locating and retaining a cover (not depicted) in position on the body when the lure is in use. The lure body may further include one or more fins or projections to cause the lure to exhibit certain characteristics. These features may be integrally formed in the lure body or comprise
10 separate pieces attachable to the lure body.

Fig. 3 is an uncovered multi-piece lure body 30 wherein the two or more portions forming the lure body 30 are articulated thereby allowing the portions of the body to move relative to each other when the lure is moved through water and thus simulating a swimming motion. In the embodiment depicted the lure body comprises
15 two portions 32a, 32b joined at articulating joint 18. The body 30 includes mounting points 12a at the head of the lure body and one or more mounting points 14 located intermediate the two body portions. The mounting points 14 are located externally of the lure body portions but lie within the overall shape of the lure body. The various items referred to in the description of Fig. 1 may be attached to any of the mounting
20 points and in this embodiment mounting points 14 are at least or in addition connected together by known means to form an articulated connection so that the lure body portions 32a, 32b can move independently of each other. A decorative cover or sleeve (not shown) is placed over the lure body without interfering with the mounting points 14. The relative movement of the lure body portions 32a, 32b when the lure is moved
25 through the water simulates a bait swimming motion and enhances the reflection of light from any reflective cover or surface on the lure. The rear portion of the lure has a tail-shaped section 34 over which may be affixed a tail portion of a lure body cover. The tail portion 34 may be a separate piece joined to portion 32b along line A-A and may be connected to lure body portion 32b by means of an articulated connection.

30 Fig. 4 depicts a shrinkable lure cover 40. The cover is preferably in the form of a sleeve which may be passed over the lure body 30. The sleeve 40 is subsequently shrunk onto the lure body by application of heat so that it conforms to the shape of the lure body or lure body pieces. The sleeve 40 may be made from a decoratively

printed plastic film, such plastic film for example being of a type that has a highly reflective finish. In one embodiment the film may have a highly reflective surface capable of changing colours according to the incidence of light on the surface of the film. The cover may have a printed design having fish-like features 42 for example, in
5 the form or facsimile of a fish species consistent with the size and shape of the lure body or in some other form which is attractive to fish. The sleeve may also have one or more openings 44 to allow water to flow through between the covers or underneath the covers so as to cause at least one of the cover surfaces to change aspect or reflect light in different directions as water flows through the opening and underneath the
10 cover. The design on the cover may be designed so as to allow for the shrinkage so that when the cover is shrunk onto the body the design will assume the desired appearance.

Fig. 5 shows the cover 40 shown in Fig. 4 having been shrunk into position on the lure body 30 by application of heat or other means. After the application of the
15 sleeve, a nose piece 36 formed from a suitable plastic or metal may be placed over the nose of the lure. A small amount of glue or sealant may be applied to cover any gap or opening in the leading end of the heat shrunk material so as to prevent water under pressure of trolling infiltrating beneath the leading edge of the sleeve and delaminating the sleeve from the underlying body of the lure. The cover or sleeve 40
20 may be longer than the lure body and may in part consist of thin strips 46 which when the lure is trolled through water will flex and move reflecting light and colour in a manner attractive to fish. More than one reflective coloured cover or sleeve may be applied including a top sleeve which may be transparent and/or having decorative colouring or printing 42 depicting one or more of the characteristics of the exterior
25 appearance of any bait and applied over the other covers or sleeves. In another embodiment the cover or sleeve portion 46 may instead be in the form of a tail which would be shrunk onto a lure body tail portion 34 shown in Fig. 3.

Fig. 6 shows a sectional view of a lure body 30 with a slot 38 for receiving an externally mounted device 20. The slot 38 includes a transverse semi-circular channel
30 39. The slot receives device 20 which has a corresponding semi-circular channel 22 which combines with the semi-circular channel 39 to form a circular orifice for receiving locking pin 24 to lock device 20 in position within the slot.

Fig. 7 illustrates a length of a flat strip of cover material 50 having free longitudinal edges 52 and 54. The flat strip comprises two portions 55a, 55b which form cover pieces for a lure body. The two portions 55a, 55b are separated by a cutting space 56 which separates the adjacent cover pieces on the strip. Edges 52 and/or 54 may have adhesive applied during manufacture and an adhesive protectant strip or layer (not shown) may be applied to prevent the adhesive adhering to the adjacent material when the strip is rolled or folded for transport or storage. To create a cover for a lure body the first cover element 55a having leading free edge 58 is separated from the flat strip of cover material 50 by cutting at separation line 56 and the separated cover element 55a is then formed around a lure body such as shown in Fig. 2, with free edges 52 and 54 abutting attachment device 12b (referring to Fig. 2) or overlapping one another and requiring a small slit to be made to accommodate attachment device 12b and surfaces adjacent to free edges 52 and 54 being affixed to the lure body by adhesive means such as hot melt glue and upon setting of adhesive a heat source is applied to the cover or sleeve to shrink the cover to adopt the shape of the lure body.

In another embodiment a separate tail shaped piece of stiff material is inserted into the overlapping portion of the cover or sleeve and the cover or sleeve is then shrunk onto the tail piece of stiff material to form a tail portion which can move at least partly independently of the lure body by the cover material flexing.

In another embodiment heat is not directed at the overlapping portion and the overlapping portion is not shrunk. The overlapping portion may be slit into strips.

The flat strip of cover material may be formed into a tube by affixing to the free longitudinal edges 202 and 204 to each other. The method of creating a cover for a lure body using a strip of tubular cover material is essentially the same as for a flat strip of cover material, except for the need to make a slit to accommodate attachment device 12b. Alternatively, if no slit is made then the cover material that shrinks around and covers the attachment device 12b must be punctured.

Fig. 8 shows a side elevation of lure body 30 without cover, whilst Fig. 9 shows the lure body of Fig. 8 viewed from underneath. In this embodiment the lure body has a channel or recess 36 which extends substantially between the front and rear of the lure body. In other embodiments the channel 36 may be interrupted or extend

on one or other sides of attachment device 12b or bifurcate and pass on both sides of attachment device 12b.

Fig. 10 shows cross-section B-B of lure body 30 shown in Fig. 7 and showing channel 36 which is formed with an opening slightly smaller than the widest cross-sectional dimension deeper in the channel. In applying a flat strip or non tubular cover to a lure body free edges or at least the portions adjacent to the free edges of cover 50 (shown partially in cross-section) are located within channel 36 and the cover is then held in place in the channel by means of a length of compressible cylindrical strip 60, the cross-sectional area of the strip 60 being slightly greater than the cross-sectional area of channel 36. The insertion of the compressible strip 60 into the groove 36 is effected by a tool 70 which has a concave face 72. The concave face 72 may be formed in the perimeter of a circular shaped tool 70. The concave face 72 is pressed against convex surface of the compressible strip 60 to press the strip 60 into channel 36. Additionally, if free edges 52 and 54 are overlapping then adhesive may be applied to the upper surface of the free edge first inserted into the channel 36 and the other free edge then placed over the adhesive coated free edge and the compressible strip 60 is then inserted into channel 36.

Fig. 11 shows a partial perspective view of a cover consisting of tubular cover pieces 80 and 90 which have been separated from a continuous tubular shape stored on a roll or folded or stored by some other means. The cover piece 90 covers the rear of the lure body and has slit or opening 92. The slit or opening has a rear wall 94 such that upon assembly cover piece 90 onto the lure body rear wall 94 is positioned to abut or be in close proximity to attachment device 12b so that leading free edges 428 are forward of attachment device 126 and cover piece 80 is assembled so trailing free edge 82 passes over the leading free edge 96 of cover piece 90 and abuts or is in close proximity to attachment device 12b. Slit or opening 92 and leading free edges 96 of cover piece 90 are thereby covered by cover piece 80 and upon shrinking of cover pieces by application of heat or other means both cover pieces are held in position on the lure body. Slits 98 and slit or opening 92 are advantageously formed in the cover material whilst it is in strip form prior to being formed into a tubular structure. In circumstances where hooks remain attached to attachment devices, especially a central attachment device such as 12b, a tubular lure cover consisting of two or more tubular cover pieces can be advantageously used without removing the hooks.

Fig. 12 shows as an example part of a continuous strip of bait shapes 100 with bait shapes 102 printed and cut-out in pairs AA, BB, etc. on a highly reflective material which is not prone to shrinkage on the application of heat. The bait shape pairs are connected together at point 104 at the tail and point 106 at a dorsal location.

5 Each pair of bait shapes is joined to the next of the pairs of bait shapes by connecting piece 108 at the tail and by connecting piece 110 at a dorsal location. All edges other than the joining pieces and joining points are free edges. Each pair of joined bait shapes is severed from an adjoining pair by severing joining pieces 108 and 110. The separated pair of bait shapes may then be folded at the joining points 104 and 106 and

10 placed on a lure body such as that shown in Fig. 3 and a tubular cover sleeve made of transparent material which shrinks on application of heat and of similar shape to the cover pieces 80 and 90 shown in Fig. 9 but absent strips 415 is placed over the bait shapes and heat applied to shrink cover pieces 80 and 90 bring the cover pieces 80 and 90 and the bait shapes underneath into close or tight proximity to lure body 30 thereby

15 creating an attractive and highly reflective bait simile.

Although the invention has been described with reference to specific examples it will be appreciated by those skilled in the art that the invention may be embodied in many other forms.

CLAIMS

1. A fishing lure; said lure comprising:
a body;
an outer covering;
5 wherein said outer covering is shrunk onto said body.
2. The fishing lure as claimed in claim 1 further comprising a frame to which said body is attached.
3. The fishing lure as claimed in claim 2 wherein said frame is formed from wire.
4. The fishing lure as claimed in claim 2 or 3 wherein said frame includes one or
10 more attachment points which extend from the body.
5. The fishing lure as claimed in any one of claims 1 to 4 wherein the body is moulded from a suitable plastics or rubber material.
6. The fishing lure as claimed in any one of claims 1 to 5 wherein the body is shaped to mimic the shape of a bait for a fish.
- 15 7. The fishing lure as claimed in any one of claims 1 to 6 wherein the body comprises more than one piece.
8. The fishing lure as claimed in claim 7 wherein the pieces are connected and articulated so as to allow movement relative to each other.
9. The fishing lure as claimed in any one of claims 1 to 8 wherein the outer
20 covering is decorated.
10. The fishing lure as claimed in any one of claims 1 to 9 wherein the outer covering is formed from a heat shrinkable material.
11. The fishing lure as claimed in any one of claims 1 to 10 wherein the outer covering is formed from a film.
- 25 12. The fishing lure as claimed in any one of claims 1 to 11 wherein the outer covering is in the form of a sleeve which is passed over at least part of the body and then shrunk to conform to the body.
13. The fishing lure as claimed in any one of claims 1 to 11 wherein said outer covering is in the form of a substantially flat sheet which is wrapped over said body.
- 30 14. The fishing lure as claimed in claim 13 wherein said body includes a channel or recess which receives a retaining member for retaining said outer covering on said body.

15. The fishing lure as claimed in claim 14 wherein free edges of said outer covering are located in said channel or recess and retained therein by said retaining member.
16. The fishing lure as claimed in claim 15 wherein said retaining member is
5 compressible.
17. The fishing lure as claimed in any one of claims 14 to 16 wherein said channel or recess extends substantially between the front and rear of the lure body.
18. The fishing lure as claimed in any one of claims 1 to 17 wherein the outer covering is formed from a light reflective material.
- 10 19. A method of making a fishing lure; said method comprising:
forming a body;
applying an outer covering to said body;
wherein said outer covering is shrunk onto said body.
20. The method of making a fishing lure as claimed in 19 wherein the frame is
15 formed from wire.
21. The method of making a fishing lure as claimed in any one of claims 19 or 20 wherein the body is moulded from a suitable plastics or rubber material.
22. The method of making a fishing lure as claimed in any one of claims 19 to 21 wherein the body is shaped to mimic the shape of a bait for a fish.
- 20 23. The method of making a fishing lure as claimed in any one of claims 19 to 22 wherein the outer covering is decorated.
24. The method of making a fishing lure as claimed in any one of claims 19 to 23 wherein the outer covering is formed from a heat shrinkable material and is shrunk onto the body by the application of heat.
- 25 25. The method of making a fishing lure as claimed in any one of claims 19 to 24 wherein the outer covering is in the form of a sleeve which is passed over at least part of the body and then shrunk to conform to the body.
26. A cover for a fishing lure, said cover made from a shrinkable material.
27. The cover as claimed in claim 26 wherein the cover is made from a heat
30 shrinkable material.
28. The cover as claimed in claim 26 or 27 wherein the cover is formed from a film.

29. The cover as claimed in any one of claims 26 to 28 wherein the cover is in the form of a sleeve which is passed over at least part of a lure body and then shrunk to conform to the body.

30. The cover as claimed in any one of claims 26 to 29 wherein the cover is made
5 from a film with a reflective surface capable of changing colours according to the incidence of light on the film.

31. The cover as claimed in any one of claims 26 to 30 wherein the cover is decorated.

32. The cover as claimed in any one of claims 26 to 31 wherein the cover has a
10 printed design bearing fish-like or bait-like features.