FISHING HOOK STRUCTURE
CONSTRUCTED FROM LIGHT CURABLE
ACRYLIC RESIN AND THE METHOD FOR
MAKING THE SAME

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Appl. No.: 10/896,668

Filed: Jul. 22, 2004

Related U.S. Application Data

Provisional application No. 60/489,543, filed on Jul. 23, 2003.

Publication Classification

Int. Cl. 7 ........................................... B21F 45/12
U.S. Cl. ......................................... 43/42.53; 43/43.16; 29/9

ABSTRACT

Applicants disclose a fishing fly or lure made at least in part from light cured acrylic resin (LCAR). The LCAR may be used to attach fiber to a fish hook or to mimic the body of an insect or other desirable shape.
FISHING HOOK STRUCTURE CONSTRUCTED FROM LIGHT CURABLE ACRYLIC RESIN AND THE METHOD FOR MAKING THE SAME


FIELD OF THE INVENTION

[0002] A fly or lure for fishing, the fly or lure at least partially constructed from light curable acrylic resin (LCAR) and a method of making the same.

BACKGROUND OF THE INVENTION

[0003] Prior art flies/lures (fishing hook structures) are typically made with a hook, to which fibers or various materials are attached by means of thread or glue. The completed structure is intended to mimic a food source for fish and, when used by a skilled fly fisherman when attached to the end of a fishing line can often be successful in catching fish.

[0004] Hooks, threads, fibers and other materials come in a wide variety of sizes, shapes, dimensions and other characteristics and are chosen to be combined according to the desired result—a fishing hook structure attractive to a fish. For example, if one intends to tie a Dark Cahill Dry Fly then they may choose a suitable hook such as a Mustad 94840 size 8 to 10. A suitable thread might be black, a suitable wing may be woodduck flank, a suitable tail may be brown hackle fibers, a suitable body may be muskrat fur and a suitable hackle may be brown hackle fibers. This fly imitates the dark phases of the genus Ephemerella and also represents a number of other early season gray colored mayflies.

[0005] On the other hand one may desire to tie a wet fly for example, a Leading Coachman. Wet flies are taken by trout and other fish for a variety of sub-surface foods. If one were to tie this wet fly they may choose a Mustad 3906 hook, black thread and fibers including peacock herl for the body, brown hackle and slate mallard wing quills for a wing. Likewise, Nymphs and Streamers may be made using a hook, thread, fibers and other materials.

[0006] The term thread here is intended to include thread, wire, floss and the like. The term fiber includes quills, dubbing, hackle, dun, chenille down, hair, tinsel, fur herl and any other natural or synthetic fiber substance intended to simulate: tail, wing, hackle, thorax, body and/or any other structure of fish food substance which the fly/lure is intended to imitate.

[0007] Typical prior art flies and methods for tying them may be found in the book entitled “The Fly Tier’s Benchside Reference to Techniques and Dressing Styles” by Leecon and Schollmeyer © 1998, the contents of which are incorporated herein by reference.

[0008] Typically a fly may include a fly wing, fly tail and a fly hackle formed from fibers. Flies typically also include a fly body which may also be formed, in part, from fibers of various materials. The body may include a thorax, abdomen, head and other body parts.

[0009] In addition to the hook, thread and fibers, adhesives may also be used in tying flies. These adhesives, typically liquids or semisolids, achieve several functions. These include one or a combination of: adhesive to attach material to the fly, coating for durability and appearance, and bulk for shaping a body or other fly structure. For example, adhesives may be applied to the hook prior to wrapping the threads, during the thread wrapping or after thread wrapping to help make the fly more durable and the fly tying procedure easier.

[0010] Beside the standard lacquer head cement onto the shank, covering the length of it will help keep flies from slipping after the fly has been tied. Further, a touch of head cement to the final windings at the head of a fly will help prevent unwinding. For another example, in tying a nymph head cement may be applied to both the winding and the outer side of the wing case to help prevent unraveling.

[0011] Epoxy is used as a coating and as material for forming a body. It is an adhesive which will attach to the shank of a hook and to which the fiber materials may be embedded. Numerous fresh and saltwater flies utilize epoxy resin as a coating or a body material. Epoxies cure by adding a catalyst and a base to form a chemical reaction that hardens the material. They will also form a tough, smooth finish when applied to a tie and will fill in gaps. However, epoxy flies need to be rotated until cured to prevent sag. This may be done by hand, but a rotisserie is much more convenient.

[0012] Epoxy substitutes such as hot glue and Soft Body™ may be used. Hot glue can be used to build bodies and/or attach material such as fibrous material. It is fed through a glue gun which melts it and then it quickly cures. It may be used to make egg patterns, molded eyes or flat flies. However, it can melt at high temperatures, such as may be found in the tropics and in tackle boxes exposed to the sun. Soft Body™ is available from Anglers Choice™ and is a pure water based plastic resin for coating flies. It may be used like epoxy for thick coats on flies, while thinner resin penetrates natural materials better. It sets in about twenty minutes and cures to waterproof in about twenty-four hours. It is less toxic than epoxy.

[0013] Nail polish can be used for head cement. Thickened up nail polish makes a satisfactory one coat gloss with streamer heads. A coating of thick nail polish, for example, for wrapping a hackle may make for a durable fly.

[0014] Various adhesives are available such as: Shoe Glo Goop, Zap A Gap, Aquaseal. These are strong flexible adhesives. They are used for gluing on eyes or coating bullet head flies for durability. Silicon caulking may be used to reinforce fibers such as rabbit hides. Silicon caulking may also be used to coat fibers such as lambs wool.

[0015] Contact cement works well for flexible bonds. For example, latex can be used to glue down wing cases.

[0016] Water based cement may be thick or thin. A chemical reaction allows them to set. They typically take longer to set than solvent based cements.
In addition to the liquid adhesives, that may, like epoxy, serve both an adhesive function and the function of forming shape or body to the fly, there is double stick tape that may be used with foam. For example, double stick tape is used to wrap around the base of foam before the foam is tied down to the hook. It prevents the foam from being cut with the threads and fuses it in place. Adhesive lure tape may be used to cover heads and bodies of warm water flies. It may be used to cover a foam cylinder to make a popper or the side of streamers. It can be used to form caddis, dragon fly and terrestrial wings.

Many of the adhesives, however, have a number of drawbacks. Some are at least partially soluble and when the fly gets wet, one or more parts of the fly may become loose or may fall off the fly. Some leave an undesirable chemical contamination or are difficult to work with. Some of these are difficult to work with because they set up too quickly or, on the other hand, too slowly. Chemically adhesives will cure under conditions not directly controlled by the fly tier. Cyanocrylate glue (superglues) may set quickly. Certain epoxies may set slowly. What is needed is a material and method for making flies which will afford one or more of the deficiencies of present adhesives. Thus, it is the object of the present invention to provide a composition that will serve at least some of the functions of the present adhesives that are available but will provide additional advantages.

SUMMARY OF THE INVENTION

Applicants have discovered anew material for use in making or producing new flies, lures or other fishing hook structures. This material has a number of advantages over the prior art material and adhesives. Applicants’ material consists of an acrylic resin that has a catalyst which will react to visible light (preferably 250-500 nanometers), thus controllably curing the resin when the resin is exposed to visible light. The acrylic resin is available in liquid, honey, gel or putty form. In gel or putty form it is easy to shape the resin to mimic a body, thorax, head or any other structure of an insect or nymph. It has heretofore been used in dentistry. A typical light cured acrylic resin (LCAR) material is clear gel Triad® used in dentistry, available from Dentsply of York, Pa. LCAR is available, that will cure to varying degrees of flexibility, from non-flexible to flexible, such flexibility based on differing polymer chains.

Applicants’ novel fly or other fishing hook structure may be formed using a hook as a base and LCAR either as a liquid, honey, gel or putty to form the body or parts of the body. As a putty, it may be hand shaped onto the shank of a hook in any desired shape. When shaping is completed it may be exposed to a light source, for example, a high intensity light source such as that available from a high intensity halogen or LED source for approximately 5-30 seconds per millimeter thickness in which it will cure from a putty to form a hardened resin (faster if clear LCAR is used). High intensity light sources are available from Rembrandt Den-Mat Corporation as the “Allegro.”

The LCAR is typically stored in light proof containers and may be refrigerated. It is exposed to light when the fly tier wishes to use it, but while it is light sensitive, there is typically sufficient time to shape a body or the structure on the hook. That is to say, LCAR may be exposed to ambient light but will not set up and cure immediately under such light. Rather, one can work with LCAR in typical ambient light, such as a hobby workspace, without the LCAR curing. However, when curing is desired, a intense light may be placed close to the shaped object and curing will be effected in a few seconds.

Thus, a major advantage to applicants’ novel fly and tying method is that, unlike chemical curable resins, which have a preset timetable (based for example, on temperature and other variables) the fly tier may shape and reshape the putty or gel until the desired shape is achieved and, at that time choose to cure the resin by application of a high intensity light.

Further, applicants’ LCAR, when used in a liquid or gel form may coat flies such as prior art coating is used, which coating will set and cure when subject to high intensity light.

Applicants’ LCAR may be used as a liquid to coat the shank of a hook before the hook is wrapped with string and then it may be cured. Depending on the type of LCAR used, this could produce a fly that floats. LCAR may also be applied to the hook after the shank has been wrapped with thread. It may be used as to shape a body of a wet fly, which will sink.

The use of applicants’ novel LCAR may cut traditional fly tying time by up to 50%. LCAR can have a variety of colors added and bonds irreversibly to itself even after one application has already been cured. Applicants’ novel LCAR may be used, for example, to cover painting, or stickers which have been applied to previously cured LCAR, thus rendering the artwork imbedded and waterproof.

Thus, applicants’ LCAR, as a liquid, honey gel, or putty, has numerous uses in the manufacture, and finishing of flies and lures for fishing. It may be used as a method of making artificial flies and lures. In its simplest form, the method may comprise the steps of providing a hook, a quantity of LCAR and quantity of fibers. One would shape the LCAR to the hook and attach fibers to the shaped LCAR and then cure it by exposure to a high intensity visible light. The shaping and attaching steps are not necessarily done in that order. For example, one may wish to attach fibers to the shank of a hook either using liquid LCAR, a prior art adhesive cement or no adhesive cement at all (using threads, for example). Following the attachment of the fibers to the hook or base, the LCAR may be applied and shaped into any desired configuration, such as a body, thorax, head, ribs, etc. After achieving the desired configuration one may cure the LCAR. That is to say, LCAR may be used to supplement additional fly tying techniques wherever prior art adhesives or epoxy is used. The LCAR may be used either as an adhesive or as a body material itself or a combination of an adhesive and body material.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is an illustration of a fishing hook structure, here a fly, made at least in part with LCAR, the view in perspective.

FIG. 2 is a side elevational view of a streamer made, in part, with LCAR.

FIG. 3 illustrates the use of LCAR with molds to form fishing hook structures.
FIG. 4 illustrates some components of a kit for use in making fishing hook structures such as flies or lures.

FIG. 5 is a front elevational view of a lion's head, stuffed, to illustrate the use of LCAR in taxidermy.

FIG. 6 is a side elevational view of a fish to illustrate the use of LCAR in taxidermy.

FIGS. 7 through 14 illustrate the use of LCAR and the steps of making a fishing hook structure, the views in perspective.

FIGS. 15A through 15F illustrate the use of LCAR to make parts for attachment to a fishing hook structure.

FIGS. 16 through 23 illustrate, in perspective view, steps in using LCAR to complete a fishing hook structure, here a fly tied using LCAR to mimic a shrimp.

FIGS. 24 through 26 illustrate, in conceptual view, the methods for adjusting specific gravity, altering the appearance of LCAR and texturizing LCAR.

FIG. 27 illustrates the preferred embodiment of using LCAR to either coat a fishing hook or a component attached to a fishing hook, or to attach an item to a fishing hook structure, the fishing hook structure preferably being at least partially coated with cured LCAR.

Note in FIGS. 1 and 2 that LCAR 30 may be used as a part of the structure formed on the fishing hook 12.

While Applicants may use LCAR to hand form, at least partially, the body or other structure on the fishing hook, as by hand application or hand shaping, FIG. 3 illustrates the use of LCAR 30 for mass producing LCAR fishing hook structures.

FIG. 3 illustrates a mold 26 that is capable of mass producing flies or lures. Mass production may be achieved by inserting putty, gel or liquid LCAR, into the mold, (here through use of syringe 28). Body parts may be molded separately and then attached to a hook, or the hook may be integrated into the mold. LCAR 30 may be used alone or with a chemical catalyst, in this application or any other application set forth in these specifications.

FIG. 4 illustrates a kit 32 for making flies or lures or other fishing hook structures. The kit includes LCAR 30, here a light proof container 31 of LCAR. Included may be a light proof syringe 28 of LCAR and/or a light proof plastic pouch 32 of putty LCAR. The syringe of the kit may be a "black" syringe with a light proof barrel and nozzle (see FIGS. 3 and 4). The kit may include a light source 35 (see FIG. 10) such an LED light source, an incandescent or halogen light source. The light source for the kit may be a high intensity light source such as that available from Den-Mat Corporation known as the Rembrandt Allegro. The kit may optionally include an assortment of hooks. Finally, the kit may also include an assortment of fly tying or lure accessories including: fibers, quills, hackles, eyes, sparkles, color dye, floats, rattles, as well as any other materials and accessories set forth in these specifications. Applicants provide a kit to package the aforesaid elements for the convenience of the consumer. The kit may also include any fly tying materials set forth herein or any of the materials set forth in FIGS. 24-26, or a light source.

The specifications set forth herein may apply also to the field of taxidermy. Applicants' incorporate herein by reference VanDyke's 2003 catalog. The catalog illustrates known uses in the taxidermy field of epoxy. Many such uses of epoxy in the taxidermy field may be achieved with the use of the LCAR (with or without a chemical catalyst) as set forth in the specifications. Indeed, the following figures illustrate some of the uses of LCAR in taxidermy. More specifically see FIGS. 5 and 6 for a lion 50 and a fish 60 illustration, respectively, which shows potential uses of LCAR in taxidermy including: sealing, coating (for protection) and bonding the skin to the preformed prosthesis. In regard to taxidermy work, the LCAR may be used to seal around the nose, eyes, ears, mouth, fins, claws, teeth, tongue etc., of the animal and filling in cracks and crevices and coloring the same.

It is noted that, with the appropriate light source, the chemical reaction in LCAR is substantially complete within 15-30 seconds of exposure to strong light. On the other hand epoxy, such as is used in prior art fly tying, lures and taxidermy, takes overnight or longer before it is substantially complete. The time saving achieved by substantially complete curing in a few seconds in the high intensity light of applicants' LCAR will save a substantial amount of time.

FIGS. 7 through 23 illustrate some of the steps in making Applicants' novel LCAR based fishing hook structure 10.
FIG. 7 illustrates the step of providing a hook 12, here held carefully in the jaws of afly tying vice.

FIG. 8 includes an optional step of wrapping at least part of the shank of the hook with thread 22. Following the wrapping, as illustrated in FIG. 8, one may, optionally, apply a coating of LCAR to assist in bonding the thread to the shank or to coating the thread for strengthening and protective purposes as illustrated in FIG. 9. If this coating step is used, then curing, as set forth in FIG. 10, is provided by exposing the LCAR to alight source 35.

Beginning with FIG. 11, the tying of a fly, more specifically a shrimp, to fishing hook 12 will be illustrated, but is only exemplary of Applicants' present invention. FIG. 11 illustrates part of the attaching step wherein part of the tentacles of the head 14A of a shrimp are provided, here as through the use of fibers 34. Part of the fibers may be wrapped directly to the hook, or to a base of the hook created by the aforementioned thread wrapping. In any case, whether fiber 34 is attached directly to the hook or to a hook base (in the form of, for example, threads) illustrated in FIG. 9, thread 22 may be provided to at least partially wrap the fibers to the hook structure. FIG. 12 shows the completion of the wrapping step. FIG. 13 illustrates that LCAR 30 may be applied to help attach, strengthen, protect and coat the fiber 34. FIG. 14 illustrates curing of the LCAR using light source 35.

FIGS. 15A through 15F illustrate the steps, optional, of preparing other body parts or components for attachment to the hook structure, here stalked eyes 36 (see FIG. 16). A heavy gauge nylon fishing line 38 is heated to form a pair of balls 38A and 38B at the removed ends thereof. The balls are then coated with a thick layer of LCAR to form a pair of round bulbs 38C, which, before curing, are flattened 38D as in FIG. 15C, against a flat surface. A marker 39, dye or other coloring is used to create eye art on flattened bulbs 38D, which are then capped and cured with LCAR in the step illustrated in FIGS. 15E and 15F to protect the eye artwork from washing out and for three dimensional or optical enhancement. In FIG. 15F, curing is undertaken and the pair of eyes 36, on stalks, are ready as in FIG. 16 to be attached to the fishing hook or fishing structure. This is illustrated in FIG. 17, the attachment typically done with LCAR, subsequently cured as set forth in FIG. 18.

In FIGS. 19 and 20, additional fiber 34 is provided, here to form a tail and attached by curing using LCAR, see FIG. 20.

FIGS. 21 through 23 illustrate the manner in which accessories may be attached to the fly or fishing hook structure to make it more attractive to a fish. This particular accessory, by way of example only, is a fly rattle 40, which consists of a small cylindrical glass enclosure including one or more metal spheres for bouncing back and forth and creating a "rattle" sound, attractive to some fish. In any case, the fly rattle is only one of a myriad of accessories beyond the hook, body and/or fiber that may be used to make it more attractive to the fish, and LCAR 30 may be used in applying, attaching, strengthening and protecting such accessory. For example, FIG. 21 illustrates LCAR 30 applied to secure fly rattle 40 to the fishing hook structure. FIG. 23 illustrates the curing step.

Typically, LCAR would have a specific gravity of slightly greater than one. However, the LCAR may be adjusted for specific gravity of the resulting fishing hook structure, so as to help it either sink or float. For example, FIG. 24 illustrates some LCAR to which either tiny dry microscopic glass beads 42 may be added, to decrease the specific gravity of the resulting mixture and produce a hook structure that would tend to float. On the other hand, powdered silica 44 may be added to the LCAR to increase the specific gravity to produce a fishing hook structure that will sink.

FIG. 25 is an optional appearance altering step wherein LCAR may be combined with or more of the following: dye; "glow-in-the-dark" materials (such as strontium aluminate added 25-60% by volume to the LCAR); glitter; or other material.

LCAR may be "texturized" to give the surface of the LCAR a desired texture and feel, as illustrated in FIG. 26. In FIG. 26, four different texturizing materials may be used, but there are others known in the art. FIG. 26 illustrates one or more of the following: ground hair; sand; feather (ground); or sprinkler. The texturizing material maybe pressed, wrapped, or sprinkled on the surface of the LCAR prior to curing.

Thus, applicants attach LCAR to a fish hook, directly, or to a fishing hook that already has a support base, for example cured LCAR and/or thread, traditional fly materials or some other base.

FIG. 27 illustrates the preferred method of attaching any of the items 46 disclosed herein to a fishing hook that may have previously applied and cured LCAR 48. LCAR is most effective as mechanical bonding and bonds well chemically to a previously cured layer of LCAR 48. Because the LCAR secures mainly by mechanical forces, it is important to cover around the edges of the item and to a base of previously cured LCAR. A bonding agent, such as Hydroxy Ethyl Methacrylate (HEMA), Bis-GMA or MDP may be used to attach LCAR to a non-LCAR material. Thus, in applying LCAR to a fishing hook structure, as shaped part of a body, used to coat, attach or seal, the user should be careful to at least partially encapsulate (or preferably completely encapsulate) the hook, thread or other support base. LCAR adheres well chemically to an LCAR base or other acrylic resins. On other bases, partial encapsulation to obtain a mechanical attachment is best or the use of one of the bonding agents.

Shaping may be done by hand prior to curing, especially if the LCAR is a putty. A brush, paddle, or a bodkin needle may also be used to shape the pre-cured LCAR. LCAR can be provided as a putty or can be used in liquid form and a thinner such as fused silica may be provided to thicken it before it is applied to a fish hook or base and shaped.

A chemical catalyst may optionally be used in the method of making fishing hook structures to be mixed with the LCAR to help chemically cure those areas that light can’t reach.

After the LCAR has cured, it may be further shaped, as by grinding, filing or sanding in a post curing shaping step.

At times it may be important, in fly tying or making a lure, to adjust the items to a specific gravity-less than one
or more than one. That is, it may be advantageous to have a lure or fly that will sink or float. To achieve the ability to float, a foam material or other material which is impregnated or traps air may be used in connection with the LCAR to assure that the fly or lure will float. On the other hand, specific gravity of greater than one may be assured by the addition of silica, for example or with the addition of other materials with a specific gravity of greater than one to the LCAR, typically prior to curing. The LCAR, referenced above has a specific gravity of slightly greater than one so, if used in connection with a hook, and without a material having a specific gravity of less than one, the fly or lure will typically sink.

[0063] While disclosed in the specifications above, in some cases, flies for use in fly fishing, the method and compositions discussed herein, anticipate use in a lure for use in salt or fresh water and for custom construction or mass production of lures or flies.

[0064] Used as a liquid, LCAR may be used to pour into molds. Used as a gel or putty it may be hand shaped for the body or even used as an adhesive for an attachment of accessories to itself previously applied a hook or to a body of a fly or lure. That is to say, Applicants’ LCAR may be used in a range of viscosities from putty to gel to honey to liquid. Liquid LCAR is available from Ultradent Products as Permaseal. Silica or other additives may be added to increase the viscosity.

[0065] Besides the quick set and cure upon exposure to a high intensity light source, there is no waste or messy mixing required with LCAR, especially when used without a chemical curing agent. There is no waste, offensive aroma or messy mixing with LCAR.

[0066] Fly tying materials may include one or more of the following: thread, fibers, fur; feather; foam and cork; hooks; synthetic fibers including hair and flash; natural hair; soft plastic; tubing (e.g. mylar tubing and/or flexcord); eyes, including synthetic eyes (e.g. lead eyes, adhesive eyes and doll eyes); raffles; rubber legs; dubbing; cheenille; tinsel; latex and cords of nylon, vinyl or other plastic; and beads. While it is understood that this is a list of “fly tying materials” and that these specifications use the term “fly tying,” Applicants’ invention covers more than flies. Indeed, Applicants’ novel method and devices include adorning a hook with a shape attractive to a fish. Such a shape could and may include (but are not limited to) the following shapes: an insect; amphibian; birds and rodents; mice; eggs; crustaceans; and minnows.

[0067] Other fly tying materials include dyes that may be used to dye other of the tie flying materials. Further, Applicant’s LCAR may be used as a substitute for or in conjunction with epoxy, silicon, and other materials to create durable bodies, and eyes. Applicant’s LCAR may be also used in conjunction with thread, floss and yarn. LCAR may be used in conjunction with traditional prior art methods of tying flies, to create a fly, lure or other fishing hook structure that is part LCAR and part epoxy, for example.

[0068] Applicant’s LCAR may be applied to hook structures including lures.

[0069] Optimally, Applicant’s novel method uses light cured acrylic resin. Acrylic resin with the photo initiator responsive to electromagnetic radiation preferably in the 250-550 nanometer range is preferable, and more preferably in the visible blue light range, most preferably about 470 nanometers.

[0070] LCAR also provides for an effective substitute to epoxy in the process of building a fishing rod. Fishing rods may be built using prior art method and accessories except using applicants’ photo initiated setting and curing of LCAR as disclosed herein.

[0071] One example of the use of applicants’ of LCAR in building a fishing rod would be to set the guides in place and expose them to high intensity light source when they are properly positioned. A mold for use in “mass production” for flies or lures would typically be made of clear plastic, so as to let light penetrate for the curing step.

[0072] Although the invention has been described with reference to specific embodiments, this description is not meant to be construed in a limited sense. Various modifications of the disclosed embodiments, as well as alternative embodiments of the inventions will become apparent to persons skilled in the art upon the reference to the description of the invention. It is, therefore, contemplated that the appended claims will cover such modifications that fall within the scope of the invention.

1. The method of making a fishing hook structure, the method comprising the steps of:

   providing a fish hook and a quantity of LCAR (light curable acrylic resin);

   applying at least some of the LCAR to the fishing hook; and

   curing the LCAR.

2. The method of claim 1, wherein the applying step includes a step of shaping the LCAR to a desired configuration.

3. The method of claim 1, wherein the providing step includes a step of providing a set of fly tying materials.

4. The method of claim 1, further including the step of adjusting the specific gravity of the LCAR.

5. The method of claim 1, wherein the LCAR of the providing step will cure to a flexible acrylic resin.

6. The method of claim 1, wherein the LCAR of the providing step will cure to a non-flexible acrylic resin.

7. The method of claim 1, wherein the viscosity of the LCAR of the providing step is putty, and wherein the applying step includes the step of shaping the putty LCAR to a shape attractive to a fish.

8. The method of claim 1, wherein the LCAR of the providing step is a gel and wherein the applying step includes the shaping of the gel LCAR to a shape attractive to a fish.

9. The method of claim 1, wherein the applying step includes the step of applying LCAR to at least some of a previously cured LCAR surface.

10. The method of claim 1, further including, prior to the applying step, the step of adjusting the specific gravity of the LCAR by adding a specific gravity adjusting material which has a specific gravity of less than 1.

11. The method of claim 1, further including, prior to the applying step, the step of adjusting the specific gravity of the LCAR by adding a specific gravity adjusting material which has a specific gravity of greater than 1.
12. The method of claim 1, further including, prior to the applying step, the step of adding a glow powder to the LCAR.

13. The method of claim 1, further including, prior to the providing step, the step of adding a compatible dye to the LCAR.

14. The method of claim 1 wherein the applying step includes the step of painting at least some of the LCAR.

15. The method of claim 1 wherein the curing step includes curing with a handheld visible spectrum light source.

16. The method of claim 1, further including, following the curing step, the step of attaching fly tying materials to the cured LCAR.

17. The method of claim 1 wherein the providing step includes the step of providing a set of lure materials.

18. The method of claim 2 wherein the desired configuration is selected from configurations attractive to a fish.

19. The method of claim 3, wherein the applying step includes the step of constructing on the hook a shape attractive to a fish, using at least some of the tie flying materials.

20. The method of claim 19, further including a step of at least partially coating the tie flying material with at least some of the LCAR.

21. The method of claim 19 wherein the step of constructing includes using one or more of the following fly tying materials: feathers, fur or hackle.

22. The method of claim 2 wherein the desired shape mimics one of the following: an insect; an amphibian; a bird; a rodent; a mouse; a crustacean; or a minnow.

23. The method of claim 10, wherein the specific gravity adjusting material includes glass balls.

24. The method of claim 12 wherein the glow powder is strontium aluminate added 25-60% by volume to the LCAR.

25. The method of claim 14, further including, following the curing step, the step of painting at least some of the cured LCAR to mimic an insect.

26. The method of claim 4 wherein the set of fly tying materials includes one or more of the following: thread or fibers.

27. The method of claim 17 wherein the set of lure materials includes one or more of the following: spinners, heads, and skirts.

28. The method of claim 1 wherein the applying step includes placing a fish hook in a mold, the mold to mold the LCAR to the fish hook in a desired mold shape and wherein the curing of the LCAR is done by applying visible light to the LCAR in the mold.

29. The method of claim 1 wherein the applying step is done using one or more of the following: a brush; a bodkin needle; or a syringe.

30. The method of claim 14 wherein, following the step of painting, the painted surface is at least partly covered with LCAR.

31. The method of making a fish hook structure for use in fishing, the method comprising steps of:

   providing a fish hook and quantity of LCAR; and

   adjusting the viscosity of the LCAR to a desired consistency.

32. The method of claim 31 wherein fused silica is added to the LCAR to increase the viscosity thereof.

33. The method of claim 31 further including the step of adding, to the LCAR, a bonding agent to help provide for bonding of the LCAR to non LCAR material.

34. The method of claim 33 wherein the bonding agent is one of the following: Hydroxy Ethyl Methacrylate (HEMA), Bisphenol-A-glycidylidimethacrylate (BIS-GMA) or Methacryloxydecel dihydrogen phosphate (MDP).

35. A fishing hook structure comprising:

   a fish hook; and

   LCAR.

36. The fishing hook structure of claim 35 wherein the LCAR is applied so as to take a predetermined desired configuration, the desired configuration including one or more of the following: an insect; an amphibian; a bird; a rodent; mice; crustacean; or a minnow.

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