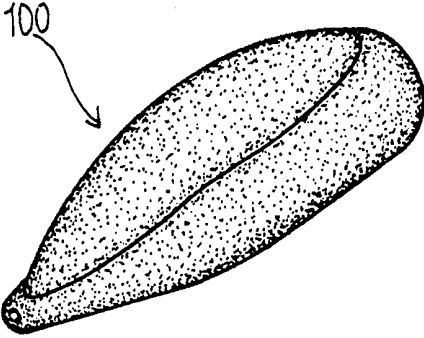




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<p>(54) Title: FISHING WEIGHT FOR PREVENTING WATER POLLUTION</p> <p>(57) Abstract</p> <p>Disclosed is a method for manufacturing a fishing weight (100) which prevents an environmental pollution. The method includes the steps of molding the fishing weight with a ceramic material and heating the molding material up to a predetermined temperature to convert the heated material into a pure earth material.</p> <div style="text-align: right;">  </div>		

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FISHING WEIGHT FOR PREVENTING WATER POLLUTION

FIELD OF THE INVENTION

The present invention relates to a fishing weight which is used in all types of fishing, and more particularly, to a fishing weight which is manufactured with a pure earth material, to thereby prevent water pollution.

BACKGROUND OF THE INVENTION

Generally, when reel fishing or fishing on a sea rock is implemented, a fishing weight is used to cast a fishing line which is fixed into a fishhook into the water, so that the fishhook is sunk into the water and is finally disposed at a desired position. Of course, a buoyant float is used, considering the weight of the fishing weight, to support the fishhook by using its own buoyance, such that the fishhook can float into the water. At the time, the fishing weight is generally manufactured by a lead material and has an oval shape, which may be variable upon determining the shapes thereof.

Furthermore, such the fishing weight made of the lead material is numerously used for a fishing net, a cultivating farm net, various kinds of

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fish traps and so on, which are widely used in the whole world. As a result, the number of the fishing weight, which is sunk into the water, without recollected, can be increased geometrically.

However, since there have been recently developed fishing equipments which have a relatively excellent durability and are well repaired at a proper time, even though a serious problem that the fishing weight made of the lead material causes water pollution has emerged over the whole world, it can be expected that the damages caused by the fishing equipments will be reduced. In the preferred embodiment of the present invention, therefore, an attention on the problems caused from the fishing weights made of the lead material which are deserted into the water by fishermen will be given.

Meanwhile, when the fishing is executed on the sea, river, lake, a reservoir and the like, the fishhook is often caught on a water grass, stone, a gap on the rock, or a net, which results in the cut-off of the fishing line. At the time, the fishing weight made of the lead material is deserted into the water, along with the cut-off fishing line.

In addition, after completing the fishing, it is common that fishermen cast the fishing weight made of the lead material into the water. The fishing

weights which have been deserted into the water are continuously stacked on the bottom surface and, during a very long time period, are corroded and oxidized to thereby pollute the sea or river by heavy metals (for example, the lead material). Further, it is important that such the water pollution may cause a fishery ecosystem to be destroyed. As a result, the destruction becomes one of hindrance causes in the development of the fishing industry and the cultivating industry on the seas along the coast or adjacent seas, river, reservoir and the like. Furthermore, this becomes one of causes of destroying a natural ecosystem on the seas along the coast or adjacent seas.

Accordingly, it is natural that the fishing weight made of the lead material which have been deserted into the water should be collected, but the collecting work is not well operated for various reasons. Therefore, as time elapses, the water pollution problem becomes more and more serious, which may be badly affected on the balance of ecosystem on the earth.

SUMMARY OF THE INVENTION

An object of the present invention is to provide a fishing weight for preventing an environmental pollution which is manufactured with a pure

earth material and even though stacked into the water, prevents water quality from being deteriorated or polluted, to thereby preserve an ecosystem on the earth as well as a fishery ecosystem, without any destruction.

Another object of the present invention is to provide a fishing weight for preventing an environmental pollution which does not need an additional work for collecting the fishing weight which is deserted into the water along with a fishing line which is cut off due to the hooking onto an object into the water.

To achieve these and other objects according to the present invention, there is provided a method for manufacturing a fishing weight which prevents an environmental pollution, including the steps of: molding the fishing weight with a ceramic material; and heating the molding material up to a predetermined temperature to convert the heated material into a pure earth material.

BRIEF DESCRIPTION OF THE DRAWINGS

Other objects and aspects of the invention will become apparent from the following description of embodiments with reference to the accompanying

drawing in which:

FIG. 1 is a perspective view illustrating a fishing weight for preventing an environmental pollution constructed according to a preferred embodiment of the present invention; and

FIG. 2 is a sectional view of FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Hereinafter, an explanation on a manufacturing process of a fishing weight for preventing an environmental pollution according to a preferred embodiment of the present invention will be discussed, but explanation on the well-known functions or constructions to those skilled in the art will be excluded in this detailed description for the sake of brevity.

Referring to FIGS. 1 and 2 showing a fishing weight which is manufactured with a pure earth material according to a preferred embodiment of the present invention, the fishing weight 100 includes a hole 102 on the center portion thereof, through which a fishing line is inserted. Generally, the fishing weight 100 takes an oval shape, but may be variable to have a circular shape, a square shape, or any other shape.

On the other hand, the fishing weight 100 is manufactured with a pure earth material. In more detail, the fishing weight 100 is molded into a predetermined shape made of a ceramic material by means of a press means and is then put into the interior of a furnace to be heated up to a temperature of about 1300°C or more. At the time, in the fishing weight 100 made of the ceramic material, since a metal component among the ceramic composing components is molten and oxidized, a pure ceramic, i. e. a pure earth material remains on the fishing weight 100. Next, the fishing weight 100 is gradually cooled at a room temperature(in the air), such that the manufacturing process for the fishing weight 100 made of the pure earth material is completed.

If the size of the fishing weight constructed according to the present invention is adjusted not to generate a serious weight difference from a conventional fishing weight(made of a lead material), the fishing weight which is made of the pure earth material can be used without any inconvenience.

While the present invention has been described with reference to a specific embodiment, the description is illustrative of the invention and is

not to be construed as limiting the invention. However, various modifications in which the fishing weight which is attached to a fishing net, a cultivating net and the like may be manufactured with a pure earth material may occur to those skilled in the art, without departing from the spirit and scope of the present invention.

As discussed in the above, a fishing weight for preventing an environmental pollution constructed according to the present invention is manufactured with a pure earth material and under the state where it is deserted into the water, can be finally reduced to a natural component, as a predetermined time elapses, to thereby prevent water quality from being deteriorated or polluted and further to preserve a fishery ecosystem, without any destruction.

WHAT IS CLAIMED IS:

1. A method for manufacturing a fishing weight which prevents an environmental pollution, said method comprising the steps of:

molding said fishing weight with a ceramic material; and

heating the molding material up to a predetermined temperature to convert the heated material into a pure earth material.

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FIG. 1

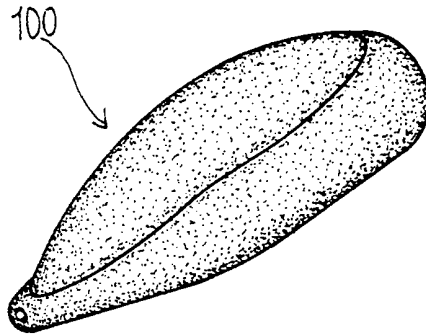
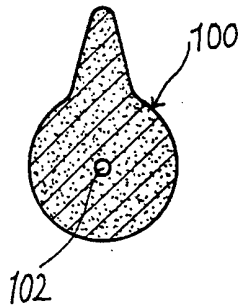


FIG. 2



INTERNATIONAL SEARCH REPORT

International application No.

PCT/KR 98/00083

A. CLASSIFICATION OF SUBJECT MATTER

IPC⁶: A 01 K 95/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC⁶: A 01 K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPI

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 77 21 613 U (SCHULTHEIS) 17 November 1977 (17.11.77), claim 1, line 3.	1
A	DE 87 11 610 U (WALTHER) 03 March 1988 (03.03.88).	
A	GB 2 191 373 A (HOSEGOOD) 16 December 1987 (16.12.87). -----	

Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search <p style="text-align: center;">25 June 1998 (25.06.98)</p>	Date of mailing of the international search report <p style="text-align: center;">16 July 1998 (16.07.98)</p>
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Name and mailing address of the ISA/ Austrian Patent Office Kohlmarkt 8-10; A-1014 Vienna Facsimile No. 1/53424/535	Authorized officer <p style="text-align: center;">Fessler</p> Telephone No. 1/53424/351
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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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Im Recherchenbericht angeführtes Patentedokument Patent document cited in search report Document de brevet cité dans le rapport de recherche	Datum der Veröffentlichung Publication date Date de publication	Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la famille de brevets	Datum der Veröffentlichung Publication date Date de publication
DE U 7721613		keine - none - rien	
DE U 8711610		keine - none - rien	
GB A 2191373		GB A0 8614016 GB A0 8701499 GB A1 2191373 GB A0 8614017	16-07-86 25-02-87 16-12-87 16-07-86