

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
19 April 2001 (19.04.2001)

PCT

(10) International Publication Number  
WO 01/26957 A3

(51) International Patent Classification<sup>7</sup>: A01K 95/00,  
B63C 11/30

(21) International Application Number: PCT/KR99/00769

(22) International Filing Date:  
15 December 1999 (15.12.1999)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
1999/44349 13 October 1999 (13.10.1999) KR

(71) Applicant (for all designated States except US): MAN-  
NAM GREEN LIFE CO., LTD. [KR/KR]; 452-2, 2Ga,  
Dongdaeshin-dong, Seo-Ku, Pusan 602-100 (KR).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KIM, Man, Joo  
[KR/KR]; 3-9, Seodaeshin-dong, Seo-ku, Pusan 602-090  
(KR).

(74) Agent: HA, Moon-Soo; H.M.S. Patent & Law Office,  
Ya Jeong Bldg. 4F, 736-16, Yeoksam-dong, Kangnam-ku,  
Seoul 135-080 (KR).

(81) Designated States (national): AE, AL, AM, AT, AU, AZ,  
BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE,  
ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG,  
MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN,  
YU, ZA, ZW.

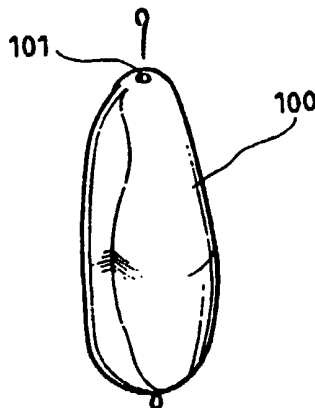
(84) Designated States (regional): ARIPO patent (GH, GM,  
KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent  
(AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent  
(AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU,  
MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM,  
GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

(88) Date of publication of the international search report:  
3 January 2002

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: BUOYANCY-CONTROLLING WEIGHT FOR FISH-CATCHING APPARATUS OR DIVING APPARATUS USING ALUMINA AND A METHOD FOR PREPARATION THEREOF



(57) Abstract: The present invention relates to a buoyancy-controlling weight for fish catching apparatus or diving apparatus and a method for preparation thereof. More particularly, the present invention provides a buoyancy-controlling weight (100) for fish catching apparatus or diving apparatus which could prevent the destruction of natural environment as well as aquatic ecosystem by preparing it through extracting alumina from natural mineral of soil.



WO 01/26957 A3

INTERNATIONAL SEARCH REPORT

International application No.  
PCT/KR 99/00769

CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: A01K 95/00, B63C 11/30

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)

IPC<sup>7</sup>: A01K, B63C

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, EPODOC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4389805 A (HARGRAVE) 28 June 1983 (28.06.83) <i>column 1, lines 52-57.</i>	1,2
A	WO 99/18778 A (KIM) 22 April 1999 (22.04.99) <i>abstract, page 6, lines 1-11, figs. 1,2.</i>	1,2,3,4
A	DE 7721613 U (SCHULTHEIS) 9 July 1977 (09.07.77)	
A	GB 2134361 A (PITT) 15 August 1984 (15.08.84)	
A	WO 96/28020 A (BROMAN) 19 September 1996 (19.09.96)	
----		

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents: „A“ document defining the general state of the art which is not considered to be of particular relevance „E“ earlier application or patent but published on or after the international filing date „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) „O“ document referring to an oral disclosure, use, exhibition or other means „P“ document published prior to the international filing date but later than the priority date claimed	„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 „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 „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 „&“ document member of the same patent family
--	--

Date of the actual completion of the international search  
13 November 2000 (13.11.2000)

Date of mailing of the international search report  
18 July 2001 (18.07.2001)

Name and mailing address of the ISA/AT  
Austrian Patent Office  
Kohlmarkt 8-10; A-1014 Vienna  
Facsimile No. 1/53424/535

Authorized officer  
FESSLER  
Telephone No. 1/53424/351

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/KR 99/00769

Patent document cited in search report			Publication date	Patent family member(s)			Publication date
DE	U1	7721613	17-11-1977	none			
GB	A1	2134361	15-08-1984	GB	A0	8303205	09-03-1983
GB	B2	2134361	03-07-1985				
US	A	4389805	28-06-1983	none			
WO	A1	9628020	19-09-1996	AU	A1	50186/96	01-10-1996
				EP	A1	814654	07-01-1994
				JF	T2	11501811	16-01-1999
				SE	A0	9500901	14-03-1995
WO	A1	9918778	22-04-1999	KR	B1	256233	15-05-1999