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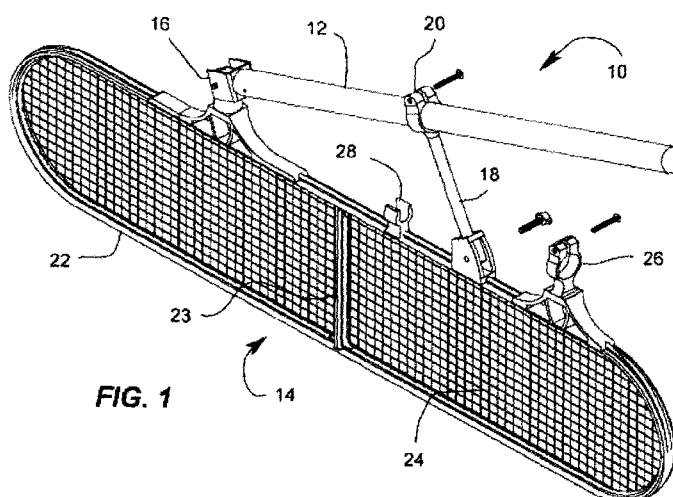
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KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD,
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(54) Title: IMPROVED POOL SKIMMING NET APPARATUS



(57) Abstract: An improved pool skimming net apparatus has a net member including a frame and a net held by the frame. The frame has parallel elongated top and bottom frame portions, an elongated handle member pivotally attached to the top frame portion by an articulated joint member, an elongated retainer member pivotally attached to the top frame portion at a distance from the articulated joint member, a handle clamp member attached to a distal end of the retainer member and adapted to releasably hold a portion of the handle member, and a secondary handle clamp member fixedly attached to the top frame portion at a distance from the articulated joint member and adapted to releasably hold a portion of the handle member, such that when the handle member is held by the handle clamp member an acute angle is formed between the handle member and the top frame portion.



Improved pool skimming net apparatus

5FIELD OF THE INVENTION

[001] The present invention relates generally to pool equipment but more particularly to a pool skimming net apparatus.

BACKGROUND OF THE INVENTION

[002] Using a skimming net to pick up debris on the water surface of a swimming pool is well known. There are two main types of swimming
10 pools: in-ground and above ground. When skimming an in-ground pool, the net is placed slightly below ground level to reach the water surface and as such, the user holds the skimmer's handle downwardly. When skimming an above ground pool, the user obviously need to hold the
15 handle differently depending on how high the pool is and how short the user is. Because of the two different orientations of the handle, the skimming net may not be adequate or optimized for both situations.

SUMMARY OF THE INVENTION

20[003] In view of the foregoing disadvantages inherent in the known devices now present in the prior art, the present invention, which will be

described subsequently in greater detail, is to provide objects and advantages which are:

[004] To provide for an improved swimming pool skimming net which has an adjustable net that can be oriented into a variety of different angles in
5 relation to the handle.

[005] In order to do so, the invention has a net member including a frame and a net held by the frame. The frame has parallel elongated top and bottom frame portions, an elongated handle member pivotally attached to the top frame portion by an articulated joint member, an elongated
10 retainer member pivotally attached to the top frame portion at a distance from the articulated joint member, a handle clamp member attached to a distal end of the retainer member and adapted to releasably hold a portion of the handle member, and a secondary handle clamp member
15 fixedly attached to the top frame portion at a distance from the articulated joint member and adapted to releasably hold a portion of the handle member, such that when the handle member is held by the handle clamp member an acute angle is formed between the handle member and the top frame portion, and when the handle member is held by the secondary handle clamp member the handle member is held
20 parallel to the top frame portion, thereby providing the ability for the pool skimming net to be adapted to skim water conveniently from either an above ground or in ground swimming pool.

[006] In a preferred embodiment, there is a clip member attached to the top frame portion and adapted to releasably hold the retainer member in a parallel position to the top frame portion when not in use holding the handle member.

5 [007] The pool skimming net apparatus has the handle member is formed as a telescoping rod having an adjustable length.

[008] The articulated joint member of the handle member and the secondary handle clamp member are both dimensioned such that when the handle member is being held by the secondary handle clamp member the
10 handle member is held at a distance from the top frame portion such that the retainer member and the clip member can be placed therebetween.

[009] The retainer member and the clip member are positioned on the top frame portion in between the articulated joint member of the handle
15 member and the secondary handle clamp member.

[0010] The frame is formed as an elongated oval having curved end portions and parallel elongated top and bottom frame portions.

[0011] The frame member further includes at least one cross support member connected between the top and bottom frame portions to thereby strengthen the frame.

5[0012] In combination, a swimming pool and a pool skimming net apparatus have the combination comprising a swimming pool having water therein, and a pool skimming net apparatus comprising a net member including a frame and a net held by the frame. The frame having parallel elongated top and bottom frame portions, an elongated handle
10 member pivotally attached to the top frame portion by an articulated joint member, an elongated retainer member pivotally attached to the top frame portion at a distance from the articulated joint member, a handle clamp member attached to a distal end of the retainer member and adapted to releasably hold a portion of the handle member, and a
15 secondary handle clamp member fixedly attached to the top frame portion at a distance from the articulated joint member and adapted to releasably hold a portion of the handle member, such that when the handle member is held by the handle clamp member an acute angle is formed between the handle member and the top frame portion, and
20 when the handle member is held by the secondary handle clamp member the handle member is held parallel to the top frame portion, thereby providing the ability for the pool skimming net to be adapted to

skim water conveniently from either an above ground or in ground swimming pool.

[0013] There has thus been outlined, rather broadly, the more important features of the invention in order that the detailed description thereof
5 that follows may be better understood, and in order that the present contribution to the art may be better appreciated. There are additional features of the invention that will be described hereinafter and which will form the subject matter of the claims appended hereto.

[0014] In this respect, before explaining at least one embodiment of the
10 invention in detail, it is to be understood that the invention is not limited in its application to the details of construction and to the arrangements of the components set forth in the following description or illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be
15 understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

[0015] As such, those skilled in the art will appreciate that the conception, upon which this disclosure is based, may readily be utilized as a basis for the designing of other structures, methods and systems for carrying out the
20 several purposes of the present invention. It is important, therefore, that the claims be regarded as including such equivalent constructions

insofar as they do not depart from the spirit and scope of the present invention.

[0016] Further, the purpose of the foregoing abstract is to enable the U.S. Patent and Trademark Office and the public generally, and especially
5 the scientists, engineers and practitioners in the art who are not familiar with patent or legal terms or phraseology, to determine quickly from a cursory inspection the nature and essence of the technical disclosure of the application. The abstract is neither intended to define the invention of the application, which is measured by the claims, nor is it intended to
10 be limiting as to the scope of the invention in any way.

[0017] These together with other objects of the invention, along with the various features of novelty which characterize the invention, are pointed out with particularity in the claims annexed to and forming a part of this disclosure. For a better understanding of the invention, its operating
15 advantages and the specific objects attained by its uses, reference should be made to the accompanying drawings and descriptive matter which contains illustrated preferred embodiments of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

5[0018] **Fig. 1** Isometric view of the invention.

[0019] **Figs. 2a-d** Isometric view of the invention as well as detail elements.

[0020] **Figs. 3a-c** Top front and side views of the invention.

[0021] **Fig. 4** Side elevation of the invention in use in an above ground pool.

[0022] **Fig. 5** Side elevation of the invention in use in an in-ground pool.

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DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0023] An improved pool skimming net (10) has a handle member (12) connected to a skimming net member (14) by way of an articulated joint member (16).

15[0024] The handle member (12) pivots from a substantially parallel configuration in relation to the skimming net member (14) to an substantially acute

angle thereof. In order to secure any given angle, a retainer member (18) provides a secondary attachment point between the skimming net member (14) and the handle member (12).

[0025] A secondary handle clamp member (20) located at the distal end of the
5 retainer member (18) secures it to the handle member (12).

[0026] The skimming net member (14) consists in a frame member (22) and a
net (24) as is known in the art of skimmers. The handle member (12) is
preferably of a telescoping configuration as is known in the art. The
articulated joint member (16) is also a configuration well known in the art
10 and need not be further discussed. Optionally, the handle member (12)
can be attached onto a handle clamp member (26) fixedly attached to the
frame (22). Also optionally, the retainer member (18) can be clipped onto
the frame (22) by way of a retainer clip member (28).

[0027] The frame member (22) further includes at least one cross support
15 member (23) connected between the top and bottom frame member (22)
in order to strengthen it.

[0028] In use, the skimming net (10) can switch from one configuration for an
above ground pool (30), as shown in fig. 4, to another configuration for

an in ground pool (32), as shown in fig. 5, simply by disconnecting the handle member (12) from the retainer member (18) and connecting it to the handle clamp member (26).

[0029] As to a further discussion of the manner of usage and operation of the present invention, the same should be apparent from the above description. Accordingly, no further discussion relating to the manner of usage and operation will be provided.

[0030] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0031] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

CLAIMS

- 1.) A pool skimming net apparatus comprising a net member including a frame and a net held by said frame; said frame having parallel elongated top and bottom frame portions; an elongated handle member pivotally attached to said top frame portion by an articulated joint member; an elongated retainer member pivotally attached to said top frame portion at a distance from said articulated joint member; a handle clamp member attached to a distal end of said retainer member and adapted to releasably hold a portion of said handle member; and a secondary handle clamp member fixedly attached to said top frame portion at a distance from said articulated joint member and adapted to releasably hold a portion of said handle member, such that when said handle member is held by said handle clamp member an acute angle is formed between said handle member and said top frame portion, and when said handle member is held by said secondary handle clamp member said handle member is held parallel to said top frame portion, thereby providing the ability for said pool skimming net to be adapted to skim water conveniently from either an above ground or in ground swimming pool.
- 2.) The pool skimming net apparatus of claim 1, further comprising a clip member attached to said top frame portion and adapted to releasably hold said retainer member in a parallel position to said top frame portion when not in use holding said handle member.
- 3.) The pool skimming net apparatus of claim 1, wherein said handle member is formed as a telescoping rod having an adjustable length.
- 4.) The pool skimming net apparatus of claim 2, wherein said articulated joint member of said handle member and said secondary

5 handle clamp member are both dimensioned such that when said handle member is being held by said secondary handle clamp member said handle member is held at a distance from said top frame portion such that said retainer member and said clip member can be placed therebetween.

10 5.) The pool skimming net apparatus of claim 4, wherein said retainer member and said clip member are positioned on said top frame portion in between said articulated joint member of said handle member and said secondary handle clamp member.

15 6.) The pool skimming net apparatus of claim 1, wherein said frame is formed as an elongated oval having curved end portions and parallel elongated top and bottom frame portions.

20 7.) The pool skimming net apparatus of claim 1, wherein said frame member further includes at least one cross support member connected between said top and bottom frame portions to thereby strengthen said frame.

25 8.) A combination of a swimming pool and a pool skimming net apparatus, said combination comprising a swimming pool having water therein; and a pool skimming net apparatus comprising a net member including a frame and a net held by said frame; said frame having parallel elongated top and bottom frame portions; an elongated handle member pivotally attached to said top frame portion by an articulated joint member; an elongated retainer member pivotally attached to said top frame portion at a distance from said articulated joint member; a handle clamp member attached to a distal end of said retainer member and adapted to releasably hold a portion of said
30 handle member; and a secondary handle clamp member fixedly

5 attached to said top frame portion at a distance from said articulated joint member and adapted to releasably hold a portion of said handle member, such that when said handle member is held by said handle clamp member an acute angle is formed between said handle member and said top frame portion, and when said handle member is held by said secondary handle clamp member said handle member is held parallel to said top frame portion, thereby providing the ability for said pool skimming net to be adapted to skim water conveniently from either an above ground or in ground swimming pool.

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9.) The combination of claim 8, further comprising a clip member attached to said top frame portion and adapted to releasably hold said retainer member in a parallel position to said top frame portion when not in use holding said handle member.

15

10.) The combination claim 8, wherein said handle member is formed as a telescoping rod having an adjustable length.

20

11.) The combination of claim 10, wherein said articulated joint member of said handle member and said secondary handle clamp member are both dimensioned such that when said handle member is being held by said secondary handle clamp member said handle member is held at a distance from said top frame portion such that said retainer member and said clip member can be placed therebetween.

25

12.) The combination of claim 11, wherein said retainer member and said clip member are positioned on said top frame portion in between said articulated joint member of said handle member and said secondary handle clamp member.

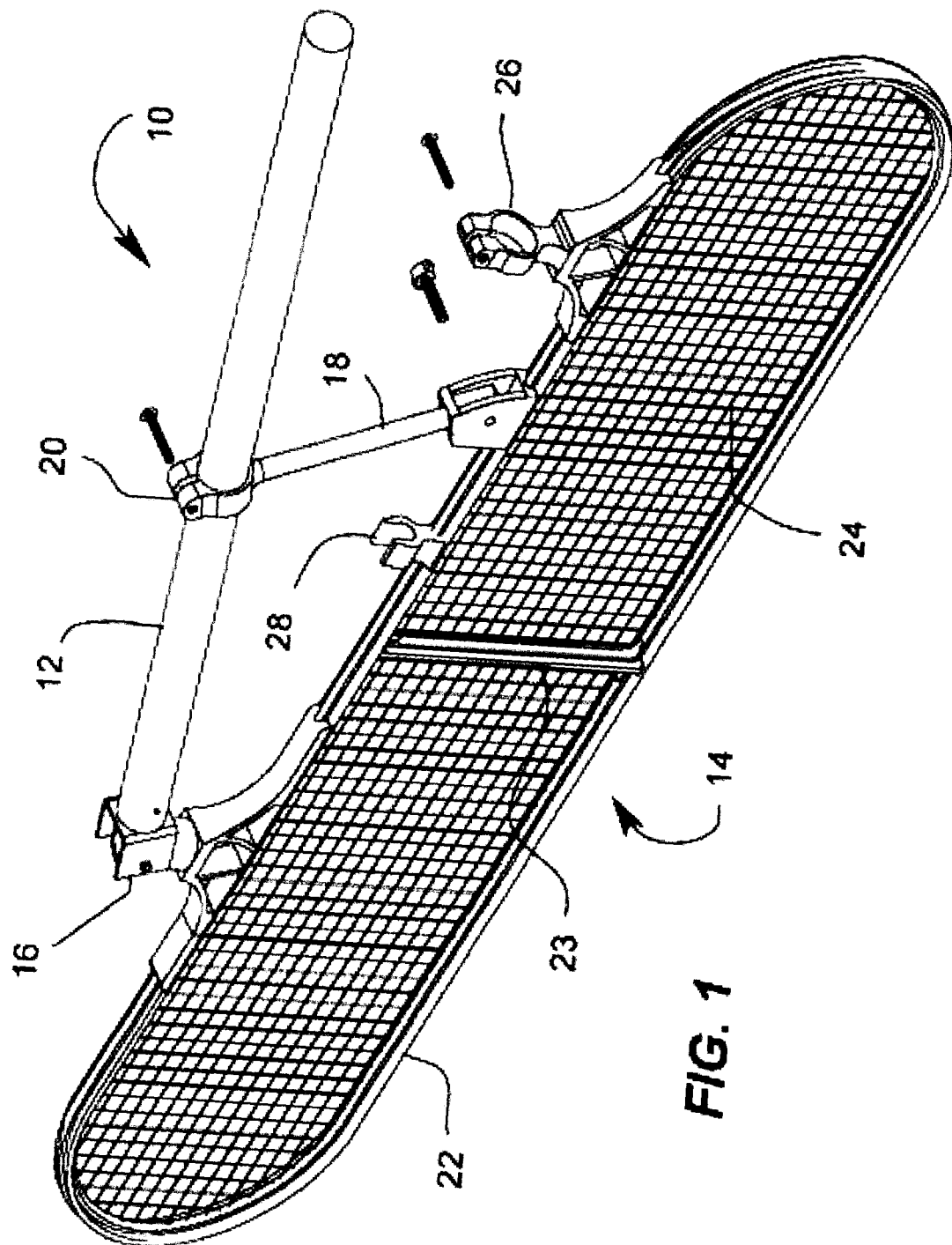
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13.) The combination of claim 8, wherein said frame is formed as an elongated oval having curved end portions and parallel elongated top and bottom frame portions.

5 14.) The combination of claim 8, wherein said frame member further includes at least one cross support member connected between said top and bottom frame portions to thereby strengthen said frame.

10 15.) The combination of claim 8, wherein said swimming pool is an in ground swimming pool having wall portions that are adapted to be below ground, such that water in said pool is adapted to be at a level that is below ground level.

15 16.) The combination of claim 8, wherein said swimming pool is an above ground swimming pool having wall portions that are adapted to be above ground, such that water in said pool is adapted to be at a level that is above ground level.



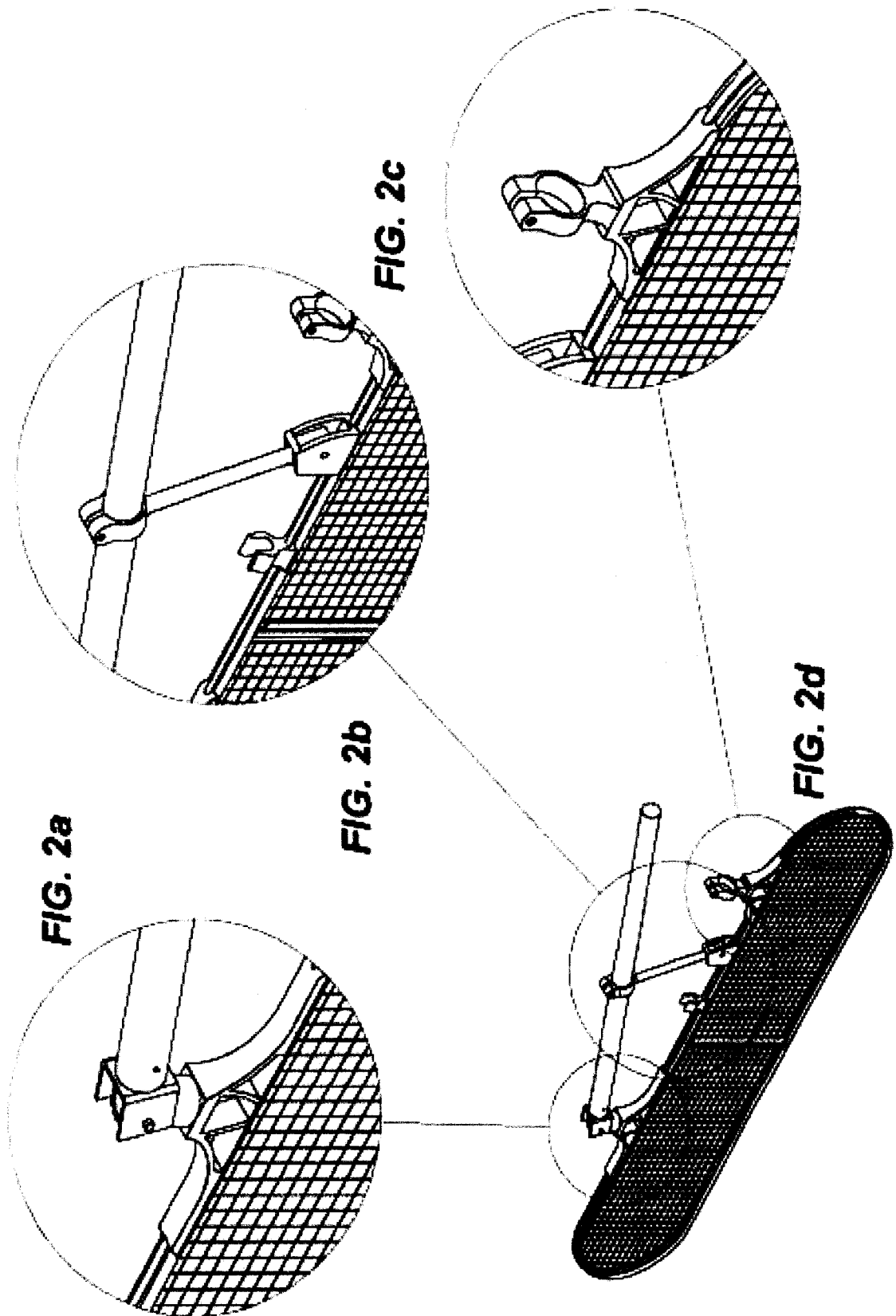


FIG. 3a



FIG. 3c



FIG. 3b

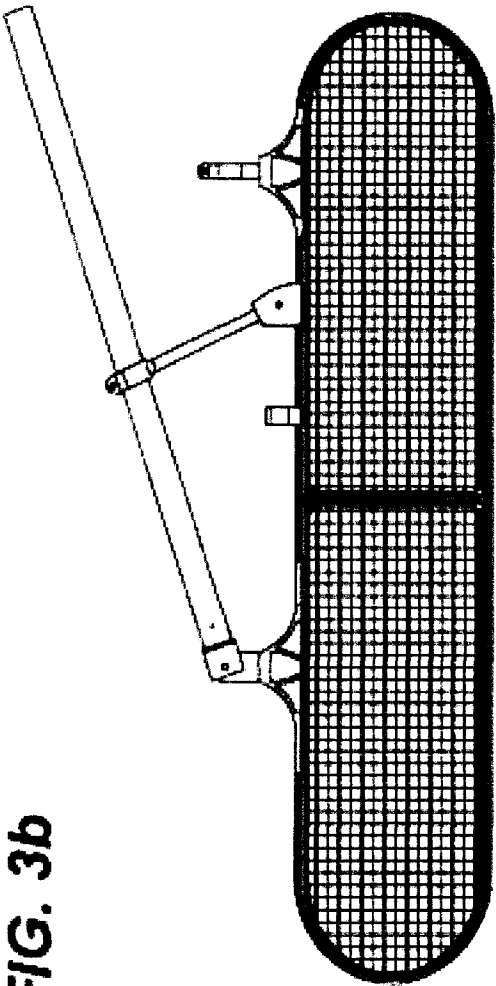
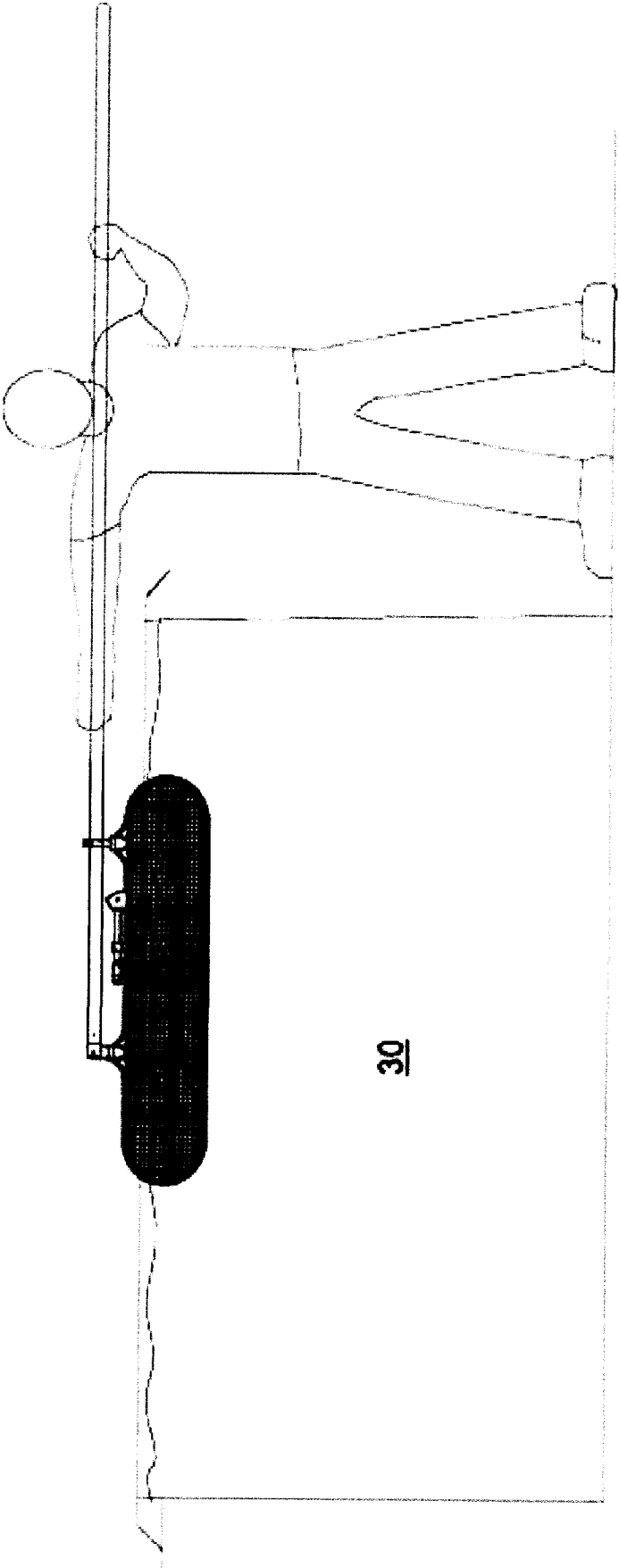
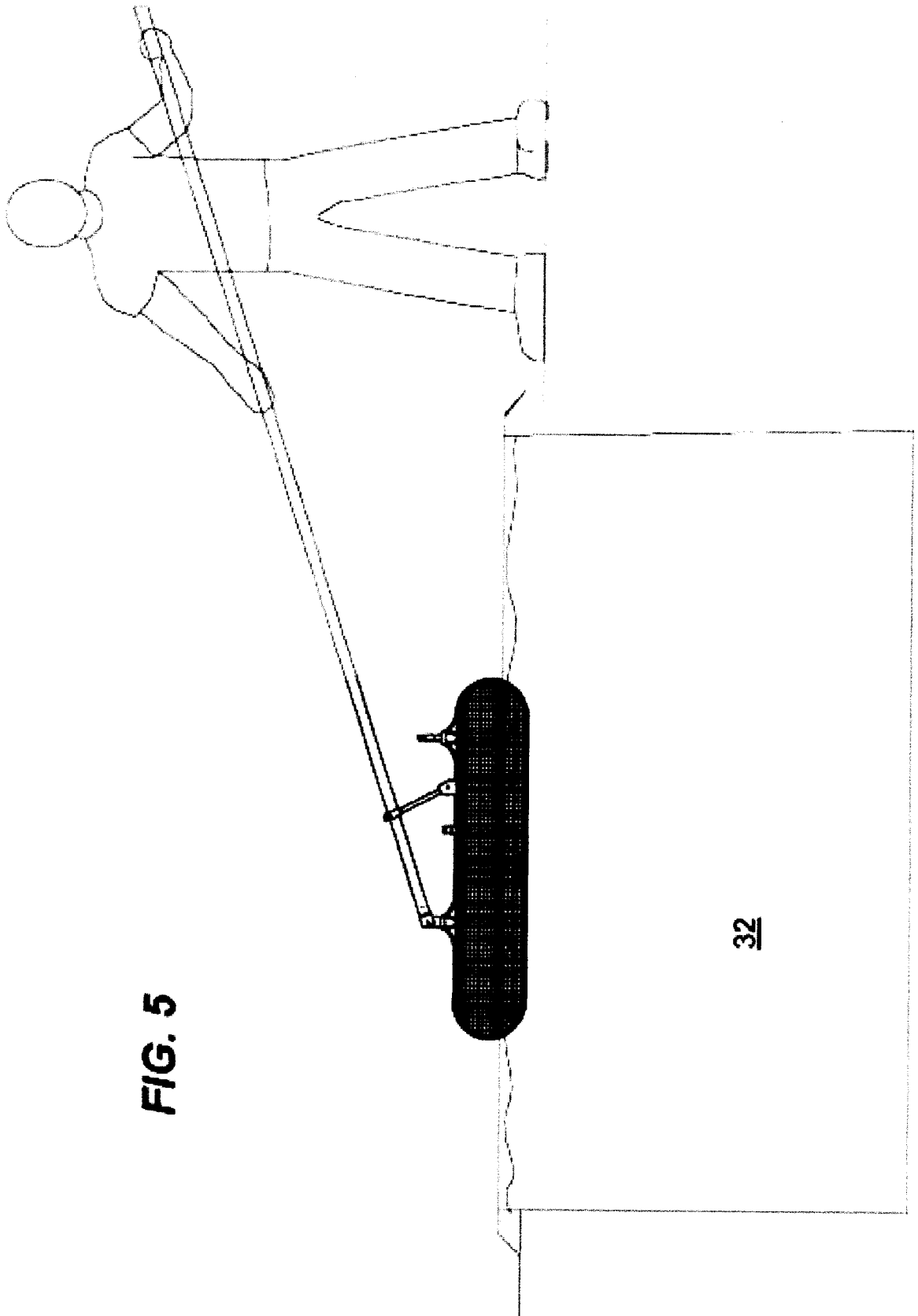


FIG. 4





INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2013/000097

A. CLASSIFICATION OF SUBJECT MATTER IPC: E04H 4/16 (2006.01) 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 (2006.01): E04H, E04H 4/16, B08B 9/08		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) Canadian Patent Database (CPD), EPOQUE (Epodoc), Google Patents, and Google Search Engine Keywords: skim, pool, above ground, in ground, net, mesh, screen, pivot, rotation, clamp, fasten, support, connect, frame, pole, and handle		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CA 1310157 C (SOICH, J.) 17 November 1992 (17-11-1992) *Whole Document*	1, 3, 8, 10, 15, and 16
A	US 4369109 A (EDGE, E. F.) 18 January 1983 (18-01-1983) *Whole Document*	
A	US 5422001 A (YAGODA, G. B., et al.) 06 June 1995 (06-06-1995). *Whole Document*	
A	US 562362 A (KOETZNER, W. C., et al.) 16 June 1896 (16-06-1896) *Whole Document*	
☐ 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 12 March 2013 (12-03-2013)		Date of mailing of the international search report 02 April 2013 (02-04-2013)
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001-819-953-2476		Authorized officer Genevieve Scott (819) 953-1627

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CA2013/000097

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
CA1310157C	17 November 1992 (17-11-1992)	AU2598888A AU602839B2 US4822487A	01 June 1989 (01-06-1989) 25 October 1990 (25-10-1990) 18 April 1989 (18-04-1989)
US4369109A	18 January 1983 (18-01-1983)	None	
US5422001A	06 June 1995 (06-06-1995)	None	
US562362A	16 June 1896 (16-06-1896)	None	