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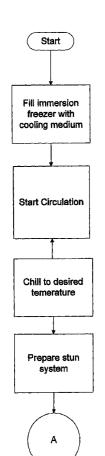
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[Continued on next page]

(54) Title: FREEZING METHOD AND APPARATUS



(57) Abstract: Various methods useful in connection with catching and freezing fish are disclosed. Also disclosed is an immersion freezer. In preferred embodiments, fish or other items to be frozen are immersed in a cooling medium. The cooling medium comprises an organic cooling agent, which preferably is a carbohydrate, sugar alcohol, glycoside, or non-toxic oil.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US04/19462

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : A01K 69/00; A22B 3/00; A23l 1/325; A23L 3/37; B63B 35/14; F25C 5/14 US CL : 43/100; 62/340; 114/255; 426/524, 643; 452/57, 58. 59 According to International Patent Classification (IPC) or to both national classification and IPC				
B. FIELI	OS SEARCHED	· · · · · · · · · · · · · · · · · · ·		
Minimum documentation searched (classification system followed by classification symbols) U.S.: 43/100; 62/340; 114/255; 426/524, 643; 452/57, 58. 59				
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched NONE				
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) NONE				
C. DOCT	JMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where ap		Relevant to claim No.	
X	US 5,761,913 A (LIBERMAN et al) 09 June 1988 (0	09.06.1988), see entire document.	27-43, 56-60, 62-71, 75-84	
Y		·	1-26, 44-55, 61, 72-74, 85-96	
Y	US 6,183,356 B1 (MIDDLETON et al) 06 February 2001 (06.02.2001), see entire document.		1-26, 52, 53, 86-89	
Y	Braker, Handling Sportcaught Fish, Oregon State Un	niversity Extension Service, October	1-26, 52, 53, 86-89	
Y	1992. US 2,722,036 A (SERVIDIO) 01 November 1955 (01.11.1955), see entire document.		90-96	
Y US 3,453,684 A (HECK) 08 July 1969 (08.07.1969)), see entire document.	90-96	
Further	documents are listed in the continuation of Box C.	See patent family annex.		
* Special categories of cited documents:		"T" later document published after the inte date and not in conflict with the applic	rnational filing date or priority	
"A" document defining the general state of the art which is not considered to be of particular relevance		principle or theory underlying the inve	ntion	
•	plication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be considered when the document is taken alone		
"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)		"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		
"O" document	referring to an oral disclosure, use, exhibition or other means	being obvious to a person skilled in the		
"P" document published prior to the international filing date but later than the priority date claimed		"&" document member of the same patent	family	
Date of the actual completion of the international search		Date of mailing of the international search report		
04 March 2005 (04.03.2005)		2.9 MAR 2005		
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450		Authorized officer Arthur L. Corbin Think No. (771) 277 7888		
Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230		Telephone No. (571) 272-1399	ter	

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/19462

Вох №. П	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)		
This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:			
1.	Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:		
2.	Claims Nos.: because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:		
3.	Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).		
Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)			
This Internati	onal Searching Authority found multiple inventions in this international application, as follows:		
1.	As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:		
4. Remark on 1	No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.: Protest The additional search fees were accompanied by the applicant's protest. No protest accompanied the payment of additional search fees.		

Form PCT/ISA/210 (continuation of first sheet(2)) (January 2004)