



- (51) **International Patent Classification:**
A01K 61/00 (2006.01) *A01K 79/00* (2006.01)
- (21) **International Application Number:**
PCT/IL2013/050044
- (22) **International Filing Date:**
17 January 2013 (17.01.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
217578 17 January 2012 (17.01.2012) IL
- (71) **Applicant:** CRYSTAL VISION AGRICULTURAL CO-OPERATIVE SOCIETY LTD. [IL/IL]; Kibbutz Samar, 88815 M.P. Eilat (IL).
- (72) **Inventors:** BEN-TOVIM, Ofer; Kibbutz Samar, 88815 M.P. Eilat (IL). ENGAUS, Pavel; 7003/11, 88000 Eilat (IL). SADAN, Eran; Kibbutz Samar, 88815 M.P. Eilat (IL).
- (74) **Agent:** REINHOLD COHN AND PARTNERS; P.O.B. 13239, 61131 Tel-Aviv (IL).
- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM,

DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

- (84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

[Continued on next page]

(54) **Title:** DEVICE FOR USE IN MONITORING FISH CONDITION

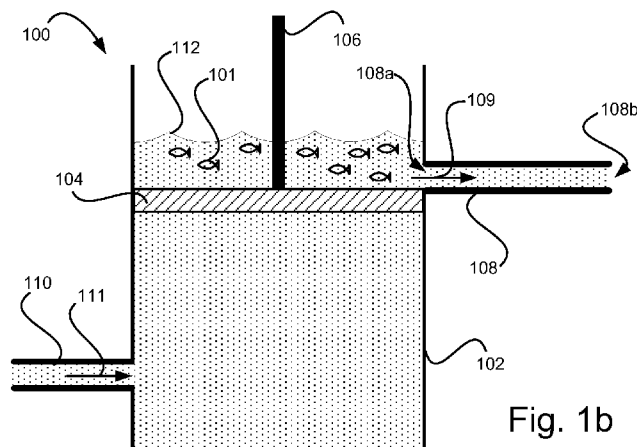


Fig. 1b

(57) **Abstract:** A device and method are presented for guiding fish from a reservoir to a desired destination. The device comprises a water reservoir (102) for containing fish (101) and having an inlet (110) and an outlet (108); first and second conduits connected to respectively the outlet and inlet of the reservoir; and a space reducing assembly (104) within the reservoir. The first conduit (108) serves for guiding a fish flow to a desired location, and comprises an inlet which is joined to the outlet of the reservoir, and has a size and shape configured for receiving only one fish at a given time from the reservoir. The second conduit (110) is configured for introducing water into the reservoir via the inlet of the reservoir, so as to create a water current within the reservoir directed toward the outlet of the reservoir joined to the inlet of the first conduit (108). The space reducing assembly (104) is operable to gradually reduce a volume of water containing the fish in the vicinity of the inlet of the first conduit thereby forcing the fish toward the inlet of the first conduit. The water current in the reservoir directed toward the input of the first conduit and the gradual reduction of water volume in the vicinity of the inlet of the first conduit prevent crowding the fish at the inlet of the first conduit and allow the fish to successively enter the first conduit one fish at a time.



(88) Date of publication of the international search report:
10 October 2013

INTERNATIONAL SEARCH REPORT

International application No
PCT/IL2013/050044

A. CLASSIFICATION OF SUBJECT MATTER
INV. A01K61/00 A01K79/00
ADD.
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)
A01K

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)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 3 040 980 A (MANN ROBERT L ET AL) 26 June 1962 (1962-06-26) cited in the application column 2, line 9 - line 32 column 4, line 40 - column 5, line 24 column 6, line 3 - line 31 figures 1-3	1, 12, 15, 19
X	----- GB 2 467 838 A (MELBU SYSTEMS AS [NO]) 18 August 2010 (2010-08-18) page 3, line 4 - page 4, line 29 page 7, line 12 - page 9, line 25 page 11, line 17 - line 25 page 12, line 13 - line 15 page 13, line 1 - line 20 claim 7 figures 1-6 ----- -/--	1-7, 12-15, 19

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 22 April 2013	Date of mailing of the international search report 26/07/2013
--	--

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Been, Mathieu
--	---

INTERNATIONAL SEARCH REPORT

International application No

PCT/IL2013/050044

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 161 504 A (JUNGLING WERNER WILHELM [AU] ET AL) 19 December 2000 (2000-12-19) column 1, line 58 - line 65 column 3, line 1 - line 43 column 3, line 65 - column 4, line 25 figures 2, 3, 6 -----	1,3-5, 12,19
Y	WO 03/092369 A1 (SINTEF FISKERI OG HAVBRUK AS [NO]; BJOERSHOL NILS H [NO]) 13 November 2003 (2003-11-13) page 3, line 6 - line 26 page 6, line 6 - page 7, line 19 figures 1a-1d -----	1,3-5, 12,19
Y	GB 2 361 400 A (EIDESVIK ARNE [NO]) 24 October 2001 (2001-10-24) page 4, line 25 - page 8, line 20 figures 1-3 -----	1,3-5, 12,19
A	GB 1 297 611 A (CENTRALNY OSRODEK KONSTRUKCYJNO-BADAWCZY PRZEMYSLU OKRETOWEGO) 29 November 1972 (1972-11-29) page 1, line 86 - page 2, line 73 figures 1, 2 -----	1-3,6,7, 13,15,19

INTERNATIONAL SEARCH REPORT

International application No.
PCT/IL2013/050044

Box No. II 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 International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

3. 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. 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.:

1-15, 19

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-15, 19

Device and method for guiding fish from a reservoir to a desired destination.

2. claims: 16-18

System and container for use in inspection of fish with a radiation transparent container configured for receiving a single fish.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/IL2013/050044

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 3040980	A	26-06-1962	NONE

GB 2467838	A	18-08-2010	CA 2692883 A1 13-08-2010
			GB 2467838 A 18-08-2010
			IE 20100074 A1 29-09-2010
			NO 329466 B1 25-10-2010

US 6161504	A	19-12-2000	AU 690885 B3 30-04-1998
			AU 720208 B2 25-05-2000
			US 6161504 A 19-12-2000

WO 03092369	A1	13-11-2003	AT 381259 T 15-01-2008
			AU 2003228154 A1 17-11-2003
			CA 2483681 A1 13-11-2003
			DK 176601 B1 03-11-2008
			EP 1499179 A1 26-01-2005
			NO 315351 B1 25-08-2003
			WO 03092369 A1 13-11-2003

GB 2361400	A	24-10-2001	CA 2336237 A1 06-09-2001
			DK 200100342 A 07-09-2001
			GB 2361400 A 24-10-2001
			IS 5871 A 06-09-2001
			NO 310131 B1 28-05-2001

GB 1297611	A	29-11-1972	NONE
