(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date 19 May 2005 (19.05.2005)

PCT

(10) International Publication Number WO 2005/045573 A3

(51) International Patent Classification⁷: F41A 33/00, F41G 3/26, G09B 19/00

(21) International Application Number:

PCT/US2004/024182

(22) International Filing Date: 26 July 2004 (26.07.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/631,242 1 August 2003 (01.08.2003) US

(71) Applicant and

(72) Inventor: LVOVSKIY, Matvey [US/US]; 8750 Bay Parkway, Apt. D5, Brooklyn, NY 11214 (US).

(74) Agent: LESCHINSKY, Boris; P.O. Box 72, Waldwick, NJ 07463 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

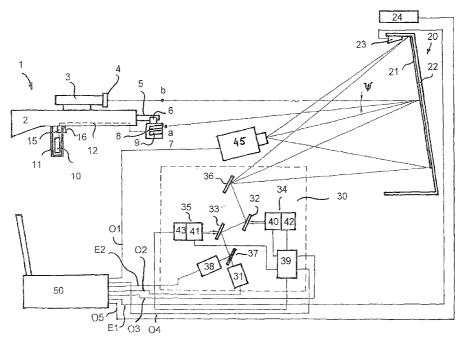
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 23 June 2005

[Continued on next page]

(54) Title: TRAINING SIMULATOR FOR SHARP SHOOTING



(57) Abstract: The simulator of the invention is based on a number of functional units connected directly or remotely to the central computer for controlling the operation and recording the shooting results. The weapon unit is untethered and includes a real hand gun equipped with a snap-on emitter unit to send simultaneously two beams of light upon pulling the trigger-a wide angle infrared beam and a narrowly focused and aimed at the target light beam. The infrared beam is registered by the sensor near the screen and a signal indicating a firing event is sent to the computer.

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

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/24182

A. CLASSIFICATION OF SUBJECT MATTER IPC(7) : F41A 33/00; F41G 3/26; G09B 19/00			
US CL : 434/11, 16-17, 19-27			
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) U.S.: 434/11, 16-17, 19-27			
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) EAST			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a		Relevant to claim No.
Y	US 4,137,651 A (PARDES et al.) 06 February 1979	0 (06.02.1979), See the entire document.	1-6, 8-10
Y	US 4,290,757 A (MARSHALL et al.) 22 September 1981 (22.09.1981), See the entire document.		1-6, 8-10 and 19-21
Y	US 6,575,753 B2 (ROSA et al.) 10 June 2003 (10.06.2003), See the entire document.		5
Y	US 2003/0003424 A1 (SHECHTER et al.) 02 January 2003 (02.01.2003), See the entire document.		6
Y	US 4,163,328 A (SHERBURNE et al.) 07 August 1979 (07.08.1979), See the entire document.		11-15 and 19-21
Α	US 3,964,178 A (MARSHALL et al.) 22 June 1976 (22.06.1976), See the entire document.		1-21
Α	US 5,366,229 A (SUZUKI) 22 November 1994 (22.11.1994), See the entire document.		1-21
Α	A US 3,888,022 A (PARDES et al.) 10 June 1975 (10.06.1975), See the entire document.		1-21
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	
"A" document defining the general state of the art which is not considered to be of particular relevance		principle or theory underlying the inve	
"E" earlier application or patent published on or after the international filing date		"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	
"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 th	e art
"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	
	5 (26.04.2005)	1.0 MAY 2005	
Name and mailing address of the ISA/US		Authorized officer	tuli //ever
Mail Stop PCT, Attn: ISA/US Commissioner for Patents		Linda Sholl Shell	a H. Veney gal Specialist Center 3700
P.O. Box 1450		Telephone No. 703 308 1148	gai Specialist
	kandria, Virginia 22313-1450 . (703) 305-3230	Tech.	Center 5700