

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 March 2003 (06.03.2003)

PCT

(10) International Publication Number
WO 03/019100 A3

(51) International Patent Classification⁷: F41B 11/00,
11/06

(21) International Application Number: PCT/US01/41846

(22) International Filing Date: 23 August 2001 (23.08.2001)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant and

(72) Inventor: BROCK, Nathan [US/US]; Route 2, Box 2155,
Oak Valley Road, Toccoa, GA 30577 (US).

(74) Agents: KNOWLTON, Paul, E. et al.; Kilpatrick Stock-
ton LLP, Suite 2800, 1100 Peachtree Street, Atlanta, GA
30309-4530 (US).

(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,
CZ, DE, DK, DM, DZ, EC, EE, 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, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU,
ZA, ZW.

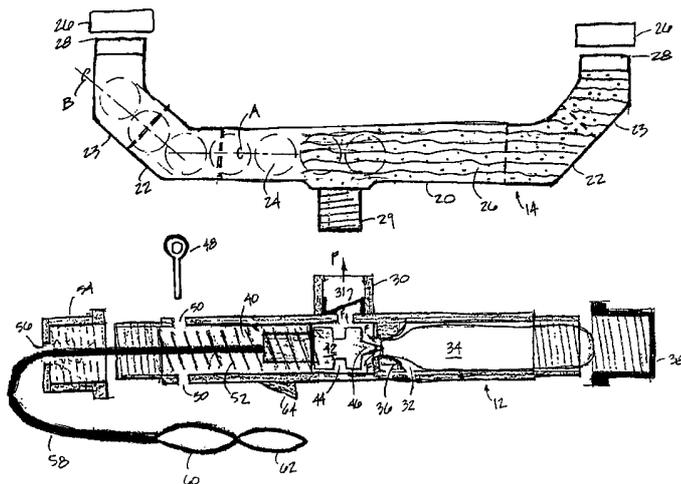
(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML,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

Published:
— with international search report

(88) Date of publication of the international search report:
21 August 2003

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: MULTI-PURPOSE WAR GAME DEVICE



(57) Abstract: A reusable war game device (10) that launches paint-balls (24) or liquid colorant (26) or both simultaneously, can be aimed and fired by the user while hand-held, can be concealed and aimed but remotely triggered, is easy to dismantle and repair under field conditions, is durable enough to withstand all field conditions. The device (10) comprises a launch housing (14) that includes a launch barrel (20) joined to a rotatable muzzle assembly (22, 23) that is fixed on a target; a chamber housing (12) that includes a charge chamber (32) which receives and stores a charge (34); a hammer chamber (40) that includes a retractable hammer (42) that when released from a cocked position is thrust toward the charge chamber (32); a trigger (58) that is drawn to retract the hammer (58) to the cocked position; and, a check valve (31) located between the launch barrel (20) and the charge chamber (32) that permits flow only from the charge chamber (32) to the launch housing (14).



WO 03/019100 A3

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/41846

A. CLASSIFICATION OF SUBJECT MATTER
 IPC(7) : F41B 11/00, 11/06
 US CL : 124/56, 59, 69; 42/76.01
 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)
 U.S. : 124/56, 59, 69, 76, 77, 73; 42/76.01, 77; 89/7; 102/401; 434/11, 16; F41B 11/00, 11/06

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)
 Please See Continuation Sheet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,003,504 A (RICE et al) 21 December 1999 (21.12.1999), column 2 line 14-column 3 line 34.	1-7,11
X	US 4,570,607 A (STOKES) 18 February 1986 (18.02.1986), column 2, lines 1-31.	13
A	US 4,291,665 A (BASH et al) 29 September 1981 (29.09.1981).	
A	US 3,329,063 A (EHRENBURG et al) 04 July 1967 (04.07.1967).	
A	US 3,777,382 A (BRUNELLE) 11 December 1973 (11.12.1973).	
A	US 6,151,824 A (CLAYTON) 28 November 2000 (28.11.2000).	
A	US 4,559,737 A (WASHINGTON) 24 December 1985 (24.12.1985).	
A	US 5,877,448 A (DENTON et al) 02 March 1999 (02.03.1999).	
A	US 5,996,503 A (WOODALL et al) 07 December 1999 (07.12.1999).	

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 international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
"E" earlier application or patent published on or after the international filing date	"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
"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)	"&" document member of the same patent family
"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	

Date of the actual completion of the international search 06 February 2003 (06.02.2003)	Date of mailing of the international search report 02 JUN 2003
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer <i>John W. Zerr</i> Telephone No. (703) 308-1113

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US01/41846

Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claim 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. Claim Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International 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.
 2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
 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.:
- Remark on Protest The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.