



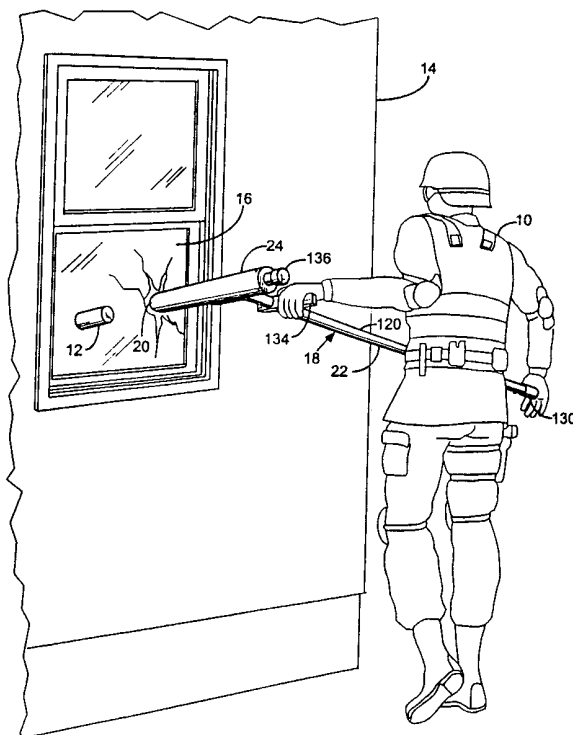
## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification <sup>6</sup> : <b>F41B 7/00</b></p>	<p><b>A3</b></p>	<p>(11) International Publication Number: <b>WO 00/02001</b></p> <p>(43) International Publication Date: 13 January 2000 (13.01.00)</p>
<p>(21) International Application Number: PCT/US99/12568</p> <p>(22) International Filing Date: 3 June 1999 (03.06.99)</p> <p>(30) Priority Data: 09/092,578 5 June 1998 (05.06.98) US</p> <p>(71) Applicant: TRG, TACTICAL AND RESCUE GEAR, INC. [US/US]; 615 Fort Worth Avenue, Dallas, TX 75208 (US).</p> <p>(72) Inventors: WOOTEN, Donald, W.; 615 Fort Worth Avenue, Dallas, TX 75208 (US). PILLING, Thomas, J.; 6309 Scottsboro, Garland, TX 75044 (US). WOHLFELD, Robert, M.; 2670 Lombardy Lane, Dallas, TX 75220 (US).</p> <p>(74) Agents: BERG, Richard, P. et al.; Ladas &amp; Parry, Suite 2100, 5670 Wilshire Boulevard, Los Angeles, CA 90036-5679 (US).</p>		<p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b> <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <p>(88) Date of publication of the international search report: 30 March 2000 (30.03.00)</p>

(54) Title: INTRUSION APPARATUS

(57) Abstract

An intrusion apparatus (18) for safely propelling a non-lethal diversionary device (12) into a structure (14) through a barrier (16). The intrusion apparatus comprises an extension device (22) adapted to be gripped by an individual (10) and being movable generally towards the barrier by the individual. A support assembly (24) is connected to the extension device. The support assembly serves to support the non-lethal diversionary device as the extension device is moved towards the barrier. A barrier breaking assembly (26) is also supported by the extension device. The barrier breaking assembly forms an opening (20) sized to receive the non-lethal diversionary device through the barrier as the extension device is being moved towards the barrier. A propelling assembly (37) is also supported by the extension device. The propelling assembly serves to selectively propel the non-lethal diversionary device into the structure through the opening formed in the barrier at a non-lethal velocity. The hand held extension device comprises a trigger member (130) for actuation of the propelling means which can be a spring. A tube for holding the non-lethal device is positioned at one end of the extension device perpendicular thereto.



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# INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 99/12568

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC 6 F41B7/00

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 6 F41B F41C F41H A62C

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 practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4 270 293 A (PLUMER ET AL.) 2 June 1981 (1981-06-02)	6
A	abstract; figures 4,5 ---	1,7
A	US 5 540 284 A (ESPOSITO ET AL.) 30 July 1996 (1996-07-30) column 5, line 13 - line 16 column 5, line 34 - line 41; figures 1-5 ---	1,7
A	DE 666 378 C (TIPP & CO) the whole document ---	2,4,5
A	US 5 690 089 A (WARD) 25 November 1997 (1997-11-25) abstract; figure 1 ---	2,5
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Patent family members are listed in annex.

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Date of the actual completion of the international search

25 January 2000

Date of mailing of the international search report

07/02/2000

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International Application No

PCT/US 99/12568

**C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT**

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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A	US 3 318 033 A (BARR) 9 May 1967 (1967-05-09) column 3, line 22 - line 54; figures 1,4,5 -----	6
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