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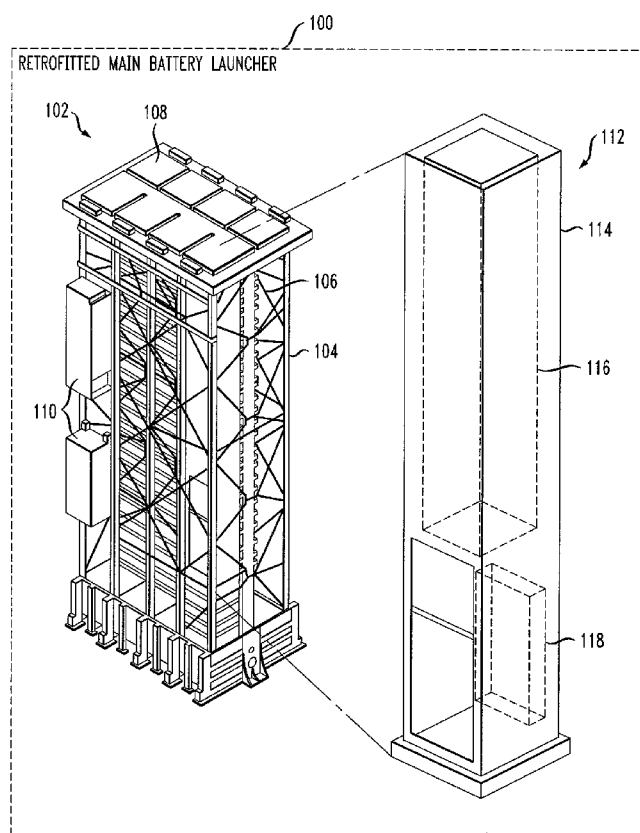
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KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME,

[Continued on next page]

(54) Title: ADAPTABLE LAUNCHING SYSTEM

FIG. 1



(57) Abstract: A launch system for use as a standalone
munition launcher or as a guest launcher within a main
battery host launcher.



MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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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)

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.
Y	ANONYMOUS: "MK 25 QUAD PACK" INTERNET ARTICLE 18 October 2007 (2007-10-18), XP002545342 Retrieved from the Internet: URL: http://web.archive.org/web/20071018171337/http://baesystems.com/ProductsServices/mk25_quad_pack.html [retrieved on 2009-09-10] web.archive.org can state on the publication date and time ("20071018171337" means "Oct. the 18th 2007 at 17:13:37") of the original content of the online BAE Systems release about the MK 25, which can be found at: http://baesystems.com/ProductsServices/mk25_quad_pack.html; paragraph [0002] ----- -/-	1-13

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

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International application No

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6 125 734 A (YAGLA JON J [US]) 3 October 2000 (2000-10-03) column 1, line 10 - line 12; claim 1; figures 1,2c column 2, line 43 - line 49 -----	1-13
Y	MOORHEAD S B: "THE LATEST IN SHIP WEAPON LAUNCHERS - THE VERTICAL LAUNCHING SYSTEM" NAVAL ENGINEERS JOURNAL, AMERICAN SOCIETY OF NAVAL ENGINEERS INC. WASHINGTON, US, vol. 93, no. 2, 1 April 1981 (1981-04-01), pages 90-96, XP002048251 page 1, column 2, line 5 page 4, column 1 - column 2; figure 4 -----	1-13
Y	US 5 327 809 A (MATTESON PHILIP L [US]; BOVEE STAN P [US]; KUNG AYE [US]) 12 July 1994 (1994-07-12) column 3, line 11 - line 18; figures 1,4,5 column 3, line 42 - line 45 -----	1-13
Y	US 3 110 464 A (PAUL BARATOFF; JACK HARRIS) 12 November 1963 (1963-11-12) column 1, line 9 - line 19; claim 1; figure 1 column 2, line 5 - line 33 -----	5

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6125734	A	03-10-2000	NONE	
US 5327809	A	12-07-1994	IL 109095 A NL 9400447 A	24-09-1998 17-10-1994
US 3110464	A	12-11-1963	NONE	