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(54) Title: METHODS OF AGING ALUMINUM ALLOYS TO ACHIEVE IMPROVED BALLISTICS PERFORMANCE

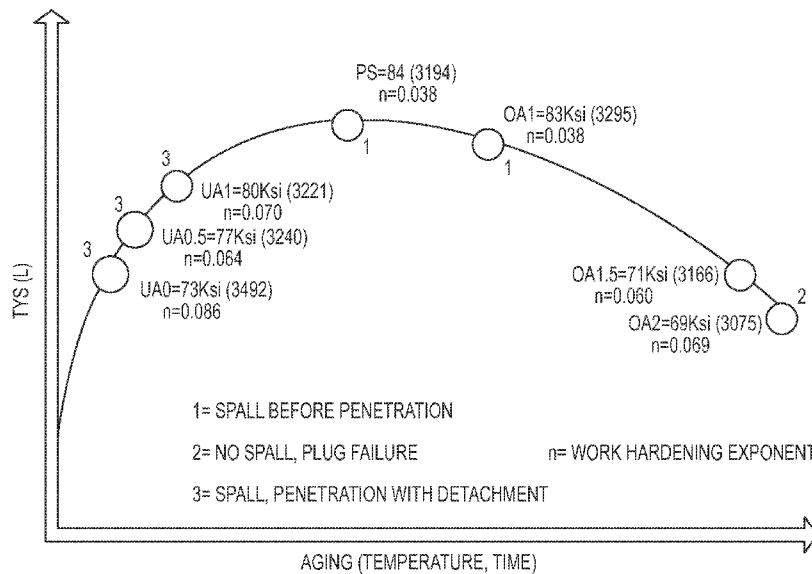


FIG.4

(57) Abstract: Aluminum alloy products having improved ballistics performance are disclosed. The aluminum alloy products may be underaged. In one embodiment, the underaged aluminum alloy products realize an FSP resistance that it is better than that of a peak strength aged version of the aluminum alloy product. In one embodiment, ballistics performance criteria is selected and the aluminum alloy product is underaged an amount sufficient to achieve a ballistics performance that is at least as good as the ballistics performance criteria.

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A. CLASSIFICATION OF SUBJECT MATTER*C22C 21/00(2006.01)i, C22F 1/04(2006.01)i*

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)

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: ballistics, amor, aluminum, aging, and toughness.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5512112 A (CASSADA, III; WILLIAM A.) 30 April 1996 See abstract; column 1 line 62-column 2 line 2, lines 27-54, column 6 lines 5-32; and claim 1.	1-20
A	WO 2007-097817 A2 (BAC OF VIRGINIA) 30 August 2007 See abstract; page 8 line 3-page 9 line 18; and claims 1-3.	1-20
A	US 4469537 A (ASHTON; RICHARD F. et al.) 04 September 1984 See abstract; column 1 lines 5-22, column 2 line 50-column 3 line 55; and claim 1.	1-20
A	JP 11-106858 A (YKK CORP.) 20 April 1999 See abstract and paragraphs [0001]-[0004], [0007], [0008].	1-20

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

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