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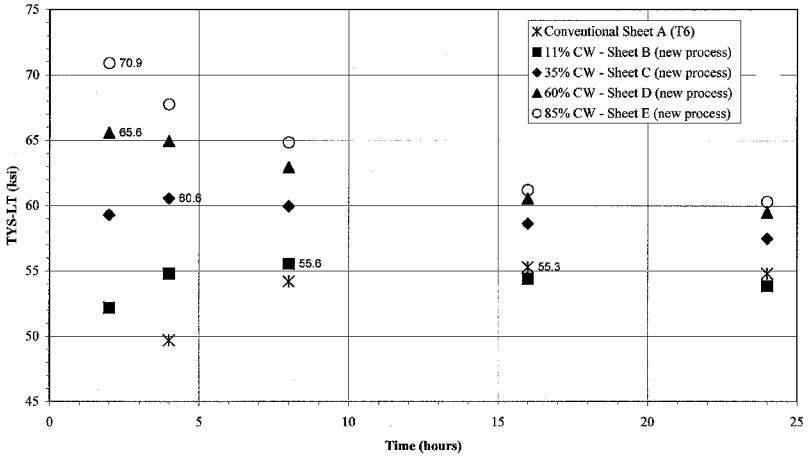
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[Continued on next page]

(54) **Title**: IMPROVED 6XXX ALUMINUM ALLOYS, AND METHODS FOR PRODUCING THE SAME

FIG. 16 - TYS v. Time at 350F



(57) **Abstract**: New 6xxx aluminum alloy bodies and methods of producing the same are disclosed. The new 6xxx aluminum alloy bodies may be produced by preparing the aluminum alloy body for post-solutionizing cold work, cold working by at least 25%, and then thermally treating. The new 6xxx aluminum alloy bodies may realize improved strength and other properties.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

C22C 21/00(2006.01)i, B22D 21/04(2006.01)i, C22F 1/04(2006.01)i, C22C 21/02(2006.01)i, C22C 21/08(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)

C22C 21/00; C22F 1/05; C22F 1/00; C22F 1/04; B21B 1/22; C22C 21/02; C22C 21/08

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: aluminum alloy; solution treatment; artificial aging; Mg; Si; and cold working.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	JP 2009-263720 A (NIPPON LIGHT METAL CO. LTD.) 12 November 2009 See abstract; paragraphs [0010], [0011], [0017]-[0025], [0036]; and claims 1, 4,5.	1-48
A	JP 2007-031819 A (NIPPON LIGHT METAL CO. LTD.) 08 February 2007 See abstract; paragraphs [0002], [0008]-[0010], [0012]-[0026]; and claims 1,2.	1-48
A	JP 2007-009262 A (MITSUBISHI ALUMINUM CO. LTD.) 18 January 2007 See abstract; paragraphs [0020]-[0026]; and claims 1,4.	1-48
A	JP 2003-321754 A (KOBE STEEL LTD.) 14 November 2003 See abstract and paragraphs [0041]-[0050].	1-48

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed

"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

"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

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JP 2003-321754 A	14.11.2003	JP 3740086 B2	25.01.2006