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[Continued on next page]

(54) Title: LITHIUM SPUTTER TARGETS

(57) Abstract: Described are methods of fabricating lithium sputter targets, lithium sputter targets, associated handling apparatus, and sputter methods including lithium targets. Various embodiments address adhesion of the lithium metal target to a support structure, avoiding and/or removing passivating coatings formed on the lithium target, uniformity of the lithium target as well as efficient cooling of lithium during sputtering. Target configurations used to compensate for non-uniformities in sputter plasma are described. Modular format lithium tiles and methods of fabrication are described. Rotary lithium sputter targets are also described.

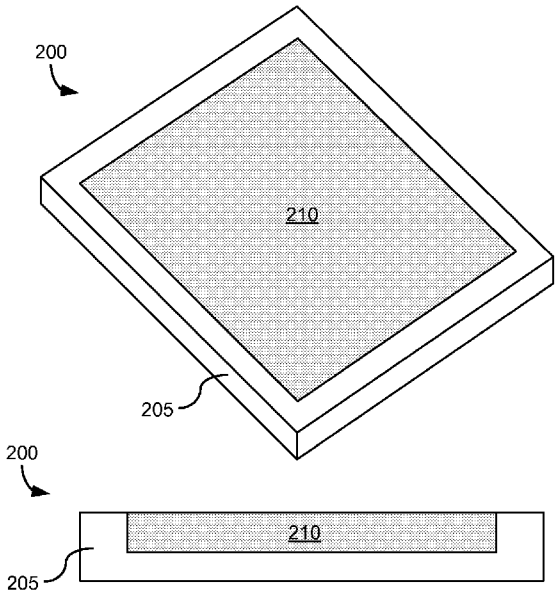


Fig. 2A

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SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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A. CLASSIFICATION OF SUBJECT MATTER

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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)

C23C 14/34; C23C 14/00; B05D 3/02; C23F 1/00; C23C 14/32; C04B 37/00

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: sputter, target, backing plate, and lithium

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	US 2006-0272936 A1 (HIDEKI YAMASHITA et al.) 07 December 2006 See abstract; paragraphs [0004],[0005],[0060]; and figures 1,10,11.	1-3 4-61
X	US 2010-0108500 A1 (HAWRYLCHAK LARA et al.) 06 May 2010 See abstract; paragraphs [0015],[0017],[0024]; claims 20,21; and figures 1A,1	21,27
Y A	C.	1-3 4-20,22-26,28-61
X A	JP 2003-183822 A (MITSUI MINING & SMELTING CO LTD) 03 July 2003 See abstract; paragraphs [0008],[0012],[0029],[0033]; and figure 3.	32-34 1-31,35-61
A	US 5507897 A (CAMPET; GUY et al.) 16 April 1996 See abstract; column 5 lines 44-47,column 6 lines 3-21; and figures 2a,2b.	1-61

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

☒ See patent family annex.

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"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

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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