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US 13/018,416 (CON)
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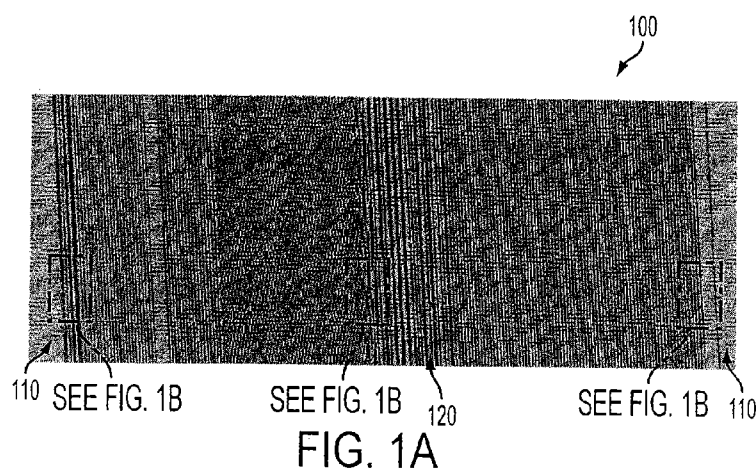
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[Continued on next page]

(54) Title: FORMING A TEMPLATE WITH DISCRETE DOMAINS



(57) Abstract: A method for nano-patterning includes imprinting features in a resist with an imprint mold to form one or more topographic surface patterns on the imprinted resist. A block copolymer ("BCP") material is deposited on the imprinted resist, wherein a molecular dimension L_0 of the BCP material correlates by an integer multiple to a spacing dimension of the one or more topographic surface patterns on the imprinted resist. The deposited BCP is annealed and at least a portion of the annealed BCP is removed, forming a template having discrete domains.



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- *with international search report (Art. 21(3))*
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/021781**A. CLASSIFICATION OF SUBJECT MATTER****G11B 5/62(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)

IPC: G11B; H01L; B32B; B05D; C08J; G11B; B44C

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: resist, lithograph*, topograph*, imprint, pattern, magnetic, record

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2003-0091752 A1 (PAUL F. NEALEY et al.) 15 May 2003 See abstract; paragraphs [0029]; figure 4	1-16
A	US 2008-0311402 A1 (YEON SIK JUNG et al.) 18 December 2008 See abstract; paragraphs [0027]-[0030]; claims 1, 19	1-16
A	US 7378028 B2 (KOICHI WAGO et al.) 27 May 2008 See abstract; column 4 line 21-column 7 line 10; figure 1	1-16
A	US 7767099 B2 (WAI-KIN LI et al.) 03 August 2010 See abstract; column 4 line 49-column 6 line 11; claims 1, 6	1-16



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:

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"O" document referring to an oral disclosure, use, exhibition or other means

"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

"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

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2012/021781

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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