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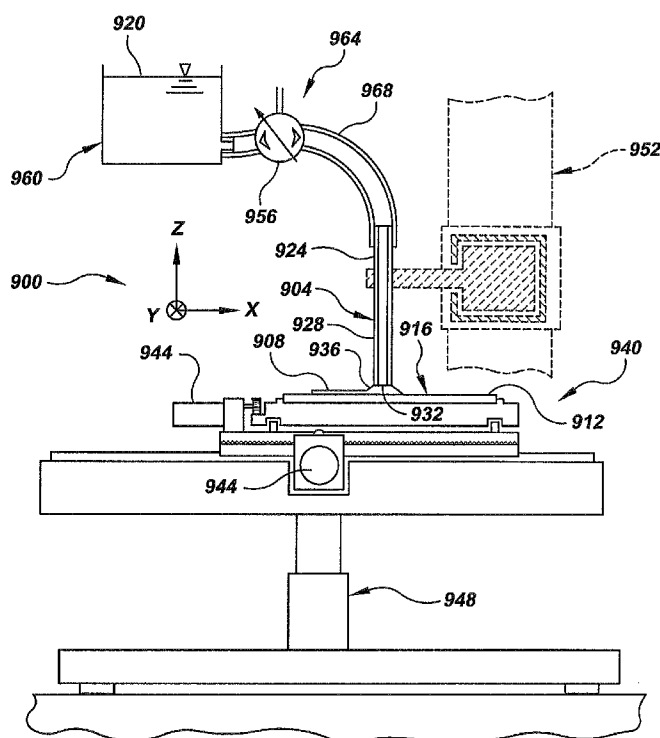
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(54) Title: SYSTEMS AND METHODS FOR FABRICATING CRYSTALLINE THIN STRUCTURES USING MENISCAL GROWTH TECHNIQUES

FIG. 9A



(57) Abstract: Systems and methods that utilize semiconductor molecules to form crystalline thin-films by depositing the molecules onto a substrate at a lateral growth front. Techniques embodied in corresponding ones of the disclosed systems and methods include a submersion technique in which a substrate is submerged in a precursor solution containing the molecules and a film is grown at a meniscus formed between the free surface of the solution and the substrate. Yet another technique disclosed is a writing technique in which a pen (904) is used to deliver to a substrate (916) a precursor solution containing the molecules and the film is grown as the solvent evaporates from the delivered solution, contained in the reservoir (960).



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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)

C30B H01L

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, INSPEC, COMPENDEX, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BJOERN ROSNER ET AL: "Functional extensions of Dip Pen NanolithographyTM: active probes and microfluidic ink delivery; Functional extensions of dip pen nanolithography TM: active probes and microfluidic ink delivery" SMART MATERIALS AND STRUCTURES, IOP PUBLISHING LTD., BRISTOL, GB, vol. 15, no. 1, 1 February 2006 (2006-02-01), pages S124-S130, XP020105307 ISSN: 0964-1726 page S124, column 2, line 3 - page S125, column 2, line 6; figures 1,2 ----- -/--	1-17

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

☒ See patent family annex.

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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.
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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