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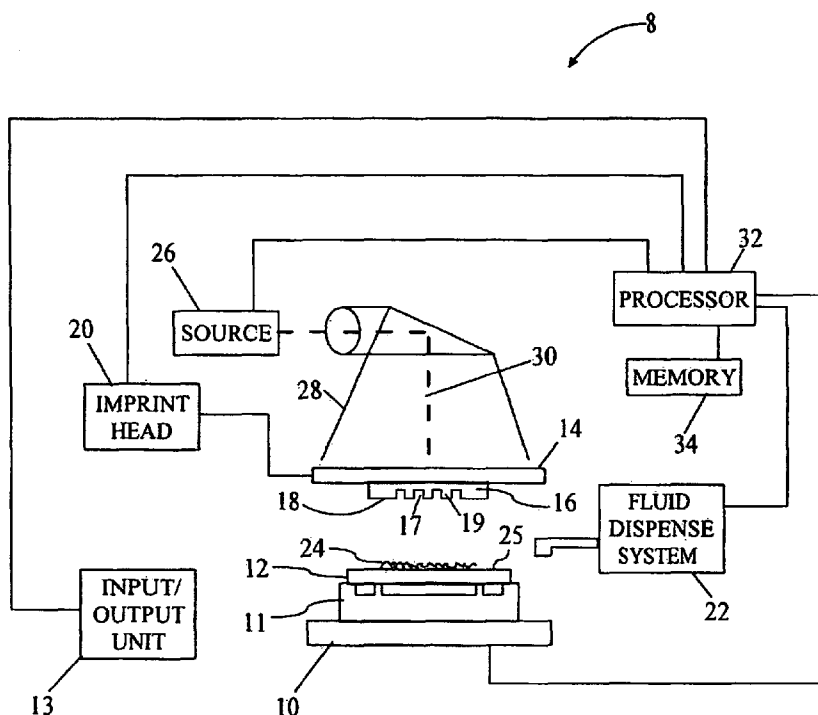
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[Continued on next page]

(54) Title: LITHOGRAPHY IMPRINTING SYSTEM



(57) Abstract: The present invention is directed towards a method and a system to create and maintain a desired environment in the vicinity of a nano-imprint lithography template by creation of a partial vacuum using channels or holes in the template holding the nano-imprint mold.



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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 07/08075

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B05D 5/00 (2007.01)

USPC - 427/256

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)

USPC - 427/256

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched  
USPC - 427/256,355; 977/855,857,887 (text search - see search terms below)

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

PubWEST (PGPB,USPT,USOC,EPAB,JPAB); DialogPro (General Research); Google Scholar

Nanolithography, imprint, mold, evacuation, vacuum, template, hole, opening, aperture, recess, groove, channel, body, block, space, gap, polymer, polymerize, fill

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 7,019,819 B2 (CHOI et al.) 28 March 2006 (28.03.2006), abstract, Fig. 2, 8 and 10, col 1, ln 21-42, col 3, ln 34 - col 4, ln 12, col 5, ln 54 - col 6, ln 13 and col 7, ln 45 - col 8, ln 11.	1, 3 and 5
Y		2 and 4
Y	US 6,932,934 B2 (CHOI et al.) 23 August 2005 (23.08.2005), abstract, Fig. 4, 5, 20A, 20B, 21, 22 and 39, col 2, ln 25-43, col 5, ln 42 - col 6, ln 24, col 18, ln 15-67, col 19, ln 51-61 and col 20, ln 21-32.	2 and 4
A	US 6,951,173 B1 (MEISSL et al.) 04 October 2005 (04.10.2005), entire document.	1-5
A	US 6,954,275 B2 (CHOI et al.) 11 October 2005 (11.10.2005), entire document.	1-5

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

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