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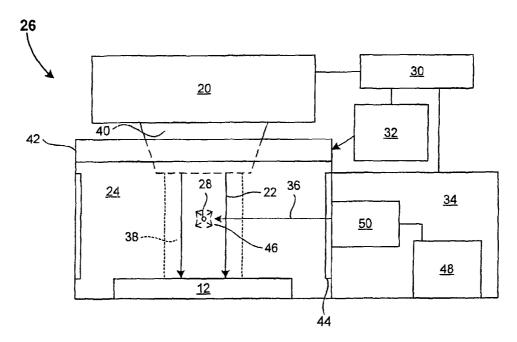
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[Continued on next page]

(54) Title: IMMERSION MEDIUM BUBBLE ELIMINATION IN IMMERSION LITHOGRAPHY



(57) Abstract: A method of operating an immersion lithography system (26), including steps of immersing at least a portion of a wafer (12) to be exposed in an immersion medium (24), wherein the immersion medium comprises at least one bubble (28); directing an ultrasonic wave (36) through at least a portion of the immersion medium to disrupt and/or dissipate the at least one bubble; and exposing the wafer with an exposure pattern (22) by passing electromagnetic radiation through the immersion medium subsequent to the directing. Also disclosed is a monitoring and control system (30, 32, 34) for an immersion lithography system (26).



 $\label{eq:tn_tr_def} \text{TN}, \text{TR}, \text{TT}, \text{TZ}, \text{UA}, \text{UG}, \text{US}, \text{UZ}, \text{VC}, \text{VN}, \text{YU}, \text{ZA}, \text{ZM}, \\ \text{ZW}.$ 

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EPO-Internal, WPI Data

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 610 683 A (TAKAHASHI ET AL) 11 March 1997 (1997-03-11) abstract figures 1,2,8 column 1, line 10 - line 14 column 3, line 4 - line 18 column 6, line 30 - line 48 column 8, line 46 - column 9, line 48	1-10
Α	US 2002/163629 A1 (SWITKES MICHAEL ET AL) 7 November 2002 (2002-11-07) abstract figure 1 paragraph '0004! - paragraph '0006! paragraph '0047!	1,3,8

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
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