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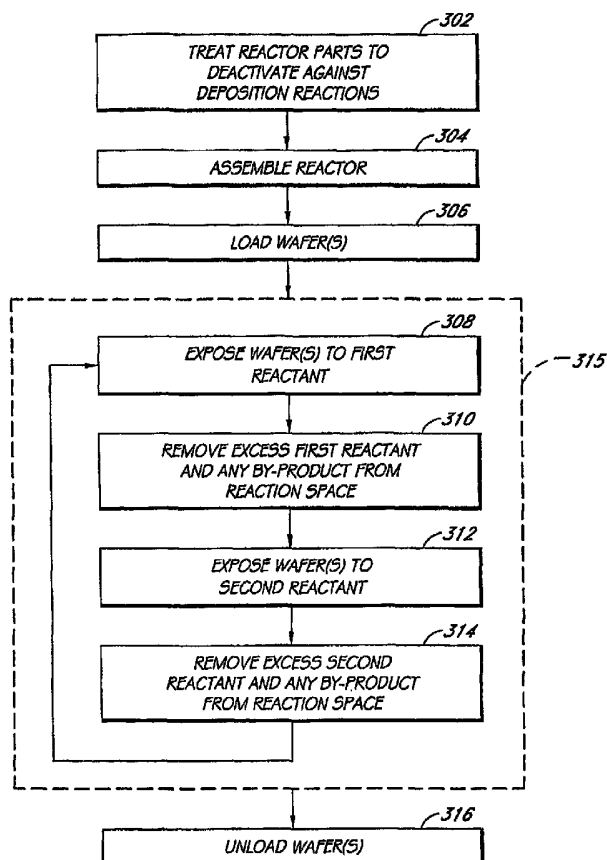
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(54) **Title:** REACTOR SURFACE PASSIVATION THROUGH CHEMICAL DEACTIVATION



(57) **Abstract:** Protective layers (208) are formed on a surface (201) of an atomic layer deposition (ALD) or chemical vapor deposition (CVD) reactor (100). Parts defining a reaction space (200) for an ALD or CVD reactor (100) can be treated, in situ or ex situ, with chemicals (206) that deactivate reactive sites (210) on the reaction space surface(s) (201). A pre-treatment step (502) can maximize the available reactive sites (210) prior to the treatment step (504). With reactive sites (210) deactivated by adsorbed treatment reactant (208), during subsequent processing the reactant gases (214) have reduced reactivity or deposition upon these treated surfaces. Accordingly, purge steps (310, 314) can be greatly shortened and a greater number of runs can be conducted between cleaning steps to remove built-up deposition on the reactor walls.



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INTERNATIONAL SEARCH REPORT

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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)

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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, WPI Data, PAJ, COMPENDEX, CHEM ABS Data, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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X	WO 01/27346 A (ASM MICROCHEMISTRY OY) 19 April 2001 (2001-04-19)	1-4,6, 17,18, 23,24
Y	example 1	5
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A	page 6, line 1 - page 9, line 27 claim 6; example 1	15
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☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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