

Title (en)  
STRIPPING, PASSIVATION AND CORROSION INHIBITION OF SEMICONDUCTOR SUBSTRATES

Title (de)  
VERFAHREN ZUR PHOTOLACK-ENTFERNUNG, PASSIVIERUNG UND KORROSIONSINHIBIERUNG VON HALBLEITENDEN SCHEIBEN

Title (fr)  
DECAPAGE, PASSIVATION ET INHIBITION DE LA CORROSION DE SUBSTRATS A SEMI-CONDUCTEURS

Publication  
**EP 0692140 A1 19960117 (EN)**

Application  
**EP 95908706 A 19950127**

Priority  

- US 9501101 W 19950127
- US 19182894 A 19940203
- US 26837794 A 19940629
- US 36923795 A 19950106

Abstract (en)  
[origin: WO9521458A1] A multicycle process for passivating, and optionally stripping, a substrate (20) having etchant byproducts (24) and remnant resist (26) thereon, is described. In the multicycle passivation process, the substrate is placed into a vacuum chamber (52), passivating gas is introduced into the vacuum chamber (52), and a plasma is generated from the passivating gas. Thereafter, the flow of passivating gas is stopped and the plasma in the chamber is extinguished. The passivating cycle is repeated at least twice to passivate the substrate. In the multicycle passivating and stripping process, each passivating cycle is alternated by a stripping cycle for stripping remnant resist (26) from the substrate.

IPC 1-7  
**H01L 21/311**; **H01L 21/321**; **G03F 7/42**

IPC 8 full level  
**C23F 4/00** (2006.01); **C23F 11/02** (2006.01); **H01L 21/02** (2006.01); **H01L 21/302** (2006.01); **H01L 21/3065** (2006.01); **H01L 21/311** (2006.01); **H01L 21/3213** (2006.01); **H01L 21/683** (2006.01)

CPC (source: EP)  
**H01L 21/02071** (2013.01); **H01L 21/31138** (2013.01); **H01L 21/6831** (2013.01)

Citation (search report)  

- [X] US 5000820 A 19910319 - DOUGLAS MONTE A [US]
- [A] EP 0019915 A1 19801210 - HITACHI LTD [JP]
- [PX] EP 0585936 A2 19940309 - TEXAS INSTRUMENTS INC [US], et al
- [X] PATENT ABSTRACTS OF JAPAN vol. 7, no. 107 (E - 174) 11 May 1983 (1983-05-11)
- [A] PATENT ABSTRACTS OF JAPAN vol. 17, no. 398 (E - 1403) 26 July 1993 (1993-07-26)
- See references of WO 9522171A2

Designated contracting state (EPC)  
BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)  
**WO 9521458 A1 19950810**; EP 0692140 A1 19960117; JP 2006237599 A 20060907; JP 2839040 B2 19981216; JP 3795220 B2 20060712; JP 4167268 B2 20081015; JP H09500763 A 19970121; JP H1174250 A 19990316; KR 100336916 B1 20021202; WO 9522171 A2 19950817; WO 9522171 A3 19950908

DOCDB simple family (application)  
**US 9501100 W 19950127**; EP 95908706 A 19950127; JP 2006032939 A 20060209; JP 52123495 A 19950127; JP 5695298 A 19980309; KR 19950704392 A 19951004; US 9501101 W 19950127