

Title (en)  
Edge-polishing apparatus and method

Title (de)  
Verfahren und Vorrichtung zum Abfasen

Title (fr)  
Procédé et dispositif de polissage d'un chant

Publication  
**EP 0877418 A3 20000809 (EN)**

Application  
**EP 98108249 A 19980506**

Priority  
JP 13580997 A 19970509

Abstract (en)  
[origin: EP0877418A2] An edge-polishing apparatus and method are provided which are capable of not only preventing the surfaces of workpieces such as silicon wafers from being smeared, stained, soiled, damaged or marred by forming hydrophilic oxide films thereon, and but also of storing the workpieces in a dry state. A workpiece W stored in a cassette 10 in a dry state is taken out by means of a first robot 12 of a first transportation section 1, and transported to an oxide-film forming section 2 where it is immersed in ozone water 21 in an oxidation water tank 20 so as to form a hydrophilic oxide film on the surfaces of the workpiece W. The workpiece W thus formed with the hydrophilic oxide film is cleaned with a shower 29 of pure water by means of a cleaning device 28, and then transported to an edge-polishing section 4 by means of a second robot 32 of a second transportation section 3. At the edge-polishing section 4, the edges of the workpiece W are mirror finished by a polishing drum 41. Thereafter, the workpiece W is cleaned with a shower 53 of pure water while being brushed by means of a pair of brushes 51, 51. The workpiece W thus cleaned is transported to a drying section 7 by means of a third robot 60 of a third transportation section 6, and dried there. Subsequently, the dried workpiece W is kept or stored in a cassette 79 in a dry state. <IMAGE>

IPC 1-7  
**H01L 21/304**; B08B 1/00; B08B 3/00; B24B 9/06

IPC 8 full level  
**B24B 55/06** (2006.01); **B24B 9/00** (2006.01); **B24B 9/06** (2006.01); **B24B 37/02** (2012.01); **H01L 21/306** (2006.01)

CPC (source: EP)  
**B24B 9/065** (2013.01); **B24B 37/02** (2013.01)

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Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**EP 0877418 A2 19981111**; **EP 0877418 A3 20000809**; JP H10309666 A 19981124

DOCDB simple family (application)  
**EP 98108249 A 19980506**; JP 13580997 A 19970509