

Title (en)

Method and apparatus for polishing semiconductor substrates

Title (de)

Verfahren und Vorrichtung zum Polieren von Halbleiterscheiben

Title (fr)

Procédé et dispositif pour le polissage des plaquettes semiconductrices

Publication

EP 0847835 B1 20010725 (DE)

Application

EP 97121841 A 19971211

Priority

DE 19651761 A 19961212

Abstract (en)

[origin: EP0847835A1] The method involves polishing the discs (10a) with a polishing head (2) by pressing them against a polishing cloth stretched over a polishing disc (13). At least one of a number of pressure chambers are pressurised at a specific pressure before the discs are polished. During the polishing process the polishing pressure is transferred to the rear surface (6) of the wafer (1) carrying the discs by the flexible bearing surface (5) of the pressurized pressure chambers. If several pressure chambers are pressurised the pressures in the chambers can be balanced

IPC 1-7

B24B 37/04; B24B 49/16; B24B 41/047

IPC 8 full level

B24B 37/04 (2006.01); **B24B 37/30** (2012.01); **B24B 41/047** (2006.01); **B24B 49/16** (2006.01); **B25J 15/06** (2006.01); **H01L 21/304** (2006.01)

CPC (source: EP KR US)

B24B 37/30 (2013.01 - EP US); **B24B 41/047** (2013.01 - EP US); **B24B 49/16** (2013.01 - EP US); **H01L 21/321** (2013.01 - KR)

Cited by

DE10159833C1; US6114245A; GB2376908A; EP0967048A1; US6080050A; DE10009656B4; DE10012840C2; EP1437197A1; DE10210023A1; GB2446358A; EP1182007A1; GB2446358B; US7140956B1; US6966822B2; US6277009B1; WO0174534A3; WO9916580A1; WO0187541A3; WO9933613A1; WO0051782A1; WO2007123576A1; US6659850B2; US6612903B2; US8037896B2; US8689822B2; US6368189B1; US7029382B2; US7311586B2; US6861360B2; DE102015224933A1; WO2017097670A1; US11075070B2

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

EP 0847835 A1 19980617; EP 0847835 B1 20010725; CN 1123423 C 20031008; CN 1185028 A 19980617; DE 19651761 A1 19980618; DE 59704120 D1 20010830; JP 3150933 B2 20010326; JP H10180617 A 19980707; KR 100278027 B1 20010201; KR 19980063896 A 19981007; SG 60162 A1 19990222; TW 411525 B 20001111; US 5980361 A 19991109

DOCDB simple family (application)

EP 97121841 A 19971211; CN 97118946 A 19970929; DE 19651761 A 19961212; DE 59704120 T 19971211; JP 33894397 A 19971209; KR 19970066694 A 19971208; SG 1997004221 A 19971202; TW 86118563 A 19971209; US 98751597 A 19971209