

Title (en)  
PNEUMATIC DIAPHRAGM HEAD HAVING AN INDEPENDENT RETAINING RING AND MULTI-REGION PRESSURE CONTROL, AND METHOD TO USE THE SAME

Title (de)  
TRÄGERKOPF MIT EINEM PNEUMATISCHEM DIAPHRAGMA DER EINEN HALTERRING UND EINE DAVON UNABHÄNGIGE MULTI-REGION DRUCKSTEUERUNG HAT, UND VERFAHREN ZUR DESSEN ANWENDUNG

Title (fr)  
SYSTEME ET PROCEDE DE PLANARISATION CHIMICOMECHANIQUE PAR TETE A MEMBRANE PNEUMATIQUE COMPORTANT UN ANNEAU DE MAINTIEN ET UNE COMMANDE DE PRESSION SEPARÉE POUR DIFFÉRENTES ZONES DES TRANCHES

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Application  
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Abstract (en)  
[origin: WO0187541A2] An apparatus and method for planarizing a substrate are provided. The apparatus (101) includes a carrier (106) having: a plate (261) for receiving the substrate (230) thereon; a first chamber (297) for forcing the plate in a predetermined direction; a spacer (260) coupled to an outer edge (282) of the plate; a membrane (250) coupled to the plate via the spacer and separated from the plate by a thickness of the spacer; and a second chamber (298) defined between the membrane and the plate for forcing the membrane in another predetermined direction. The method involves pressing a peripheral edge of the substrate (113) against a polishing pad (135) with a first pressure, and pressing an interior of the substrate against the pad with a second pressure. The first pressure may be provided through a mechanical contact with the peripheral edge of the substrate (113), a pneumatic pressure exerted through a membrane (250), or by gas pressing directly against a portion of the substrate.

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