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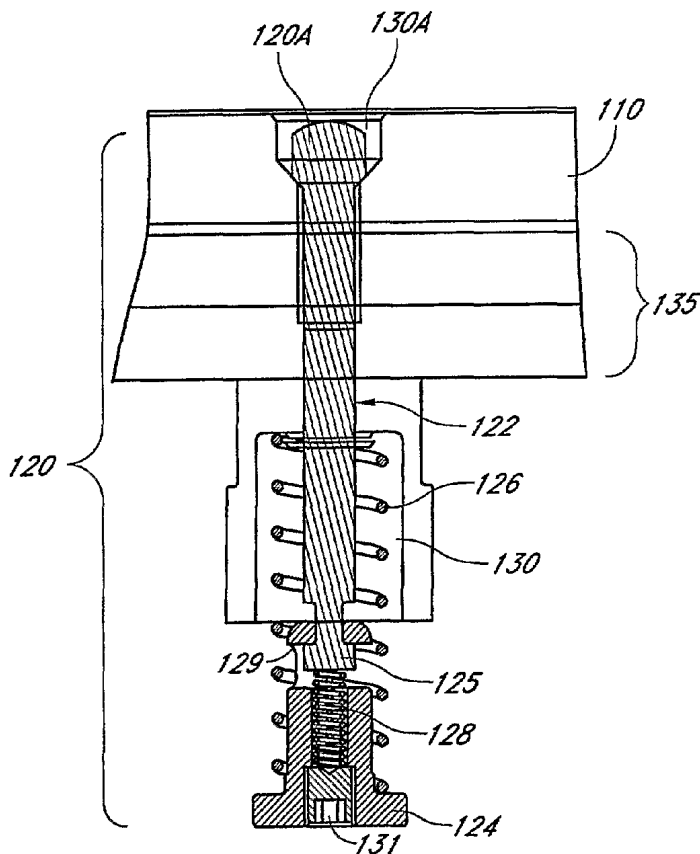
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[Continued on next page]

(54) Title: WAFER SUPPORT PIN ASSEMBLY



(57) Abstract: A semiconductor wafer support pin assembly. A susceptor has at least three support pins configured to raise a wafer above the top surface of the susceptor. Each support pin includes an upper pin and a lower pin, which lock together by means of a quick-release mechanism in the form of a bayonet mount. The upper pin is made of a non-metallic material, such as polybenzimidazole. The susceptor is driven up and down by a lifting mechanism, driven by an electric motor or pneumatic cylinder. The susceptor moves up and down, relative to the support pins.

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USPC: 118/728,729,730;156/345.51,345.52,345.53,345.54,345.55
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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 practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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| C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT | | |
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| Category * | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
| Y | US 20030178145 A1 (ANDERSON et al) 25 Sept 2003 (25.9.2003), paragraph 0039 | 16-18, 48, 49 |
| Y | US 6,213,521 B1 (LAND et al) 04 Apr 2001 (4.4.2001), col. 5, lines 25-40 | 20-24, 52, 53 |