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Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

[Continued on next page]

(54) **Title**: METHOD OF PARTICLE CONTAMINANT REMOVAL

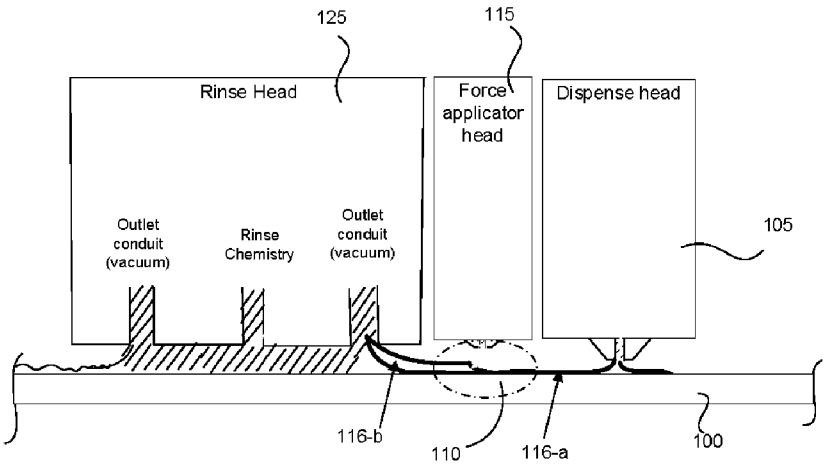


Figure 1A

(57) **Abstract**: Apparatus and methods for removing particle contaminants from a surface of a substrate includes coating a layer of a viscoelastic material on the surface. The viscoelastic material is coated as a thin film and exhibits substantial liquid-like characteristic. An external force is applied to a first area of the surface coated with the viscoelastic material such that a second area of the surface coated with the viscoelastic material is not substantially subjected to the applied force. The force is applied for a time duration that is shorter than a intrinsic time of the viscoelastic material so as to access solid-like characteristic of the viscoelastic material. The viscoelastic material exhibiting solid-like characteristic interacts at least partially with at least some of the particle contaminants present on the surface. The viscoelastic material along with at least some of the particle contaminants is removed from the first area of the surface while the viscoelastic material is exhibiting solid-like characteristics.

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