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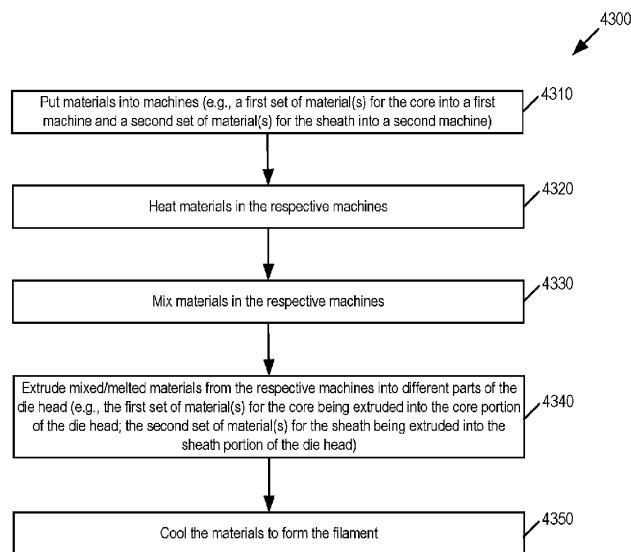


FIG. 43

(57) **Abstract:** A method for producing a filament is disclosed. The method includes using extruders to extrude materials for a core of the filament and materials for a sheath of the filament, using a core section and a sheath section of a die head to route the materials that are extruded from the extruders, and during or after using the die head, forming the filament by cooling. A method and apparatus are disclosed to post process a 3D printed product with at least one of laser radiation or plasma treatment. Also, a core/sheath structure composing a forming material or a formed product generated from the forming material is disclosed. The core/sheath structure includes a core and a sheath that includes: one or both of fibers or particles; and at least one of: a soluble substance; an antimicrobial substance; an ultraviolet protection substance; an odor management substance; or a moisture management substance.

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