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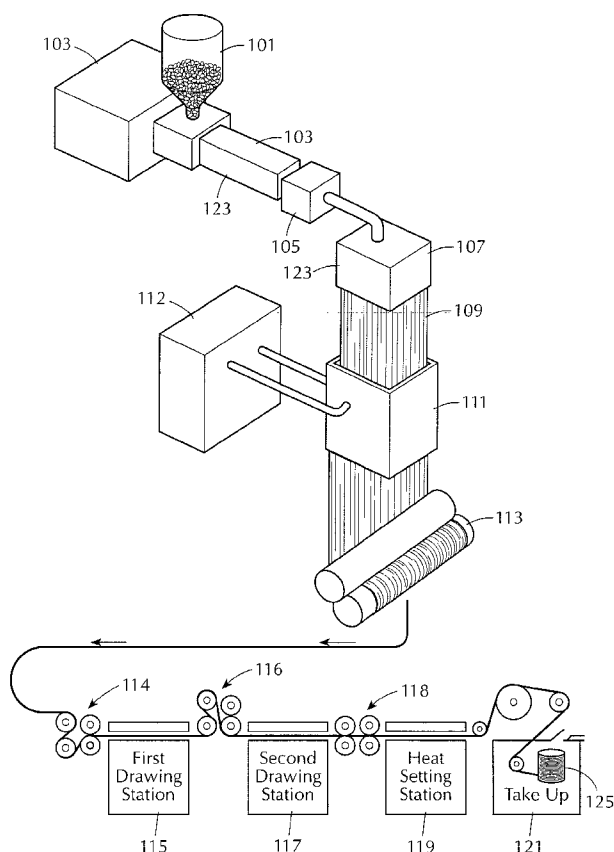
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(54) Title: APPARATUS FOR MANUFACTURING OPTICAL FIBER MADE OF SEMI-CRYSTALLINE POLYMER



(57) Abstract: An extruder (103) heats polymer resin to produce molten polymer and supplies the molten polymer at a constant pressure. A gear pump (105) is in fluid communication with the extruder (103), receives the molten polymer and controls the polymer flow rate. A spinneret (107) is in fluid communication with the gear pump and spins the molten polymer into the optical fibers. A heater (112) controls the temperature of the optical fibers after the fibers exit the spinneret. The optical fibers are slowly cooled from molten to ambient temperature to eliminate radial morphological variations. A take-up roller (113) tensions the optical fibers after the fibers exit the spinneret to maximize crystallization of the molten polymer.



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