

Hybrid Continuous Fiber Composite Additive Manufacturing

Disclosure Number

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Technology Summary

The invention relates additive manufacturing and more specifically to a nozzle and methodology for introducing continuous carbon fiber (rather than chopped) into an additive manufactured part. Carbon fibers are introduced into a stream of melted thermoplastic, thermoset or epoxy (from a single screw or multi-screw pump). This enables easy control of the flow of material as well as breaking the flow while the material is still solid (rather than after its melted and pliable). Multiple fibers can be fed in simultaneously to provide a method for flow control that does not require a variable orifice.

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