

## Additive Manufacturing with Continuous Fiber Reinforcements

### Disclosure Number

201403374

### Technology Summary

The invention relates to Additive Manufacturing and more specifically to apparatuses and methods for the addition of reinforcing fiber to the feedstock during the build. Deposition of material with continuous fiber reinforcement may alleviate problems with overhang support and finally allow true three dimensional material deposition. Most techniques rely on layer by layer approach, where the desired three dimensional shape is sliced into thin discrete layers and material is sequentially processed and deposited at specified location within this plane. Due to the integrity of a tow with continuous fiber, it is possible to span large distances in space without the necessity to support the material. Several apparatuses and methods are described in the disclosure.

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