



Hybrid Additive Manufacturing Method

Ryan Hemphill, Kevyn Young, Maxwell Harris, Adam Short, and Douglas L. Van Bossuyt

Summary: A hybrid additive manufacturing method that allows for precise deposition of various photo curable resins

Description: A hybrid additive manufacturing method that allows for precise deposition of various photo curable resins without the use of a vat has been developed. This method utilizes thermoplastics for an exterior shell and structural support, and the resin deposition allows for stronger parts to be printed more rapidly through hybridization of two additive manufacturing methods. The hybrid nature greatly expands material compatibilities from strictly thermoplastics to thermoplastics and any photo curable resin.

Main Advantages of this Invention

- Faster print times
- Extends the range of compatible materials
- Broader range of part properties

Potential Areas of Application

- 3D printing

ID number: 15040

Intellectual Property Status: US provisional application filed.

Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

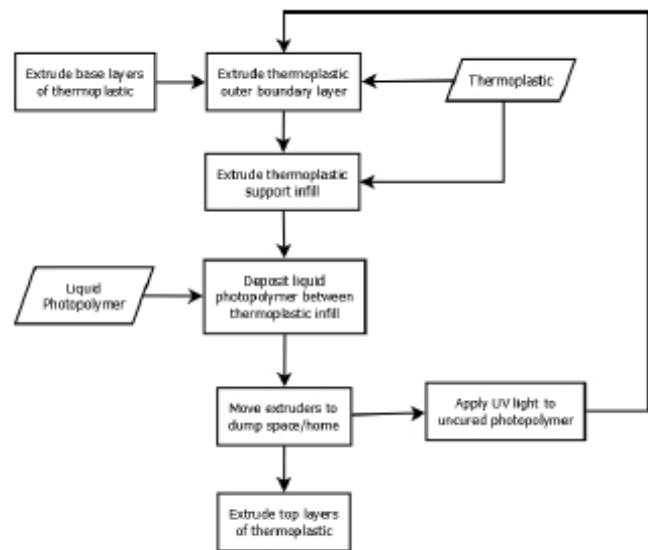


Figure 1: Process diagram illustrating how the invention works

For more information contact:

William Vaughan, Director of Technology Transfer
Colorado School of Mines, 1500 Illinois Street, Guggenheim Hall Suite 314, Golden, CO 80401
Phone: 303-384-2555; e-mail: wvaughan@mines.edu