

## **Electromagnetic Blunting of Defects Within Fused Deposition Modeling (FDM) Components**

### **Disclosure Number**

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### **Technology Summary**

Materials processed with fused deposition modeling (FDM) contain voids and air pockets that are detrimental to final mechanical properties. Due to the material bead geometry generally used in FDM manufacturing, such voids are commonly characterized by sharp features that concentrate mechanical stress. The present invention comprises a method of electromagnetic processing that can be used to re-flow only the surface of the bead, thereby blunting the sharp features without changing the overall geometry of the component. The invention enables the use of FDM techniques for fabrication of improved, robust components for high-stress structural applications, for example.

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