## An Automated Approach to Generating Conformal Cooling Channel

### Abstract

This invention relates to a method and system for generating a conformal cooling channel in a mold insert for a product. The system performs in the following manner. A three dimension profile of the product is obtained. The system then determines a dimension of a mold insert suitable for the product. A two dimension cooling path is determined and generated based on the profile of the product. Using the two dimension cooling path, the system generates a three dimension conformal cooling path. A solid conformal cooling path based on said three dimensional conformal cooling path is then generated and the system subsequently merge the solid conformal cooling path to the mold insert.

Figure 5