Automated numerical control code generation using feature definition

Abstract

The necessity of human in making decision creates a barrier for the development of one button Computer Aided Manufacturing system that can automate the down-stream activities. Albert (2001) suggested that the solution to this is to integrate of feature technology and process planning. In respect to this suggestion, a system that is capable to automate the numerical control (NC) Code generation is developed. In fact, this work is the extension of HiFEAT2 (Meeran et al, 1999). HiFEAT2 is feature recognition system that is able to recognize feature using generic approach for isolated, nested, and interacting features. Since the development of the system is at its initial stage, the features are limited to isolated features. In next section, the paper reviews some of the relevant literature. Then, it describes the architecture of the system with the use of illustrative example.