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Author: Mr. Gu Xiaohui
Beijing Aerospace Technology Institute, China, gxhzyt521@163.com

A STUDY ON THE PARAMETRIC METHOD OF COMPLEX SHAPE AIRCRAFT

Abstract

In order to improve the design and optimization efficiency of the complex shape aircraft, it is necessary to limit the number of geometric design variables. A new CST-CAD parametric method is proposed based on CST (Class function / Shape function Transformation) method. A complex shape aircraft can be easily adjusted by using the CST-CAD parametric method. Compared to the traditional CAD method, the CST-CAD parametric method is a more flexible method which could use fewer parameters to design more complex shape. It can be applied to model fast design and aircraft shape optimization design.