The generation of a constraint-based macro module

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ABSTRACT

During product development, designers often make customized design for demand requested by customers. However, the process of design change is often time-consuming. Hence, how to reduce operating time of design change becomes key issue of designers. In order to reduce processing time needed by customized design and design change, this study proposed a constraint-based method for a computer-aided system. This constraint module was developed and redefined on the basis of methods proposed by past studies. The new definitions are more extensive and complete than before, so that users can complete the design change of a drawing geometry rapidly through constraint setting. Furthermore, based on this constraint-based aiding system, this study developed a macro instruction generator, which provides variable modification function, so that users only need to compile macro file, and by using the functions of variables modification to create different expected results of design change.

Keywords : Constraint, CAD, Macro

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