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复杂产品离散装配过程中的物料动态跟踪与管理技术

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Material dynamic tracking and management technology for discrete assembly process of complex product

摘要 图/表 参考文献 相关文章 (15)

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摘要 针对复杂产品装配中物料动态跟踪困难、物料信息可追溯性差的问题,提出一种基于流程和条码的复杂产品离散装配过程中的物料动态跟踪与管理技术。分析了复杂产品离散装配中的物料组成和物料流动过程,对基于流程和条码技术的复杂产品离散装配中的物料动态跟踪管理的三个关键实现技术进行了详细论述。阐述了实做物料的内涵,给出了实做物料的生成算法,并通过产品计划树实现了对实做物料信息的有效管理。设计并开发了软件系统,该系统在航天某厂试运行,应用效果良好。

关键词 : 复杂产品, 离散装配, 实做物料, 动态跟踪, 物料管理, workflow, 条形码

Abstract : Aiming at the problem of difficult material tracking and material information reviewing for discrete assembly process of complex product,a material dynamic tracking and management technology based on workflow and barcode was proposed.The categorization and the flow process of material were analyzed,and three key implementation techniques on this basis were explained in detail.The concept of implemented material was proposed,the generation algorithm of implemented process was designed and the implemented material information was effectively managed by plan tree.The software system by using this technology was developed and applied in an aerospace-related manufacturing enterprise,and the satisfactory results were obtained.

Key words : complex product discrete assembly implemented material dynamic tracking material management workflow barcode

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