분산 지식베이스와 연계된 개방형 지식기반 설계시스템을 위한 프레임웍에 관한 연구

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A Framework for an Open Knowledge based Design System associated with a Distributed Knowledge Base

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Key Words: Knowledge based Design(지식기반설계), Ontology(온톨로지)

Abstract : A knowledge based design system(KBD) is required to implement a design environment which can satisfy the customer's requirements and re-use the designer's experiences and knowledge. However, if the KBD system could only represent the knowledge which can codify a rule-type, it would be considered an inadequate and limited knowledge based system. And a closed KBD system can not have the relationship with an external knowledge base. This paper will be focused on the implementation on an open KBD system associated with a distributed knowledge base. We propose an ontology knowledge map for an excavator design, an open KBD system, and a methodology for an association with an external knowledge base.

컬러 정보를 이용한 지능형 결핵균 검출 자동화 시스템

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Intelligent Automated Detection System of Tuberculosis Bacilli by using their Color Information

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Key Words: Tuberculosis(결핵균), automatic diagnosis system(자동 진단 시스템) ,knowledge rule(지식기반규칙)

Abstract : Tuberculosis (TB) is a chronic and acute infectious disease which damages more people than any other infectious diseases according to WHO estimates. In this paper, a new automatic diagnosis system of tuberculosis bacilli (TB) by using their color information is proposed. Through the deep investigation of color composition of TB images, a new pre-processing and segmentation algorithms are suggested. Specific features are extracted from the processed images and its counting is done by using the knowledge rules made of features.