Abstract

In the cancerology domain, we were brought to make periodic mammography images to monitor tumor patients. Oracle Database Management system (DBMS) is a solution to manage these images with patient's data recorder. Knowing the large size of medical images of mammograms, the Oracle DBMS saves these images outside the Oracle database using external LOBs. The link between these images and Oracle is done through the BFILE. At this level, two problems are raised: the first problem is that access to these images can become impossible because the link is likely to be broken. The second problem is security, the fact that the images are saved outside the Oracle database, they do not benefit from its powerful security. The protection of the integrity and confidentiality of data and patient images are a necessity defended by laws and they must be preserved against any unauthorized access, alteration or destruction. In this paper, we propose the method of reversible watermarking technique based on the difference expansion to resolve these two problems and explore its use in search and retrieval strategy of images.

Refer
Secure and Image Retrieval based on Multipurpose Watermarking for Mammography Images Database

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Index Terms

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Security and mammograms images.