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Patent Search

Invention Title	A SYSTEM FOR AUDIO FILE ENCRYPTION USING QR CODE AND LU-DECOMPOSITION IN GYRATOR DOMAIN
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Abstract:

ABSTRACT The present invention describes a system for audio file encryption using QR code and LU-decomposition in gyrator domain and method thereof. The present invention, development, and implementation of audio encryption by using QR code and LU-decomposition in gyrator 7 domain. The system uses an image as system input, which is a conversion of the input audio file. Initially, an input audio is converted into an image. Then, QR code is generated for the same image. Next, QR code is modulated with random phase mask (RPM). Then after, the outcomes will be subjected to gyrator transform(GT) followed by phase truncation (PT) and phase reserved (PR) parts. LU-decomposition is applied to PT part and PR part works as a decryption key1. Gyrator transform is applied on the decomposed parts followed by another PT and PR parts. Finally PR part of transformed image possesses an encrypted image and 14 PT serves as decryption key2. Accompanied Drawings [FIGS. 1-9]

Complete Specification

DESC:FIELD OF INVENTION:

The present invention in general relates to the field of audio file encryption. In particular, the present invention relates to a system for audio file encryption using QR code and LU-decomposition in gyrator domain and method thereof.

BACKGROUND OF THE INVENTION

Today's age group mostly uses digital platforms not only for official commitments, but even to accomplish their trivial tasks such as networking with friends and relatives. Now a days, our all information is digital in terms of messages, images, audio, video, medical data, and biometric signature. Almost everyone uses personal documents such as passports, images, and credit cards in digital form. Now it is very important to safeguard digital data not only for storage but also for online transmission via the internet. Cryptography helps us to design different secure communication methods. Although researchers are developing advanced cryptographic algorithms and parallelly older 14 techniques are also being updated by concerned communities, intruders are always enroute to breach these security loops. By using the applications of optical information technology, we can overcome these drawbacks of digital systems. The security of the

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