

ENCODING ONE-TIME PASSWORDS AS AUDIO TRANSMISSIONS
INCLUDING SECURITY ARTIFACTS

ABSTRACT

An authentication server computing device is provided. The authentication server computing device is configured to receive a transaction request from an audio interface device, generate a first audio file including a first audio transmission, wherein the first audio transmission includes a primary security artifact and at least one secondary security artifact and the primary security artifact is an encoding of a one-time password, store a reference data file including the first audio transmission, transmit the first audio file to a verified user computing device associated with the account identifier, receive a second audio file from the audio interface device, wherein the second audio file includes a second audio transmission, verify the second audio transmission by comparing the second audio transmission to the reference data file including the primary security artifact and the at least one secondary security artifact, and authorize the transaction based on verifying the second audio transmission.