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(54) Title: ENCRYPTION DEVICE AND METHOD

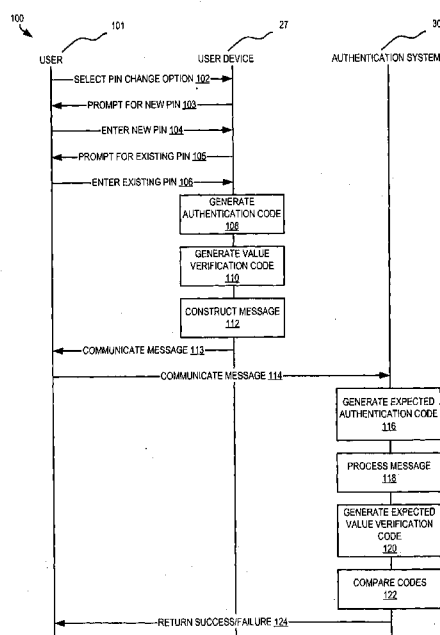


FIG. 4

(57) Abstract: A method is disclosed of encrypting a value input into a user device storing an authentication key, a code generation algorithm, and a value verification code generation algorithm. The method includes the user device processing the authentication key using the code generation algorithm to generate an authentication code; and the user device processing the value using the value verification code generation algorithm to generate a value verification code. The method further includes the user device using the authentication code, the value and the value verification code to construct a message encrypting the value, the message for communicating to an authentication system via a communications network for processing by the authentication system to determine and verify the value, and authenticate the user device and/or the user. A method of communicating a value input into a user device to an authentication system and of verifying the value so communicated as well as an associated user device and authentication system are also disclosed.