

SYSTEM, METHOD AND PROGRAM FOR OFF-LINE TWO-FACTOR USER AUTHENTICATION

ABSTRACT

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[OBJECT]

Provided is an off-line two-factor user authentication system with a reduced risk of leakage of authentication information.

[SOLUTION]

10 The two-factor user authentication system is designed to use, as a password, a one-time-password derivation rule to be applied to certain pattern elements included in a presentation pattern at specific positions so as to create a one-time password, and further use, as a second authentication factor, information identifying a client to be used by a user. A plurality of pattern seed values each adapted to uniquely specify a presentation
15 pattern in combination with a client ID, and a plurality of verification codes corresponding to respective ones of the pattern seed values, are stored in an off-line two-factor authentication client. A presentation pattern is created based on a selected one of the pattern seed values and a client ID, and an entered one-time password is verified based on a verification code corresponding to the selected pattern seed value.

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FIG. 2