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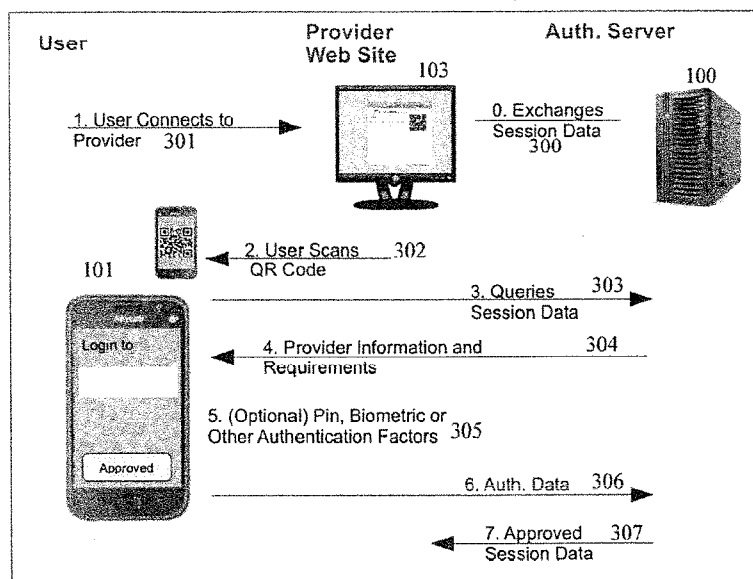


Figure 3

(57) Abstract: A user device transmits a login request. A provider server, receives a random number from and transmits other information to an authentication server. The provider server transmits the random number to the device. The random number is transferred to a second user device, which transmits it to the authentication server. The authentication server transmits provider authentication policy requirements and further transmits the other information to the second device. The second device transmits user validation information to the authentication server. The authentication server determines that the transmitted validation information corresponds to the service provider authentication policy requirements, compares the validation information with stored validation information for the user to authenticate the user. The second device transmits a message, including the random number and the other information, signed with a user credential to the authentication server. The authentication server transmits notice of authentication and the signed message to the provider server.