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(54) Title: LEVERAGING MULTIPLE DEVICES TO ENHANCE SECURITY OF BIOMETRIC AUTHENTICATION

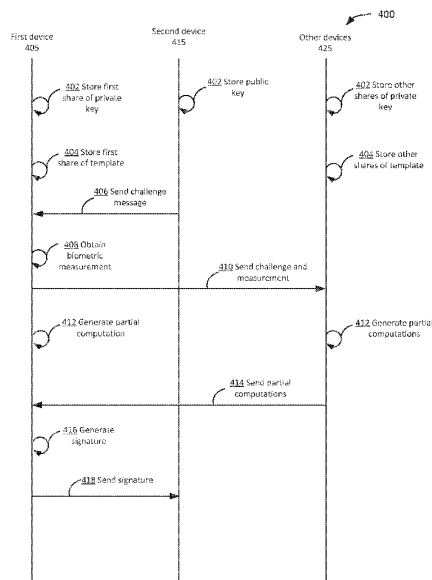


FIG. 4

(57) Abstract: Systems, methods, and apparatuses of using biometric information to authenticate a first device of a user to a second device are described herein. A method includes storing, by the first device, a first key share of a private key and a first template share of a biometric template of the user. The second device stores a public key, and one or more other devices of the user store other key shares and other template shares. The first device receives a challenge message from the second device, measures biometric features of the user to obtain a measurement vector, and sends the measurement vector and the challenge message to the other devices. The first device receives partial computations, generated using a respective template share, key share, and the challenge message, from the other devices, uses them to generate a signature of the challenge message and send the signature to the second device.

[Continued on next page]

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