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(54) Title: DYNAMIC ENCRYPTION FOR SECURE PERSONAL IDENTIFICATION NUMBER ENTRY

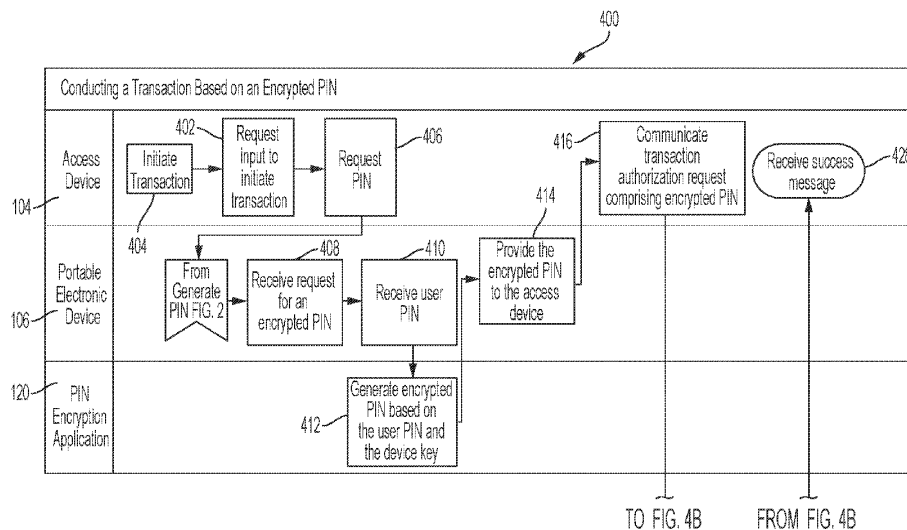


FIG. 4A

(57) Abstract: The present disclosure provides various devices, systems, and methods for securely providing a personal identification number (PIN), for securely accepting a PIN, and for authenticating a transaction based on a securely provided PIN. In one aspect, a method for securely providing a user PIN can include receiving, by a portable electronic device, a device key provisioned by a server. The device key can be associated with a payment card. The method can further include receiving, by the portable electronic device, a request for an encrypted PIN to authenticate a transaction initiated using the payment card and generating, by a PIN encryption application executed by the portable electronic device, the encrypted PIN based on the user PIN and the device key. The encrypted PIN can be provided to an access device. The access device can be configured to communicate the encrypted PIN to the server.

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