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(54) **Title:** FACILITATING CRYPTOCURRENCY-BASED TRANSACTIONS WITH TIME CONSTRAINT

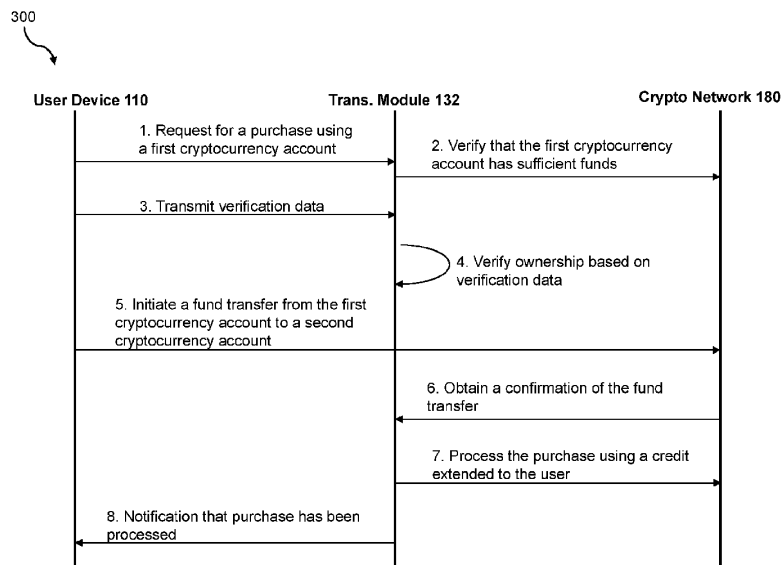


Figure 3

(57) **Abstract:** Methods and systems are presented for providing a framework for facilitating time-sensitive cryptocurrency transactions for users. When a request for processing a time-sensitive cryptocurrency transaction using funds from a cryptocurrency wallet is received from a user, a transaction system first verifies whether the cryptocurrency wallet has a balance to cover the cryptocurrency transaction. The transaction system also verifies the ownership of the cryptocurrency wallet based on an asynchronous method. The user generates verification data without any input from the transaction system, and based on a private key associated with the cryptocurrency wallet, a generator function, and a user-generated value. Without knowing the user-generated value, the transaction system verifies the ownership of the cryptocurrency wallet based on the verification data, and processes the transaction for the user.

[Continued on next page]

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