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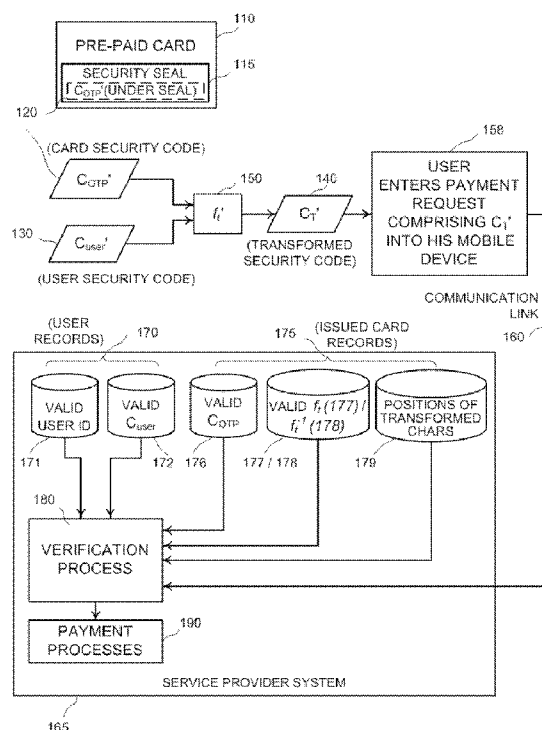
(54) **Title:** REMOTE USER AUTHENTICATION AND APPARATUS VERIFICATION

FIG. 1

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(57) **Abstract:** The present application provides a method and system for remote user authentication and apparatus verification applicable to secured mobile payment using pre-paid stored value cards and general multi-factor authentication employing one-time passcodes (OTPs). A user having knowledge of a user security code, an apparatus OTP and a transformation function easily derives a transformed security code for submission to a service provider. Data encryption is not required to secure the code nor the communication channel. The service provider system retrieves from its database a valid user security code associated with the user, a plurality of valid appliance OTPs and the corresponding transformation functions in a verification process wherein the system determines whether the submitted transformed security code can be mapped to any one of the valid apparatus OTPs.



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