Method (CVM) is used. This provides speed and convenience to users as they do not have to undertake a verification method.

Consumer Device Cardholder Verification Methods (CDCVMs) are increasingly being used for payment devices comprising a mobile device with a digital wallet. The use of CDCVMs generally allows the value of a payment transaction to be increased due to the security provided by verification. CDCVMs involve a user of the payment device verifying their identity on the payment device itself. During a payment transaction using CDCVM, no additional customer action is required on the POI or paper receipt to verify the customer, such as a signature or PIN. For example, the mobile device may be arranged to receive a PIN and/or comprise a biometric sensor for verifying the identity of a user. The payment device can then be used with a POI to undertake a payment transaction.

It is an aim of the present disclosure to address disadvantages associated with the prior art.

SUMMARY

According to one aspect of the present disclosure, there is provided a method for providing user authentication and user consent for a transaction made with a payment device, the method comprising a user authentication step to verify that a user is entitled to use the payment device and a user consent step to verify that the user consents to the transaction, wherein the user authentication step is discrete from the user consent step. The user authentication step may comprise a consumer device cardholder verification method (CDCVM). This user authentication step may be taken outside a transaction context, but may persist into a transaction context. The user consent step may be an explicit user consent made within a transaction process. The user consent may in embodiments be an implicit user consent inferred from user or device actions or user or device context. According to yet another aspect of the present disclosure, there is provided a payment device, the payment device comprising a processor programmed to perform the following steps to provide user authentication and user consent for a transaction made with the payment device, the steps comprising a user authentication step to verify that a user is entitled to use the payment device and; a user consent step to verify that the user consents to

the transaction, wherein the user authentication step is discrete from the user consent step. In various embodiments, there is provided apparatus adapted to perform the methods described above are also provided.

Within the scope of this application it is expressly intended that the various aspects, embodiments, examples and alternatives set out in the preceding paragraphs, in the claims and/or in the following description and drawings, and in particular the individual features thereof, may be taken independently or in any combination. That is, all embodiments and/or features of any embodiment can be combined in any way and/or combination, unless such features are incompatible. The