

**[0004]** Thus, it may be beneficial to provide exemplary systems and methods which allow users to control the use of user information to overcome at least some of the deficiencies described herein.

## **SUMMARY**

**[0005]** Aspects of the disclosed technology include systems and methods for controlling data access through the interaction of a short-range transceiver, such as a contactless card, with a client device. Data access control may be provided in the context of account information, including handling requests to link a first account with a second account, via the interaction of a short-range transceiver, such as a contactless card, with a client device such that disclosure of certain account identifier information, or account login information, need not be disclosed to individuals or entities requesting access to account data of another individual or entity.

**[0005a]** A first aspect provides a server comprising a processor and a memory, wherein, the processor is configured to: receive an account link request and a token, the token comprising a key associated with a first account holder, identify a first account based on the key, transmit a link approval request to approve the account link request, receive a link approval message approving the account link request, and transmit an account link confirmation message including instructions for accessing first account data.

**[0005b]** A second aspect provides a method comprising: receiving, by a server, an account link request to link a first account with a second account, the account link request accompanied by a token comprising a key associated with a first account holder; identifying the first account based on the key; transmitting, by server, a link approval request to approve the account link request; receiving, by the server, a link approval message generated in response to an indication by the first account holder approving the account link request; and transmitting, by the server, an account link confirmation message, the account link confirmation message confirming approval of the account link request and providing instructions for access to the first account data.

**[0005c]** A third aspect provides system comprising a server and a contactless card associated with a first account holder and comprising a communications interface, a processor, and a memory, the memory storing an applet and a token, wherein, after entry into a communication field, the contactless card is configured to transmit an account link request to link a first account with a second account and a token, the token comprising a key associated with the first account holder, and wherein the server is configured to: receive the token and the account link request; identify the first account based on the key; transmit a link approval request to approve the account link request; receive a link approval message approving the account link request; and transmit an account link confirmation message including instructions for access to first account data.

**[0006]** Embodiments of the present disclosure provide a data access control system, comprising: a database storing information for a plurality of accounts comprising, for a first account associated with a first account holder, a first account identifier and first account data, and, for a second account associated with a second account holder, a second account identifier; a server configured to communicate over a network with a plurality of client devices, including a first client device associated with the first account holder and a second client device associated with the second account holder; a contactless card comprising a communications interface, a processor, and a memory, the memory storing an applet and a token, wherein the contactless card is associated with the first account holder; a client application comprising instructions for execution on at least one of the first client device or the second client device, the client application configured to: when executed on the second client device: in response to a tap action between the contactless card and the second client device: receive the token from

## CLAIMS

1. A server, comprising:  
a processor; and  
a memory,  
wherein, the processor is configured to:  
receive an account link request and a token, the token comprising a key  
associated with a first account holder,  
identify a first account based on the key,  
transmit a link approval request to approve the account link request,  
receive a link approval message approving the account link request, and  
transmit an account link confirmation message including instructions for  
accessing first account data.
2. The server of claim 1, wherein the processor is in data communication with a  
database storing information for a plurality of accounts, the database comprising, for a first  
account associated with a first account holder, a first account identifier and first account data,  
and, for a second account associated with a second account holder, a second account  
identifier.
3. The server of claim 2, wherein the processor is further configured to determine  
whether the first account is eligible for linking to the second account.

4. The server of claim 2, wherein the processor is further configured to:  
retrieve at least a portion of the first account data from the database,  
encrypt the at least a portion of the first account data to generate encrypted first account data, and  
following transmission of the account link confirmation message, transmit the encrypted first account data.
5. The server of claim 4, wherein the processor is further configured to transmit, in a separate communication from the encrypted first account data, a decryption key.
6. The server of claim 5, wherein the decryption key is the key associated with the first account holder.
7. The server of claim 5, wherein a new decryption key is required for each transmission of encrypted first account data.
8. The server of claim 2, wherein:  
the first account data includes one or more data control parameters, and  
the processor is further configured to limit access to the first account data according to the data control parameters.
9. The server of claim 8, wherein the one or more data control parameters comprise at least one selected from the group of: permitting the second account holder to access the first

account data only for a limited period of time; permitting the second account holder to access the first account data only for a single use; permitting the second account holder to access the first account data for an unlimited period of time unless the first account holder revokes the approval of the request to link the first account with the second account; and permitting the second account holder to access only portions of the first account data corresponding to a predefined category.

10. The server of claim 1, wherein the processor is further configured to authenticate the first account holder associated with the access token as associated with a contactless card.

11. The server of claim 1, wherein the key is unique to the first account holder.

12. A method, comprising:

receiving, by a server, an account link request to link a first account with a second account, the account link request accompanied by a token comprising a key associated with a first account holder;

identifying the first account based on the key;

transmitting, by server, a link approval request to approve the account link request;

receiving, by the server, a link approval message generated in response to an indication by the first account holder approving the account link request; and

transmitting, by the server, an account link confirmation message, the account link confirmation message confirming approval of the account link request and providing instructions for access to the first account data.

13. The method of claim 12, wherein the server is in data communication with a database storing information for a plurality of accounts comprising, for a first account associated with a first account holder, a first account identifier, first account data, and, for a second account associated with a second account holder, a second account identifier.

14. The method of claim 13, wherein:

the first account data includes one or more data control parameters, and  
the one or more data control parameters comprise at least one selected from the group of: permitting the second account holder to access the first account data only for a limited period of time; permitting the second account holder to access the first account data only for a single use; permitting the second account holder to access the first account data for an unlimited period of time unless the first account holder revokes the approval of the request to link the first account with the second account; and permitting the second account holder to access only portions of the first account data corresponding to a predefined category.

15. The method of claim 14, wherein the data control parameters comprise different data access permissions based on the identity of the second account holder.

16. A system, comprising  
a server; and

a contactless card associated with a first account holder and comprising a communications interface, a processor, and a memory, the memory storing an applet and a token,

wherein, after entry into a communication field, the contactless card is configured to transmit an account link request to link a first account with a second account and a token, the token comprising a key associated with the first account holder, and

wherein there server is configured to:

receive the token and the account link request;

identify the first account based on the key;

transmit a link approval request to approve the account link request;

receive a link approval message approving the account link request; and

transmit an account link confirmation message including instructions for access to first account data.

17. The system of claim 16, comprising:

a client application comprising instructions for execution on at least one selected from the group of a first client device and a second client device, the client application configured to:

when executed on the first client device:

in response to a tap action between the contactless card and the first client device:

receive the token from the contactless card, and transmit to the server the token and an account link request to link the first account with the second account; and

receive from the server an account link confirmation message including instructions for access to the first account data; and

when executed on the second client device:

in response to a link approval request from the server to approve the account link request, transmit to the server a link approval message approving the account link request.

18. The system of claim 17, wherein:

the memory of the contactless card further stores one or more data control parameters for the first account, and

the client application is further configured to, when executed by the first client device:

receive from the contactless card one or more data control parameters for the first account; and

limit access by the first client device to the first account data according to the received one or more data control parameters.

19. The system of claim 18, wherein the one or more data control parameters comprise different data access permissions based on the identity of a second account holder.

20. The system of claim 17, wherein receipt by the server of the link approval message follows a tap action between the contactless card and the first client device.