

EXHIBIT D



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Weller et al.

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(54) **ONLINE PAYER AUTHENTICATION SERVICE**5,420,926 A 5/1995 Low et al.
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705/44

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See application file for complete search history.

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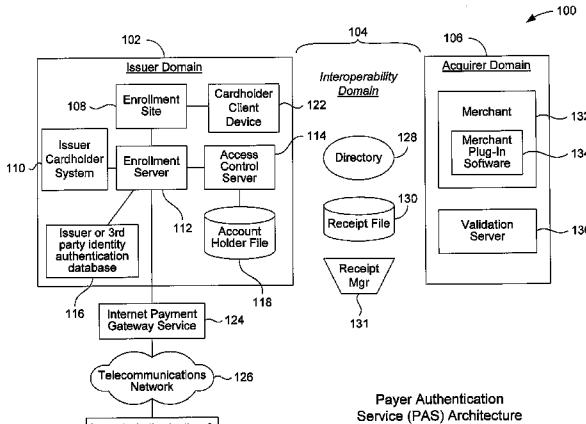
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ABSTRACT

A payment authentication service authenticates the identity of a payer during online transactions. The authentication service of the present invention allows a card issuer to verify a cardholder's identity using a variety of authentication methods, such as the use of passwords. Also, the only system participant requiring a certificate is the issuing financial institution. One embodiment of the invention for authenticating the identity of a cardholder during an online transaction involves querying an access control server to determine if a cardholder is enrolled in the payment authentication service, requests a password from the cardholder, verifies the password, and notifies a merchant whether the cardholder's authenticity has been verified. In another aspect of the invention, a chip card and the authentication service independently generate cryptograms that must match in order for the service to verify that the correct chip card is being used by the cardholder.

38 Claims, 16 Drawing Sheets

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