

Hadrian

US PATENT 9,043,224 B2

Trademark 4,867,317

Patent Overview

Summary of Invention

- Hadrian requires authentication of the cardholder
- Hadrian requires bank card holder to be involved in any transaction
- Cardholder authorizes or rejects ANY bank card transaction
- Hadrian is utilized in all Point of Sale or Card Not Present transactions

Global Benefits of Hadrian to the Institution

- Reduction of fraud losses directly impacts the bottom line
- Reduction in call center incidents
- Reduces the need for elaborate fraud software
- Reduces card disablement and reissues to customers
- Customer loyalty and brand recognition
- Ability to gather analytics on card use by customers

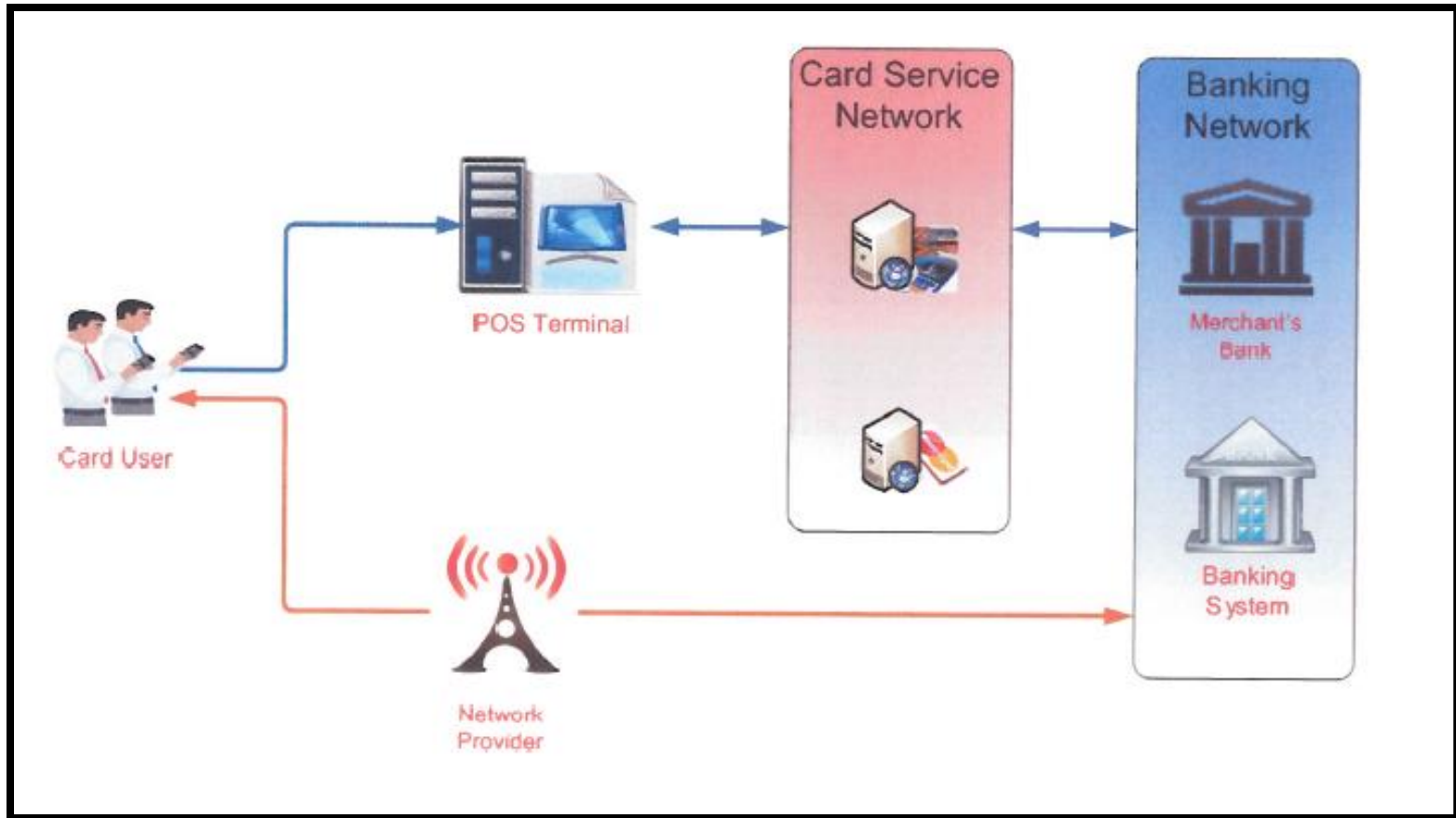
Customer Benefits of Hadrian

- Increased trust in the institution
- Increased freedom and confidence with purchases

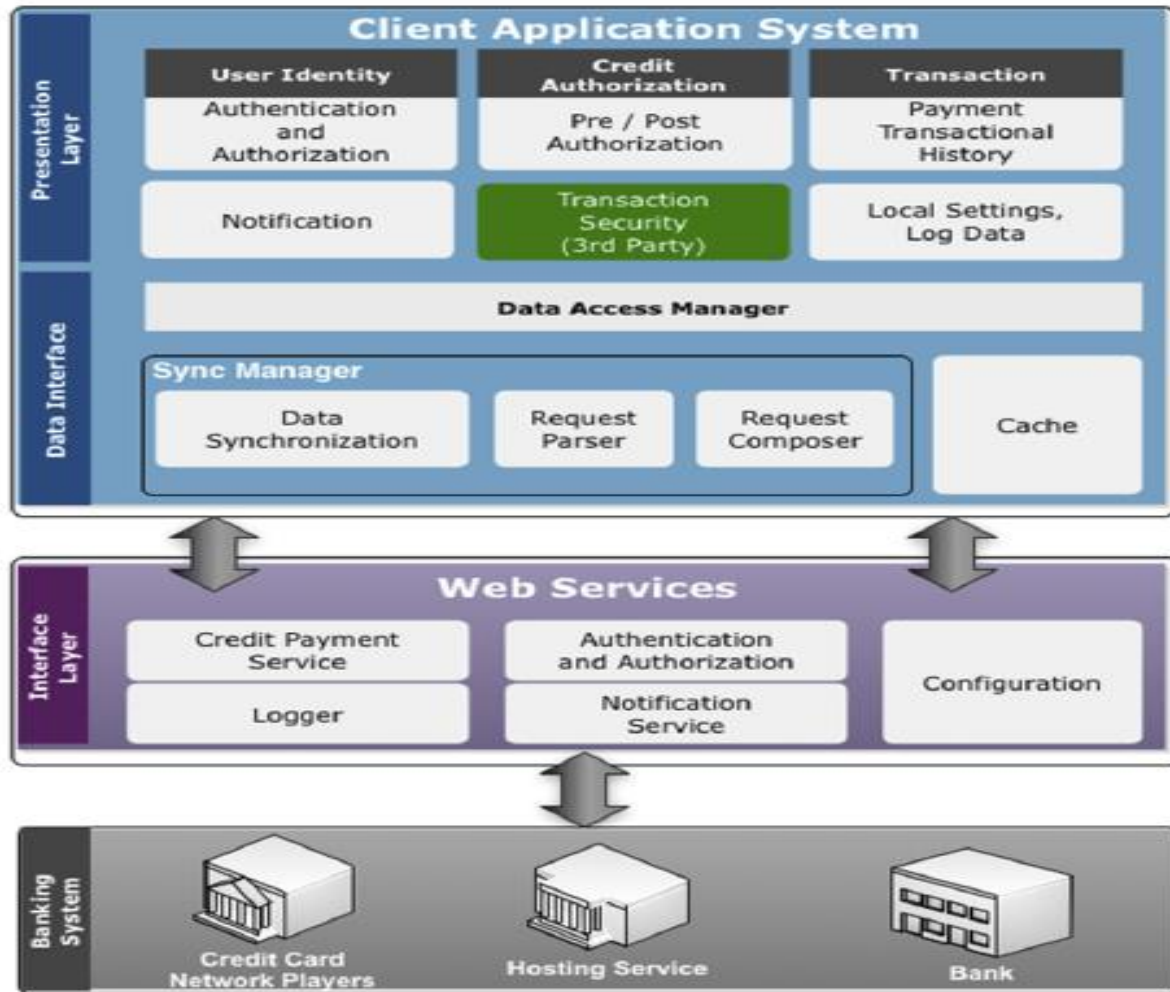
Real Time Fraud Prevention

- **Hadrian is a solution that enables secure credit authorization for every payment made by the customer**
- **Provides out of band secure communication between client device and the card processor or institution**
- **All Card Present and Card Not Present transactions are securely protected**
- **Proof of concept built on iOS with server interface layers built in .NET platform**

System Architecture Overview

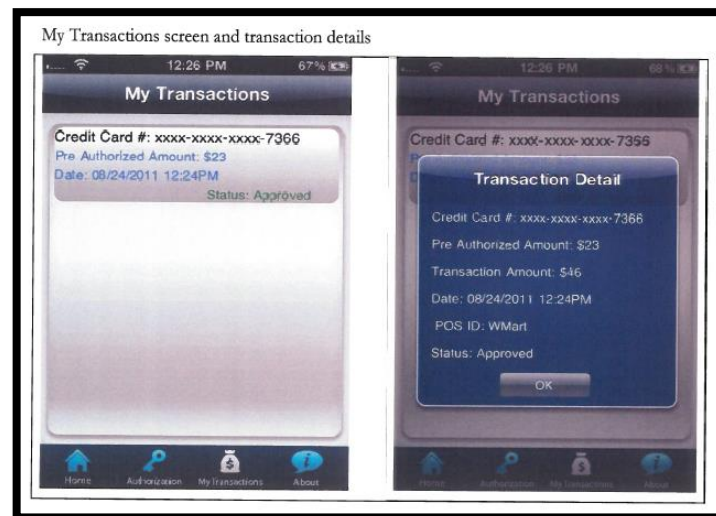
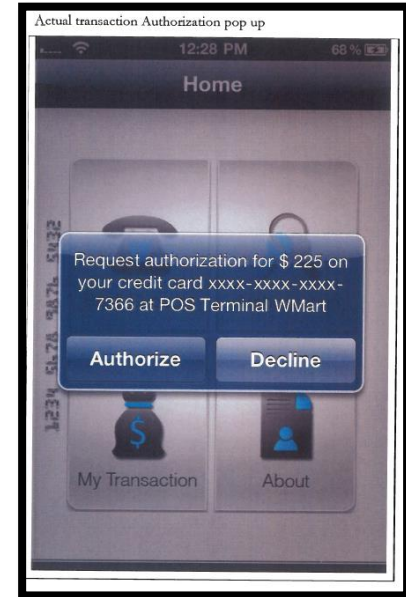
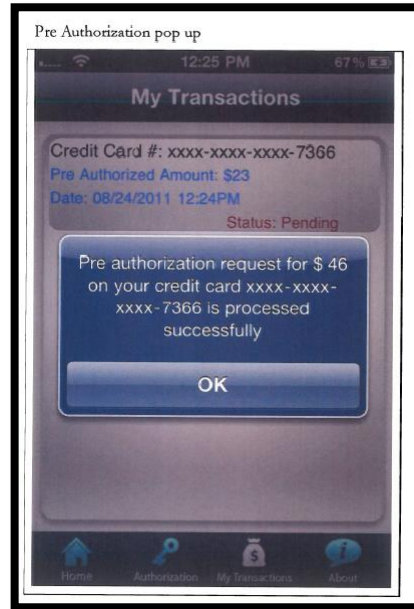


Component Architecture Overview









Component Architecture of Credit Payment Authorization
Figure 1

Screen Samples



Historical Component Build Status

Table 1 – Client Application components

Client Application			
Components	Description	Status	Comments
User Authentication	Perform user validation within the application before login into Home screen		Need to be integrated with the system
Pre / Post Authorization	Allows user to authorize payment		Need to be integrated with the system
Transaction History	Maintains history for each transaction made from this system		No changes required
Notification	Display notification when payment process initiates		Integrated with standard notification system
Security (OTP)	Initiates OTP authentication for each payment		Integrated with 3 rd party system, can be evaluated for new system integrated
Settings / Log	To maintain application status		Need to be integrated with the system







Readily available



Partially available, needs to be integrated.

Historical Component Build Status (con't)

Table 2 – Interfaces

Web Services			
Components	Description	Status	Comments
User Authentication	Provides API to authenticate with backend system		Partially available, need to be integrated with the system
Pre / Post Authorization	API to exchange the authorization request/response with backend system		Partially available, need to be integrated with the system
Notification	Standard protocol for send and receive notification		Partially available, Need to be integrated with the system
Security (OTP)	API to establish secure transactions for every payment request.		Partially available, can be evaluated for new system integrated

Hadrian

US PATENT 9,043,224 B2

Trademark 4,867,317

End of Presentation