

基於部分盲簽章之多銀行聯合發行的行動電子現金系統

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摘要

近年來行動通訊的快速發展，越來越多人使用具上網功能的可攜式行動通訊設備。基於行動電話極高的普及率，加上行動裝置本身所具有的自由度、機動性，行動商務勢必是未來的趨勢。也正因如此，更增添了行動商務交易安全議題的重要性。由於行動裝置的頻寬較小、運算能力較差，目前適用於行動商務之付款系統，多半著重於提升效率但卻忽略其安全性，或是需要較高的交易成本。然而，一個行動付款系統需具備安全、易於使用及費用低廉三項特質才能吸引消費者使用，驅使業者投資。因此，本論文將植基於既安全且高效率之ECC based self-certified public key cryptosystem設計出部分盲簽章機制，並將其應用於多銀行聯合發行的行動電子現金系統。除了能改善銀行資料庫大量成長的衝擊，更有效解決了已簽署之電子現金難以辨識其額度與時效的問題。而聯合發行的導入，使電子現金具備了統一的驗證與集中的管理之特性，能提升消費者對行動電子付款的信心，進而促進行動商務的發展。

關鍵詞：行動電子現金;部分盲簽章;自我認證公開金鑰密碼系統;多銀行聯合發行

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