

# Constructing Optimistic ID-Based Fair Exchange Protocols via Proxy Signature

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## Abstract

This paper introduces a natural paradigm for fair exchange protocols, called ID-based partial proxy signature scheme. A security model with precise and formal definitions is presented, and an efficient and provably secure partial proxy signature scheme is proposed. This is a full ID-based optimistic fair exchange protocol. Unlike the vast majority of previously proposed protocols, this approach does not use any zero-knowledge proofs, and thus avoids most of the costly computations.

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## 摘要

为公平交换协议引入了一个自然的范例——基于身份的部分代理签名,给出其形式化的安全模型,同时提出了一个高效可证安全的部分代理签名方案.这是一个完全基于身份的优化公平交换协议.与以前协议不同的是,该方案没有使用任何零知识证明,有效地避免了大量计算.

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