

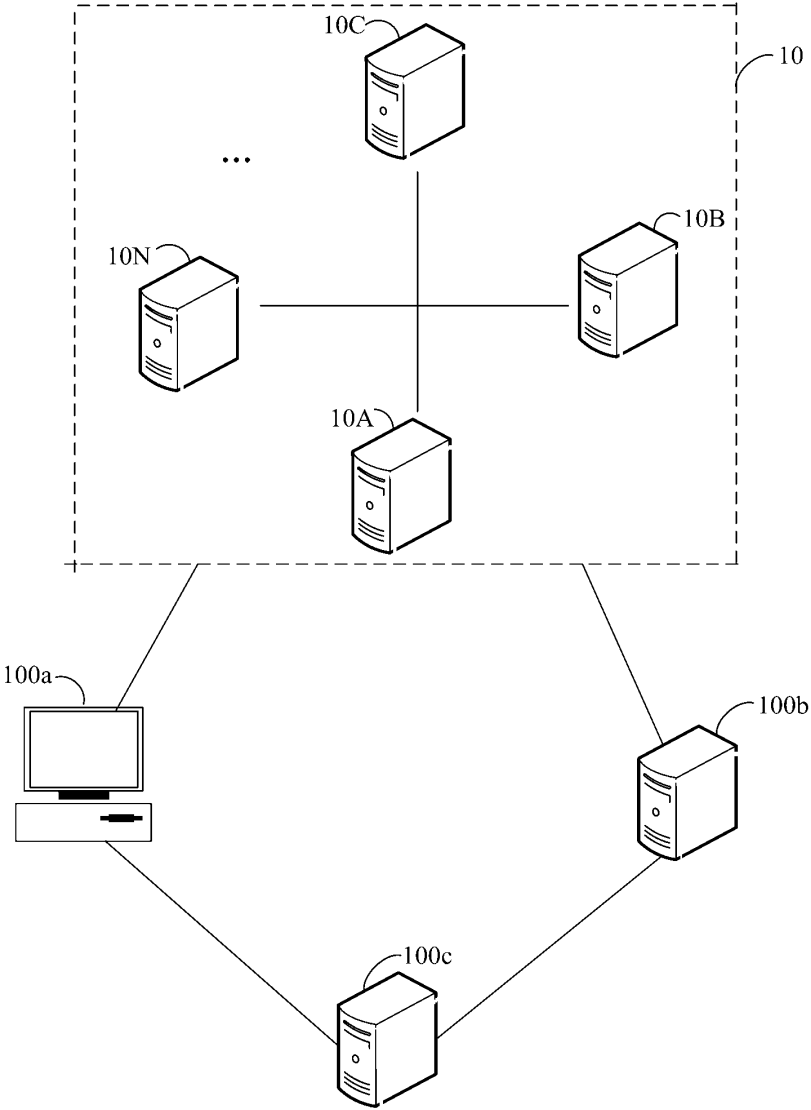


图 1

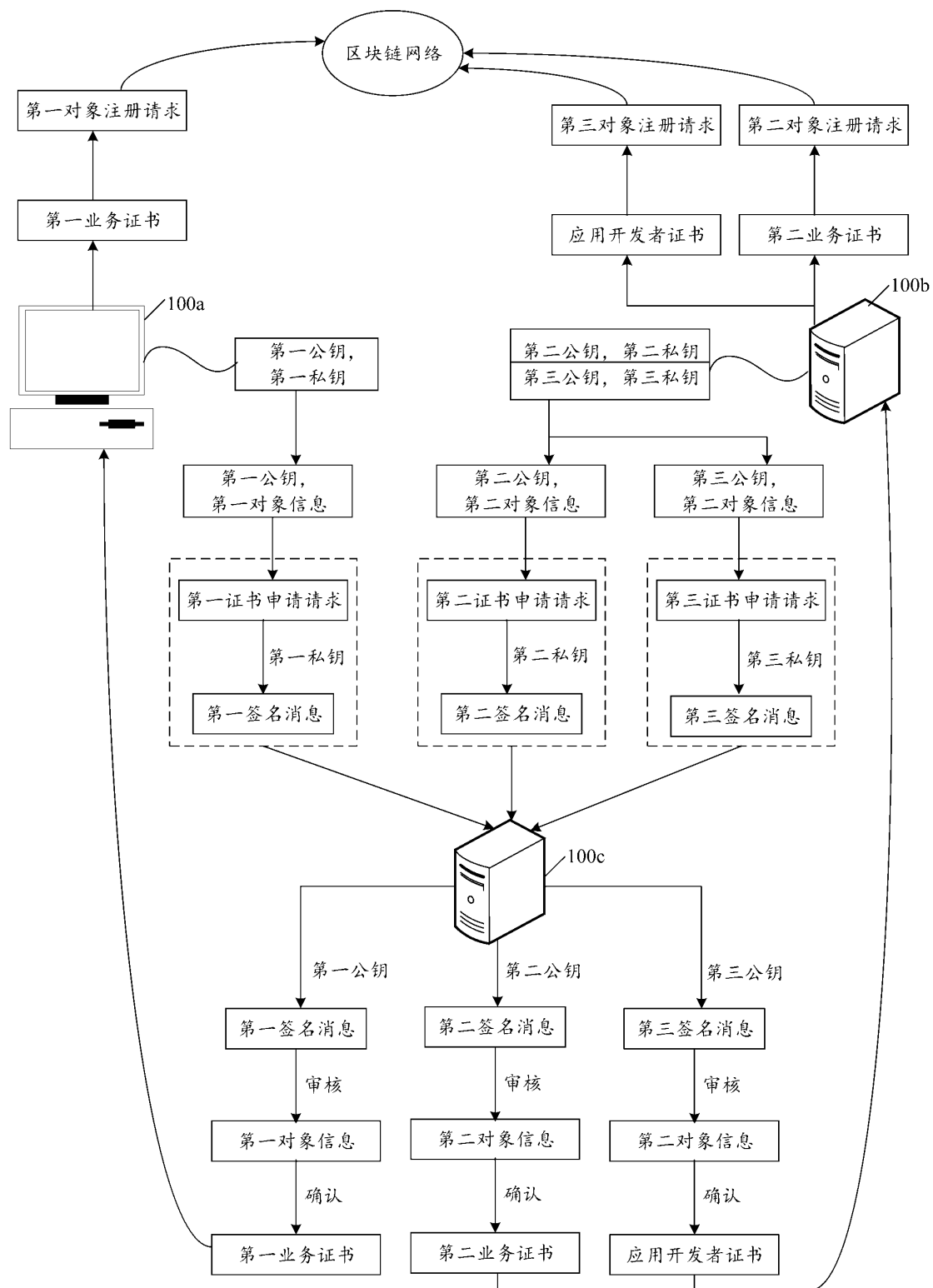
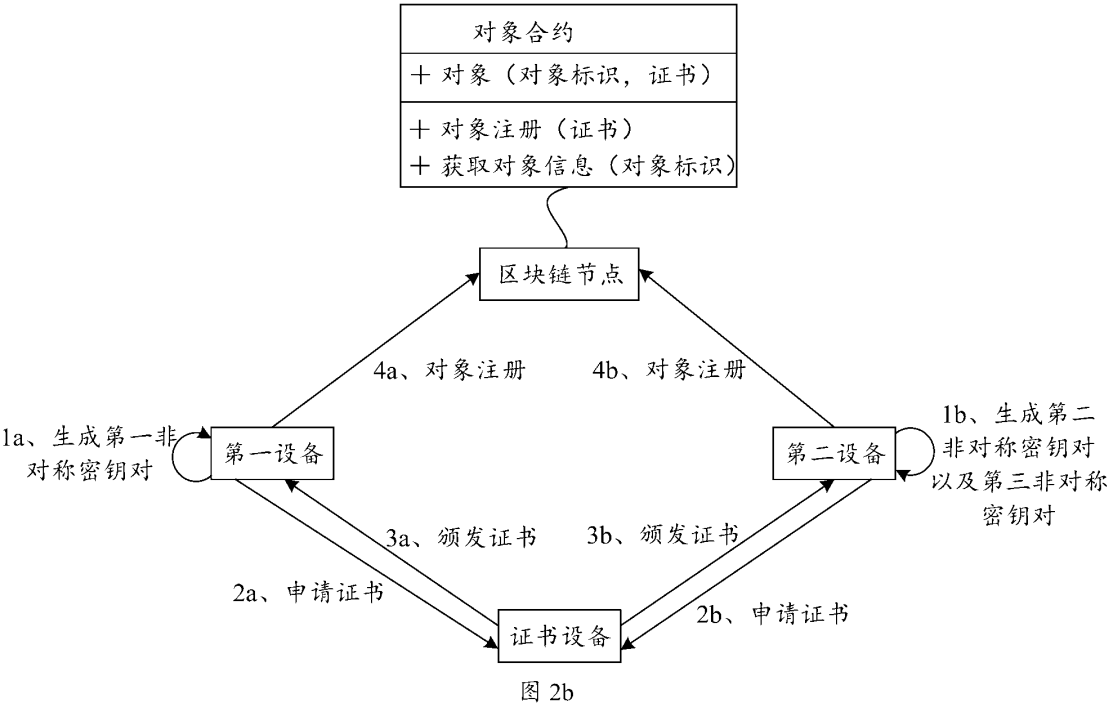


图 2a



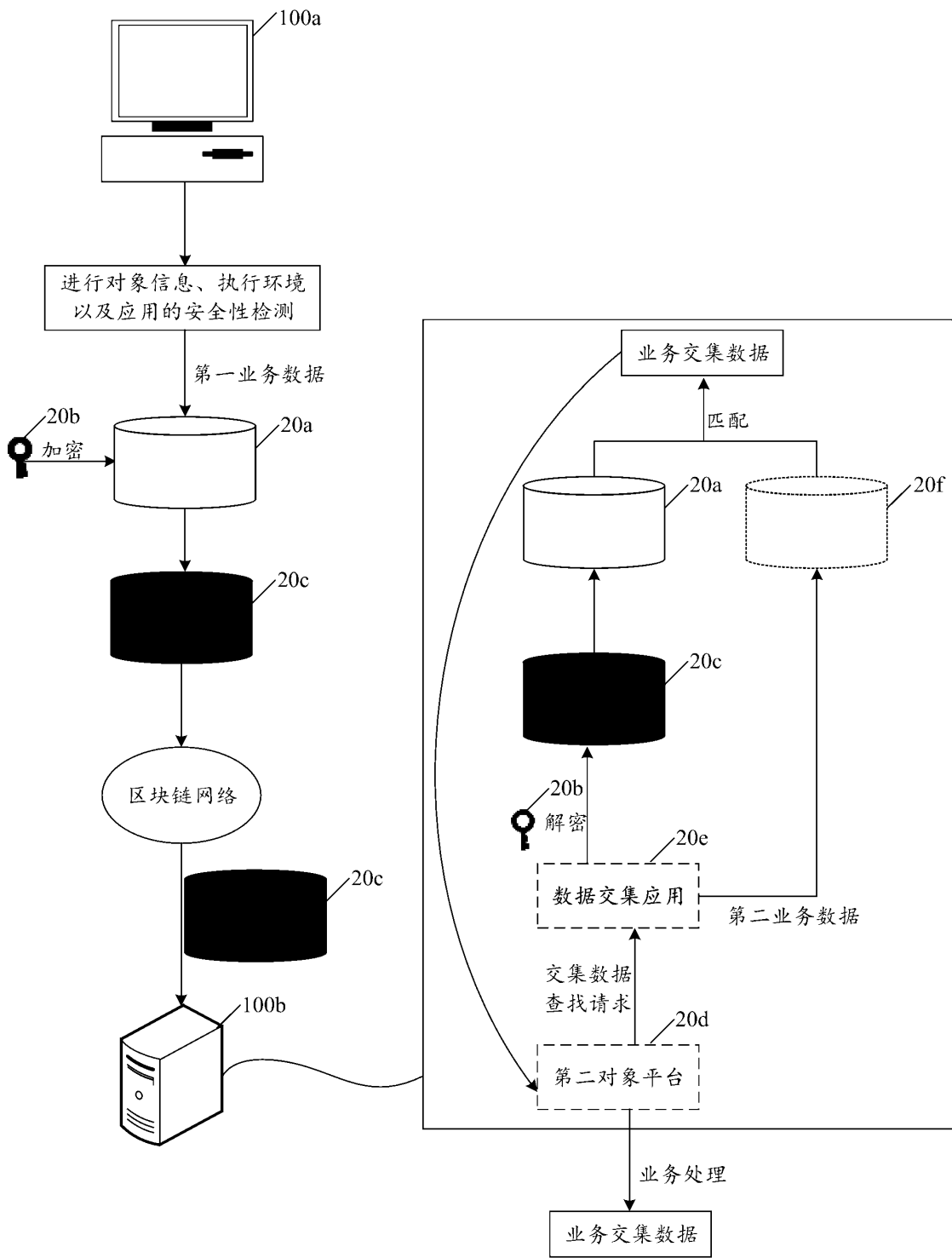


图 2c

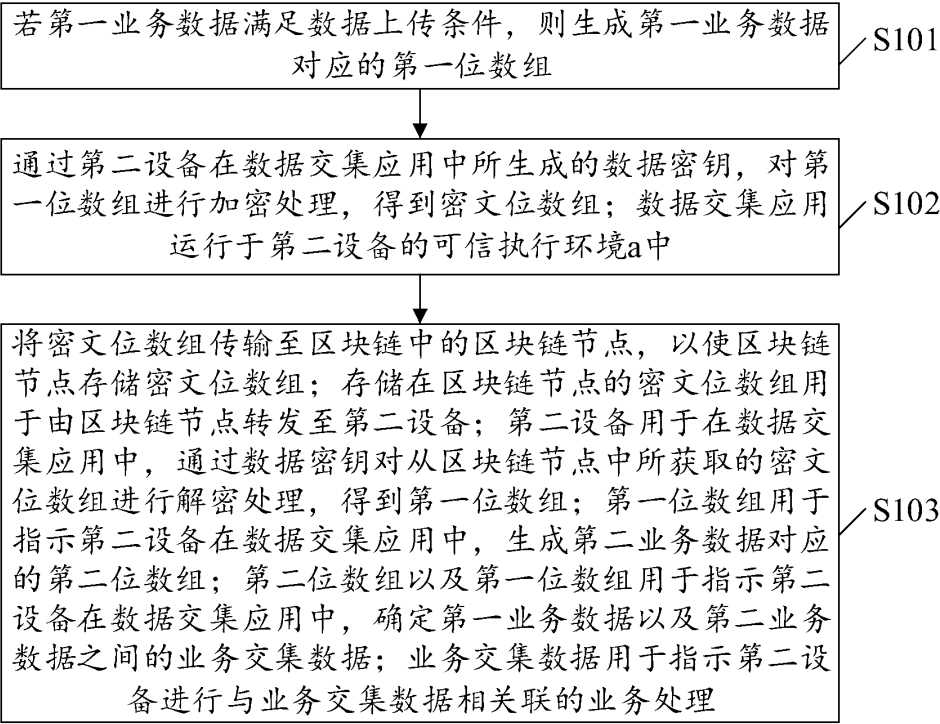
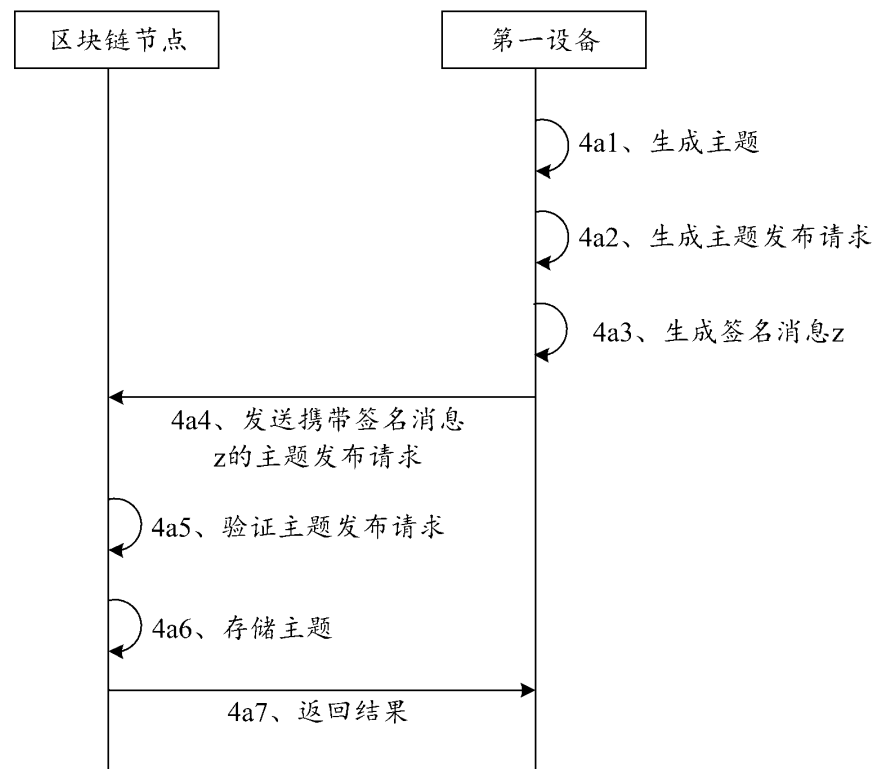


图 3



主题合约
+ 主题（主题名，发布者，订阅者） + 订阅请求（请求标识，主题名，订阅者，请求处理状态） + 最新有效的订阅请求（主题名，请求标识）
+ 发布主题（主题名） + 订阅主题（主题名） + 获取最新有效的订阅请求（主题名） + 更新主题订阅状态（主题名，状态） + 是否有效对象（对象标识） + 主题是否已被其他对象订阅（主题名） + 主题是否已存在（主题名）

图 4a

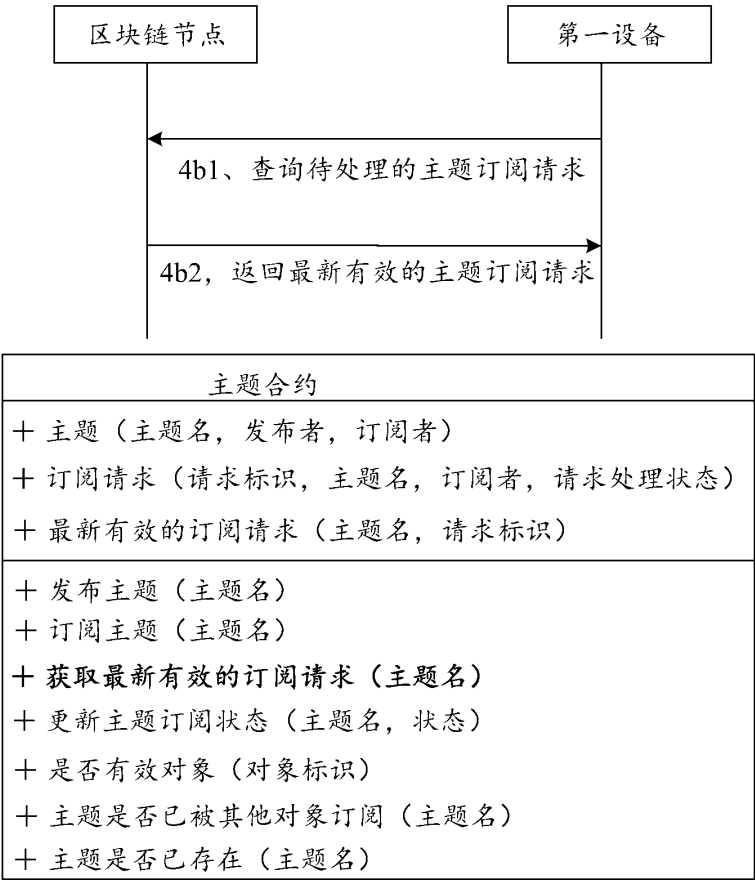


图 4b

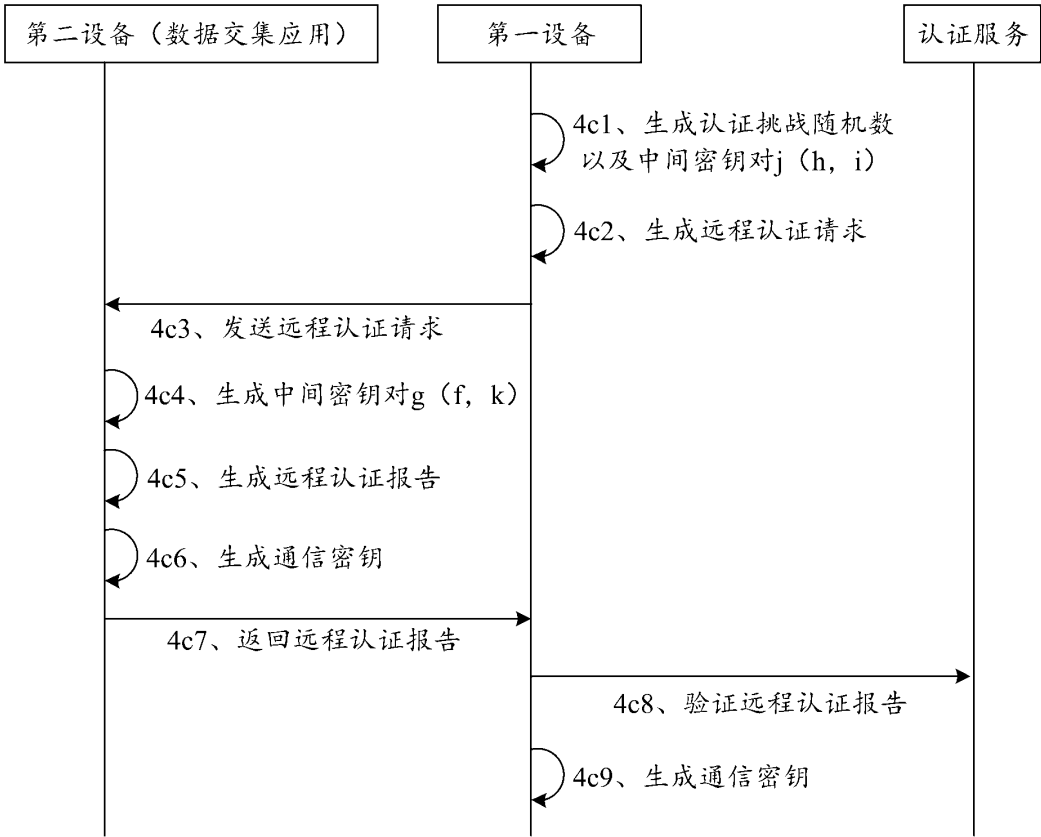


图 4c

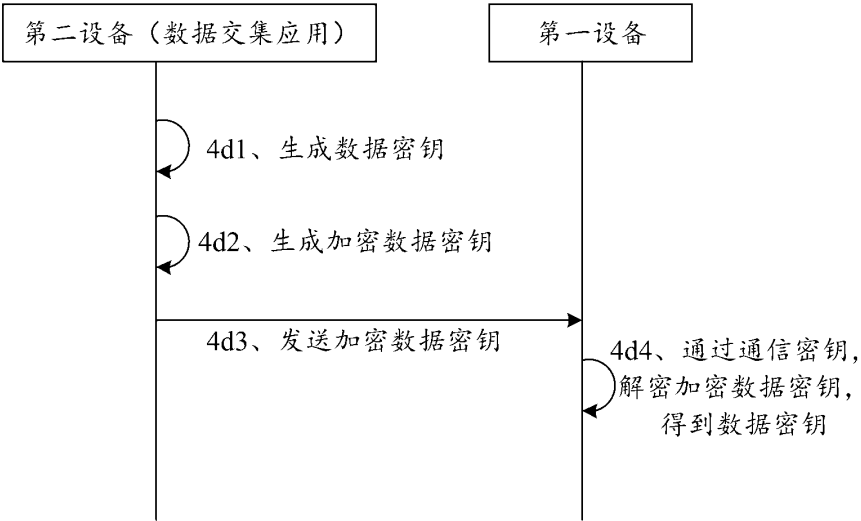


图 4d

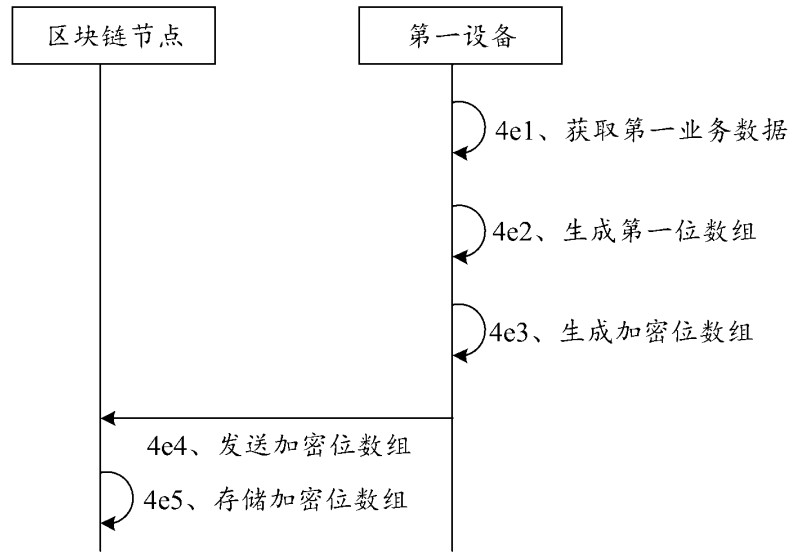


图 4e

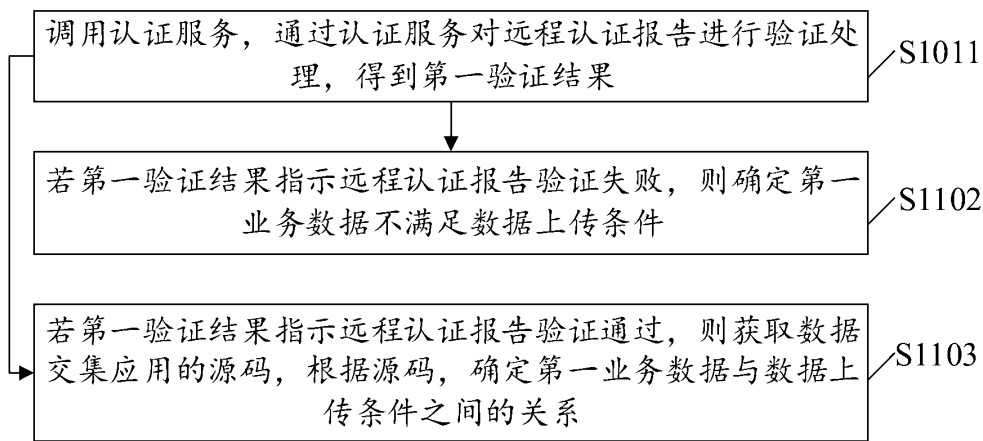


图 5

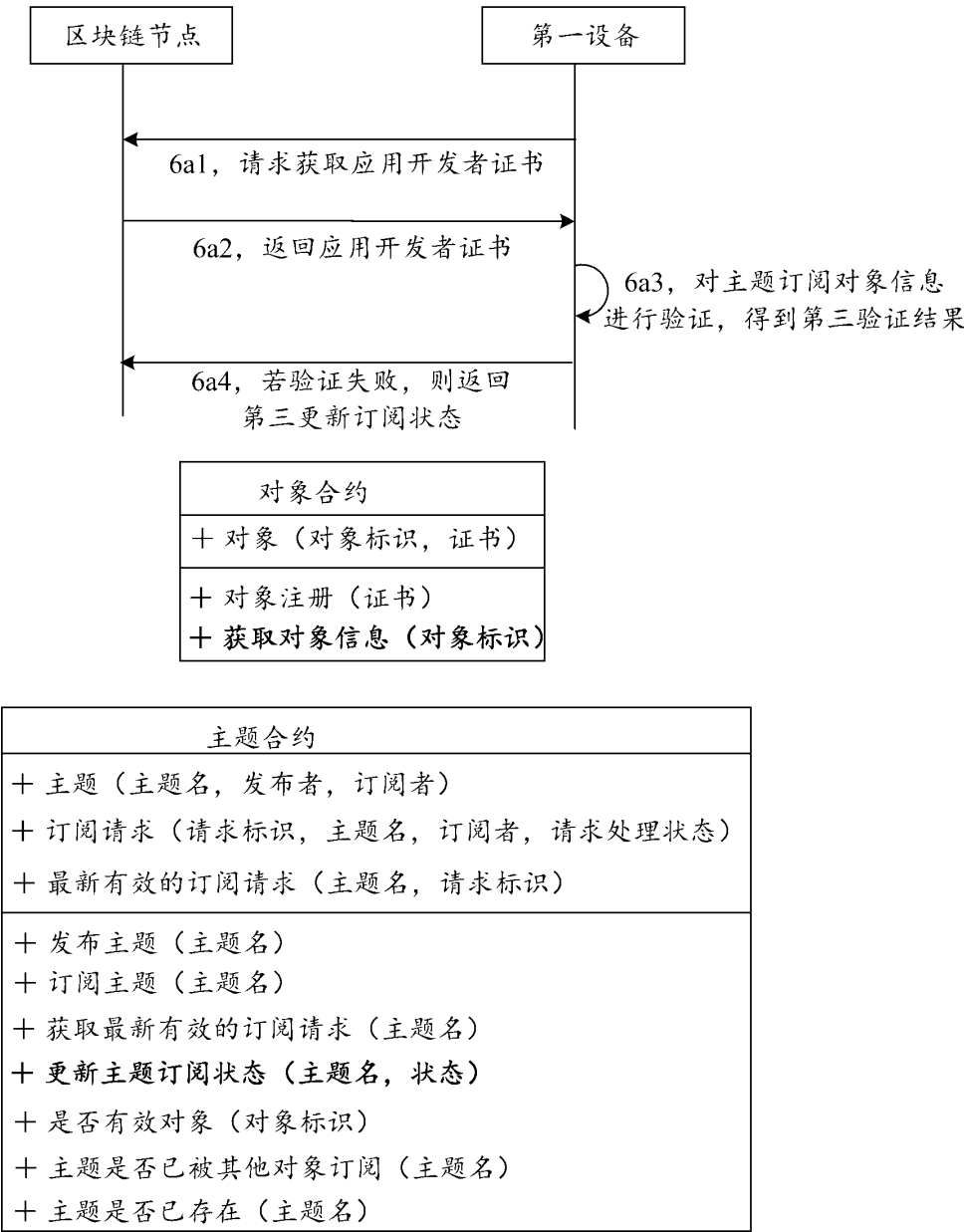


图 6a

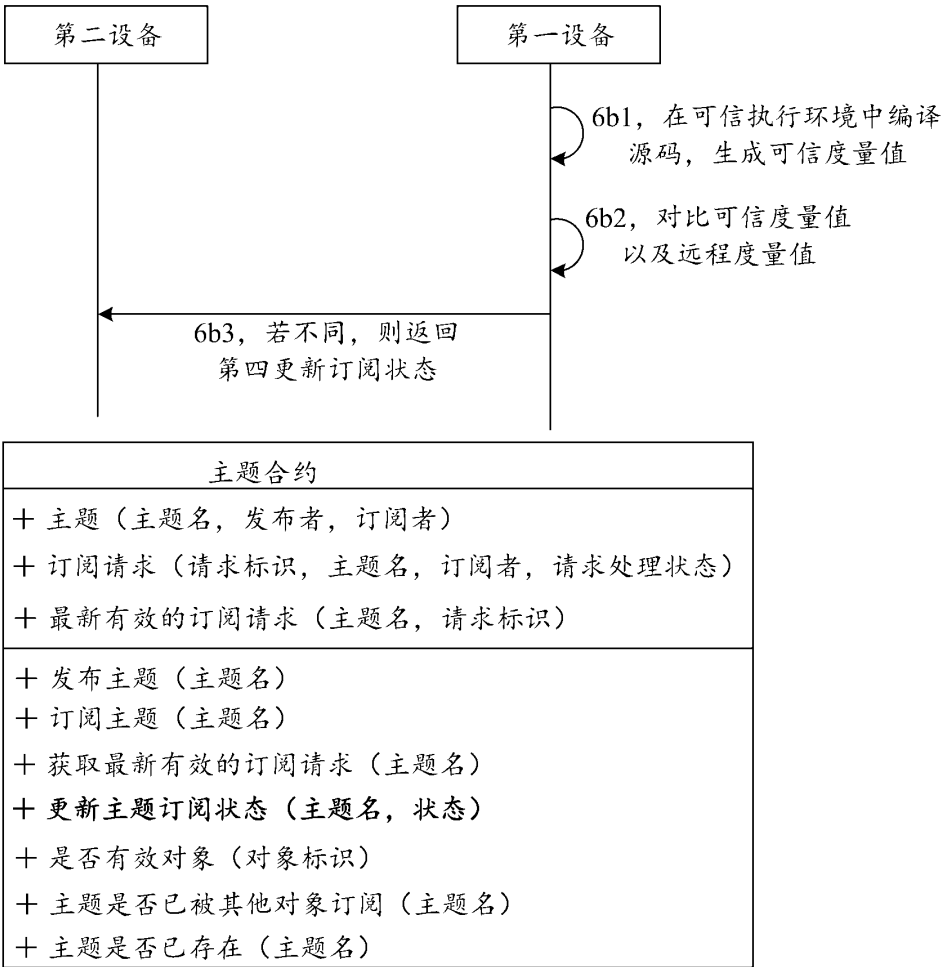


图 6b

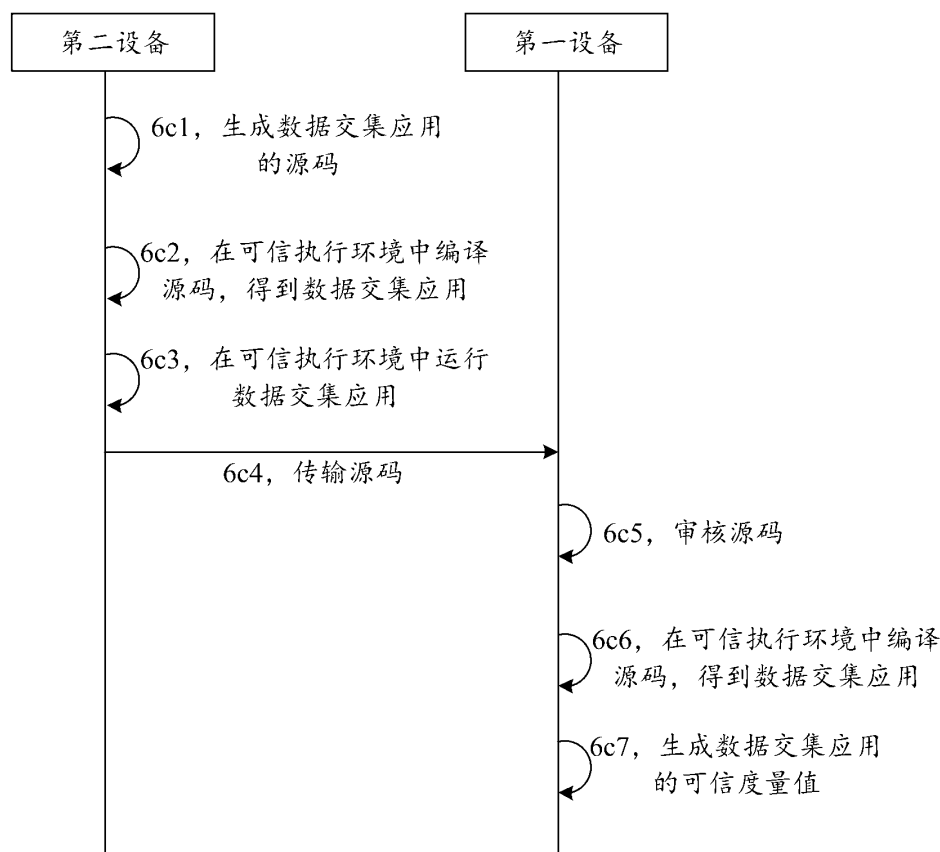


图 6c

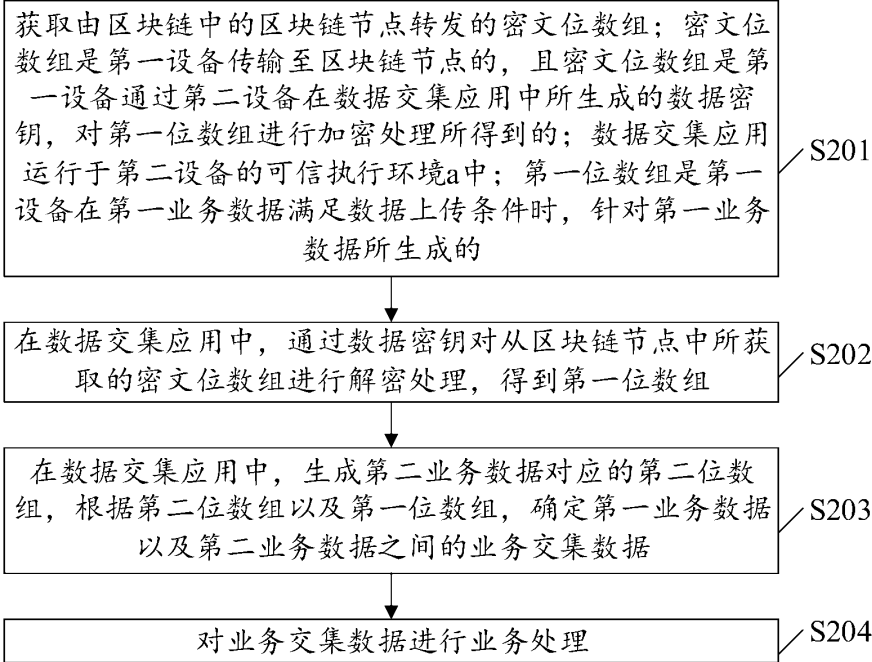


图 7

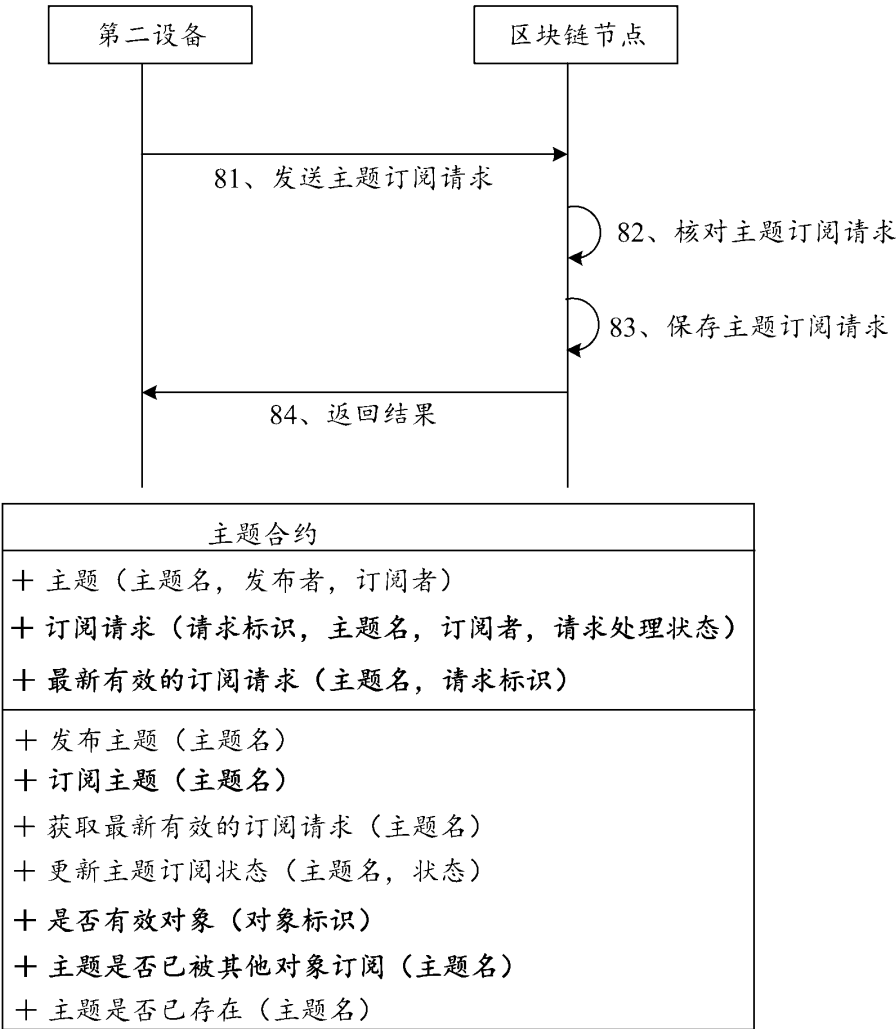


图 8

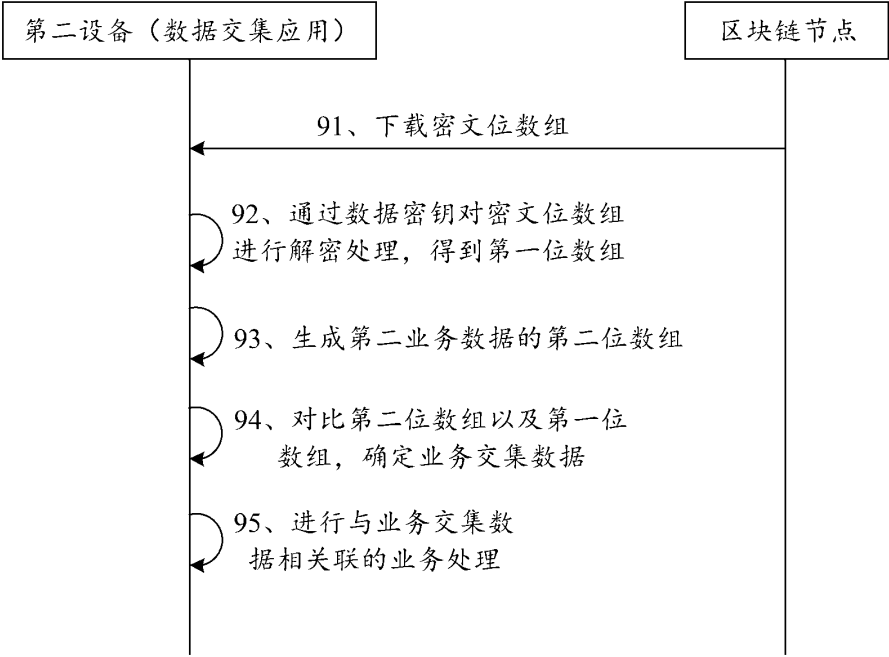


图 9

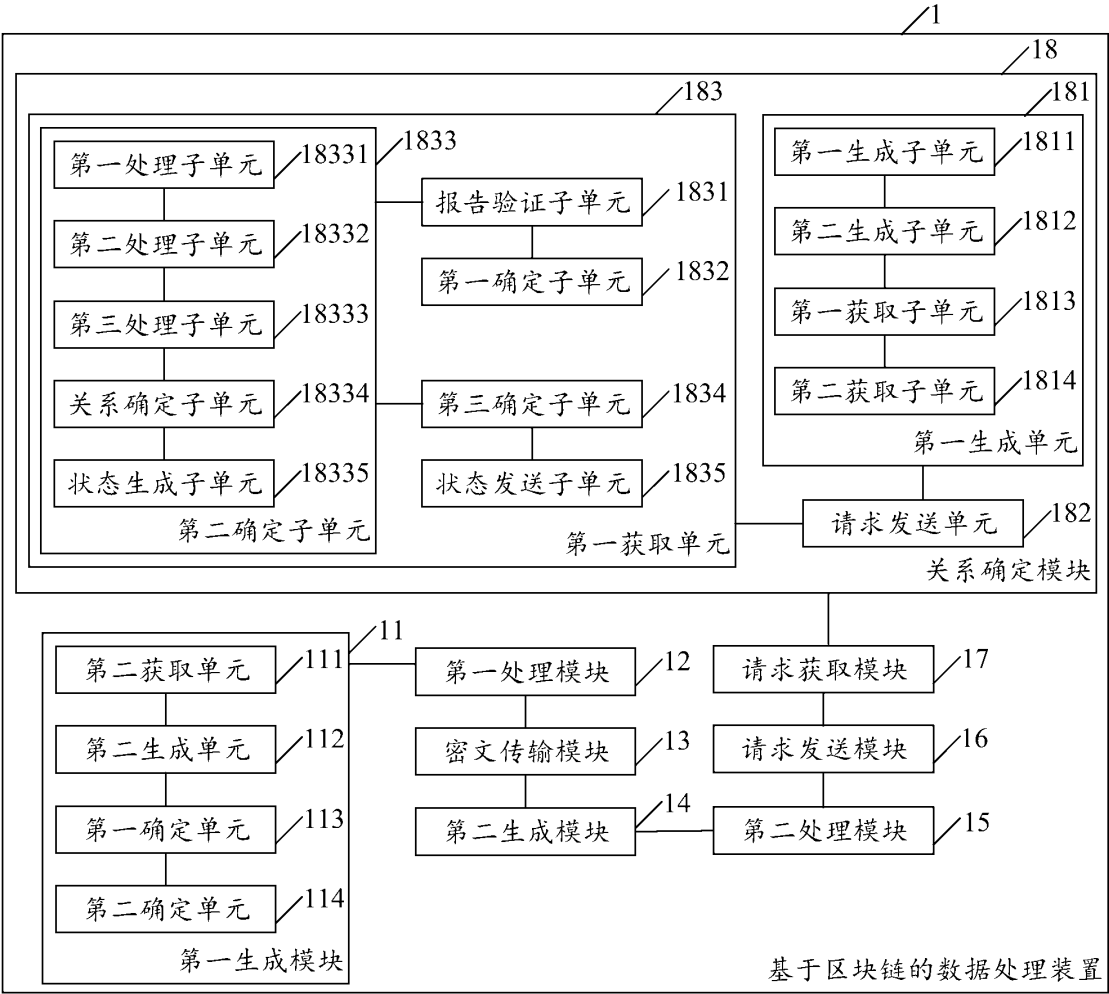


图 10

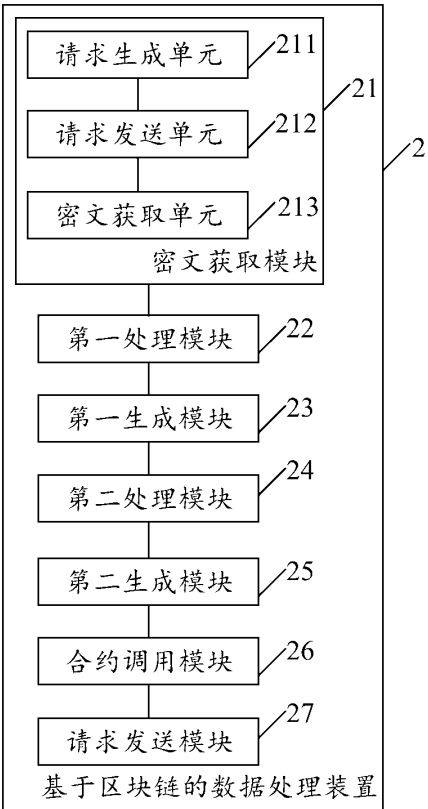


图 11

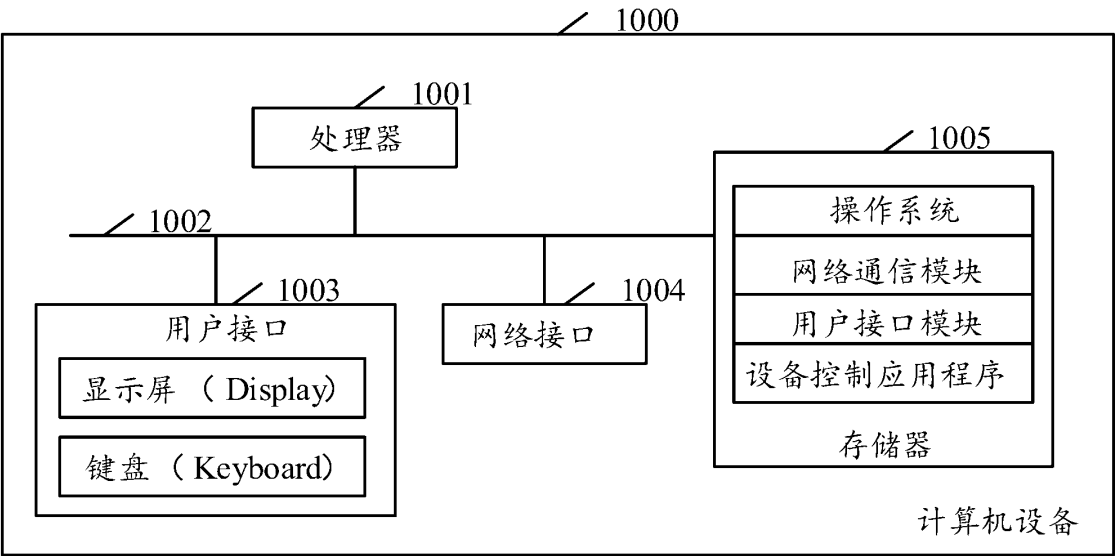


图 12