

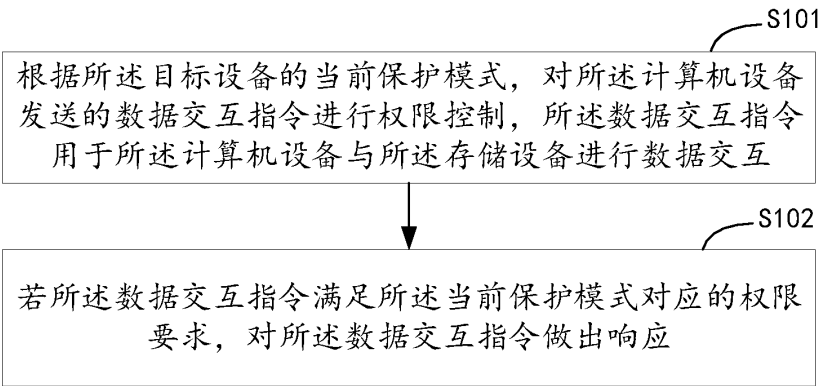


图 1

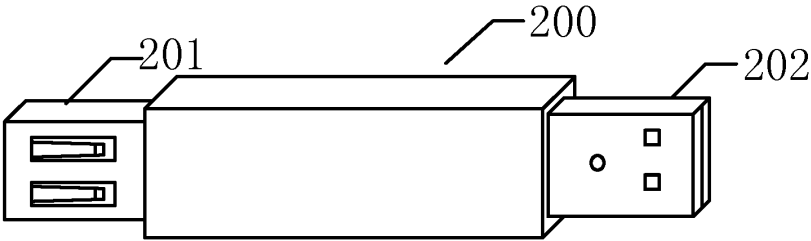


图 2a

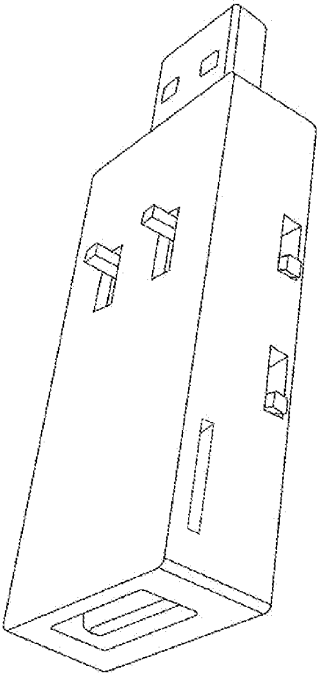


图 2b

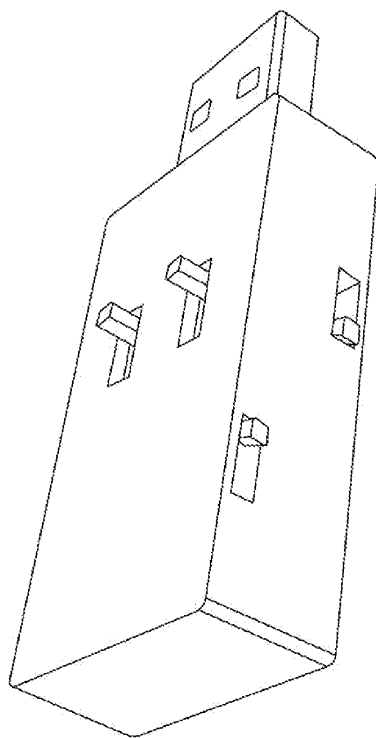


图 2c

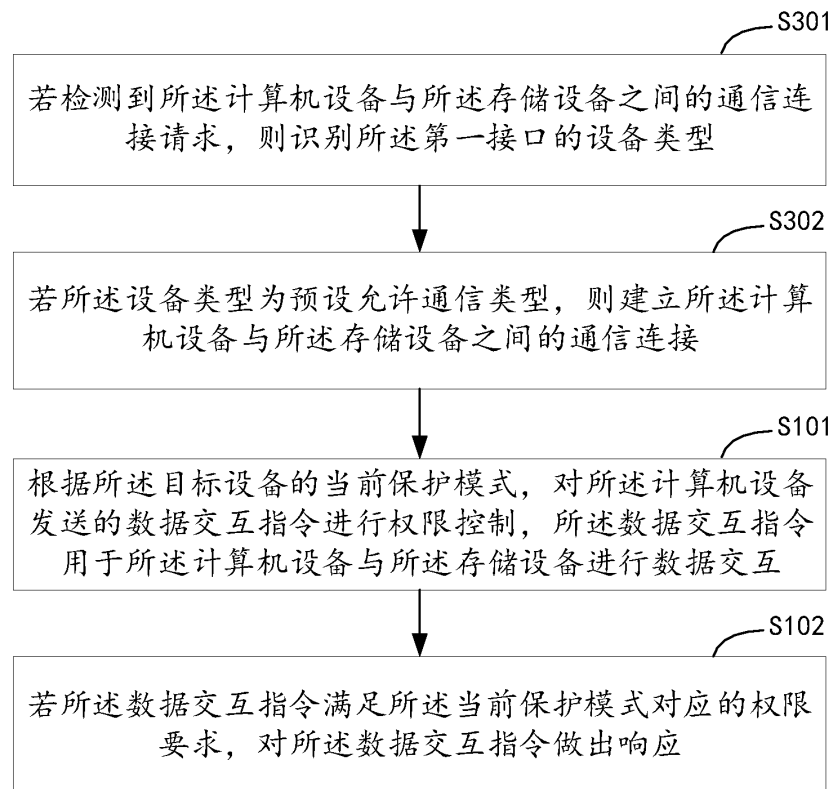


图 3

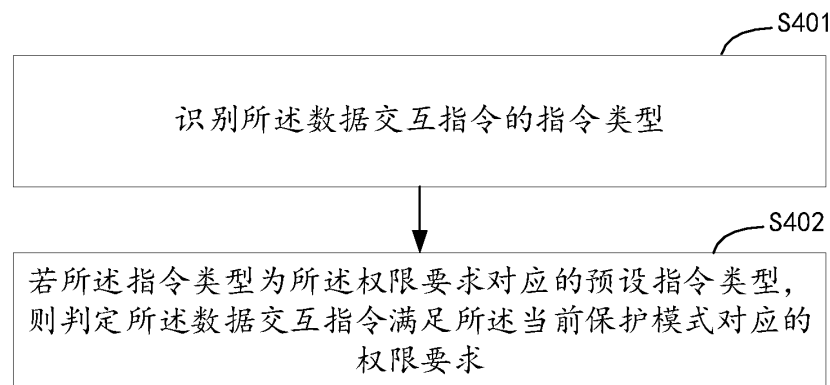


图 4

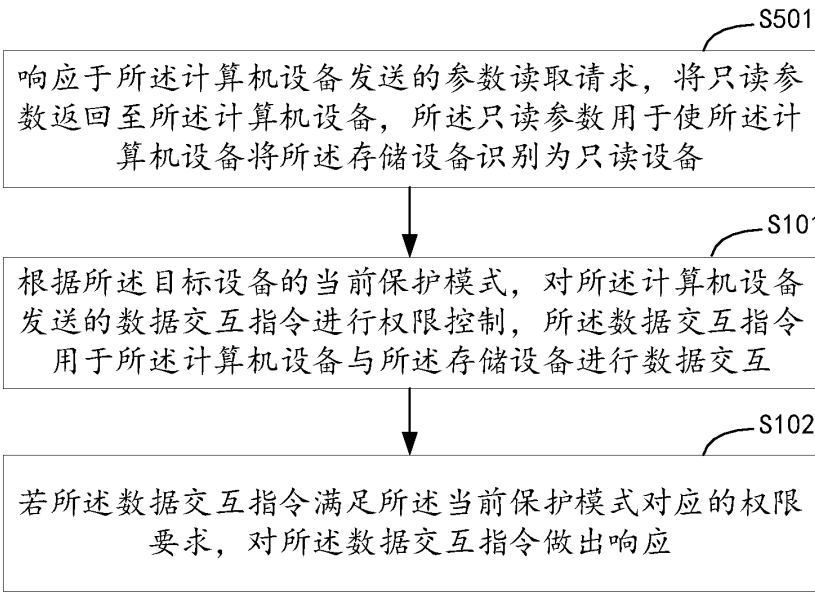


图 5



图 6a

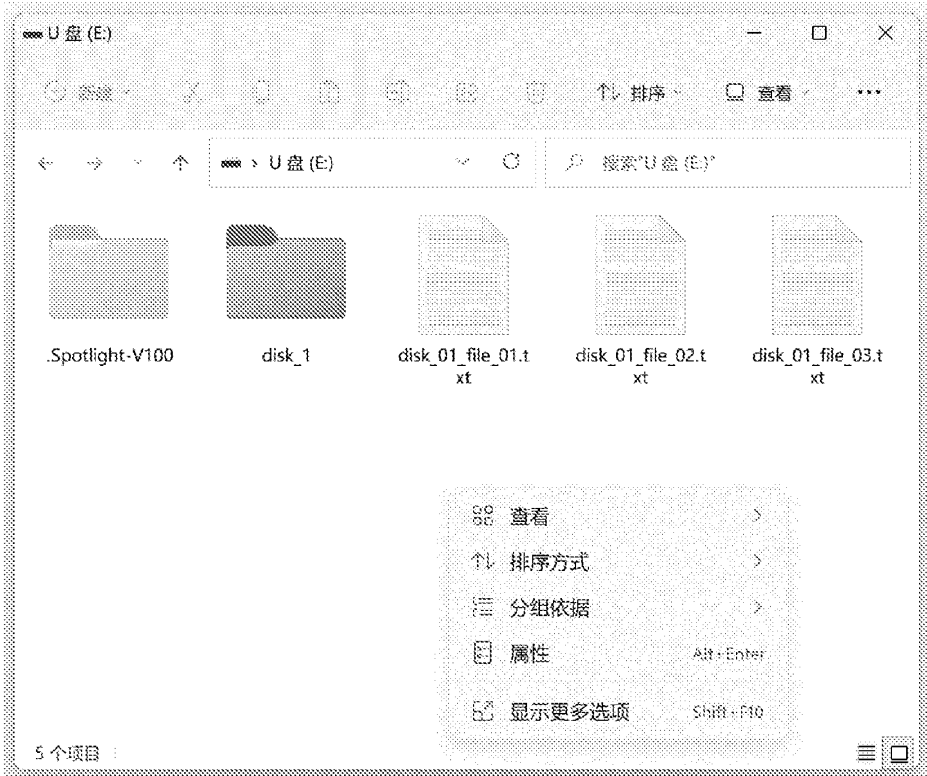


图 6b

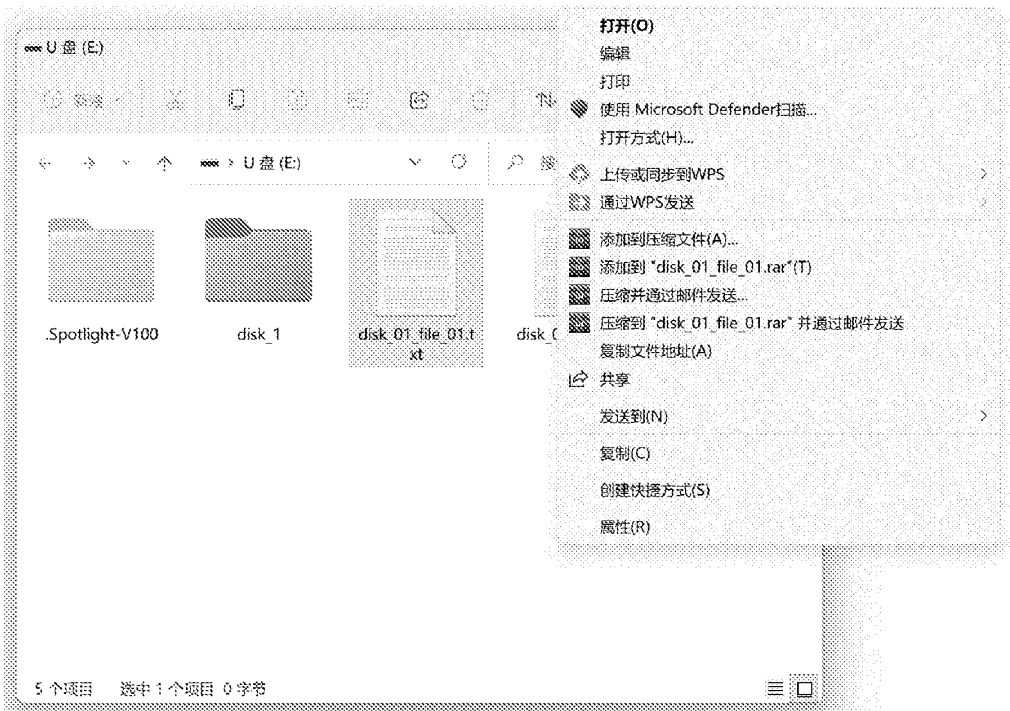


图 6c

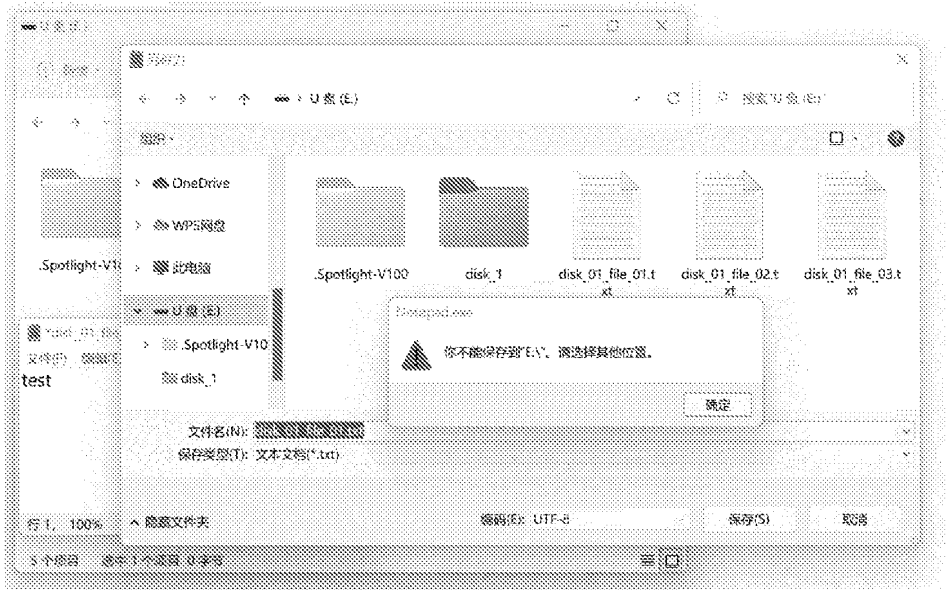


图 6d

S601
响应于所述数据交互指令，对所述存储设备中的目标文件进行读写操作，所述读写操作包括读操作和写操作中的至少一种

图 7

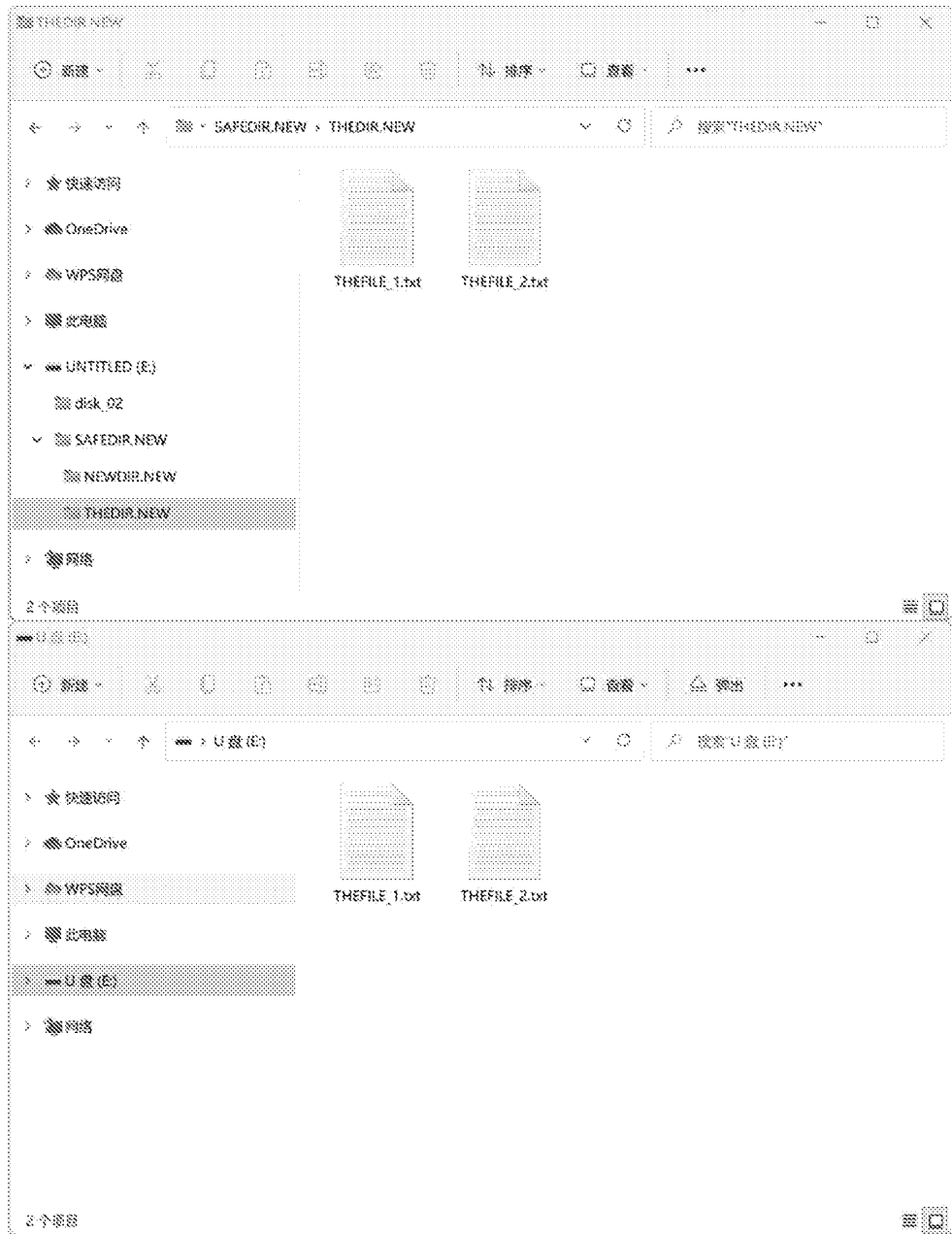


图 8

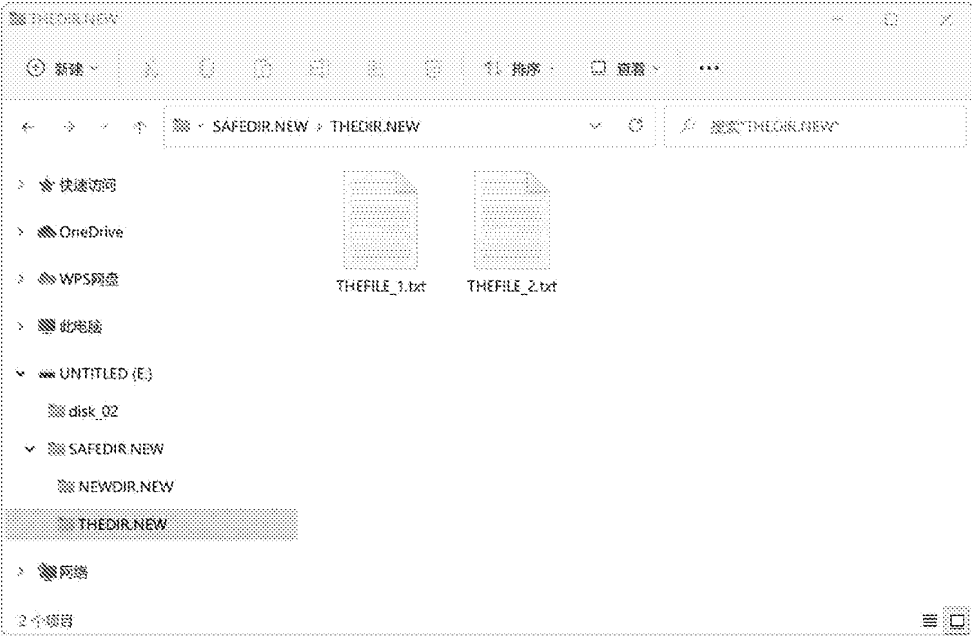


图 9a

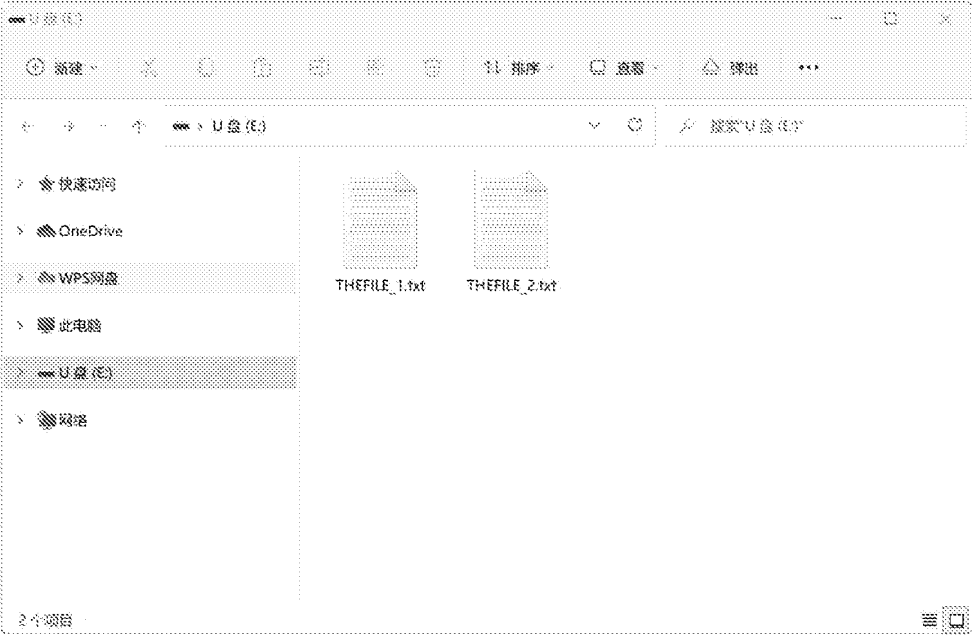


图 9b



图 9c

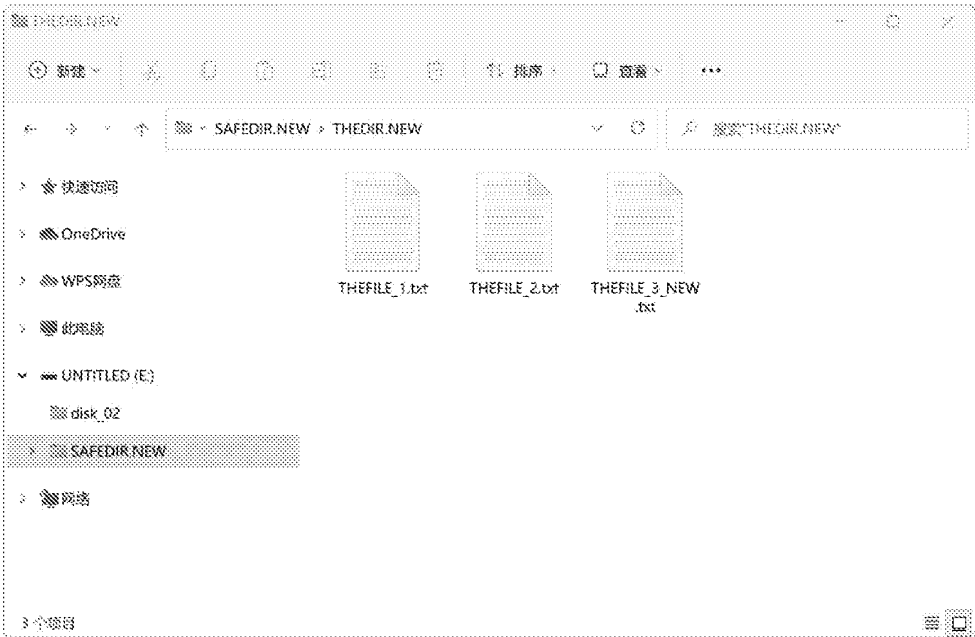


图 9d



图 10a

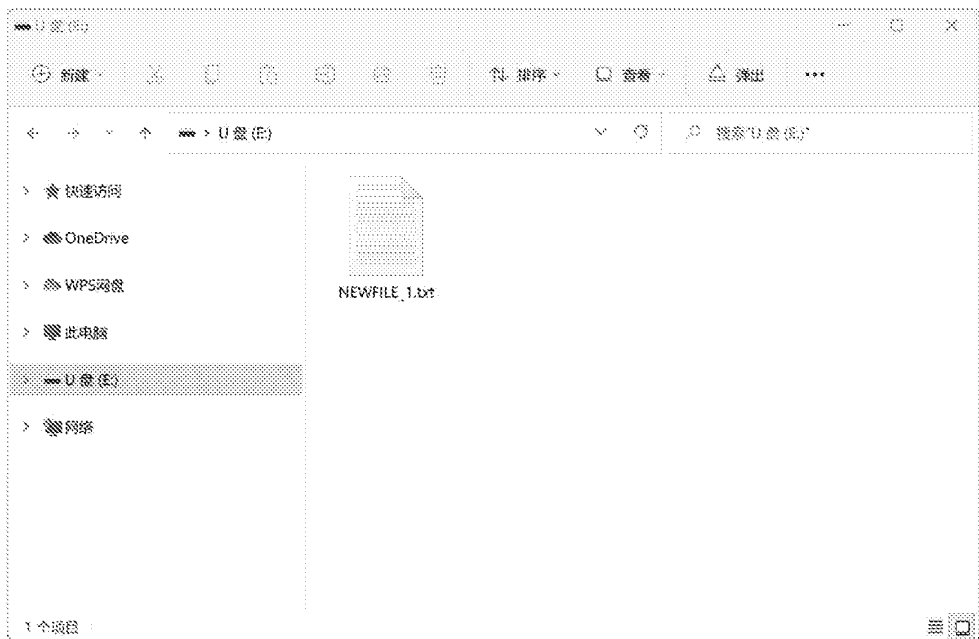


图 10b



图 10c



图 10d

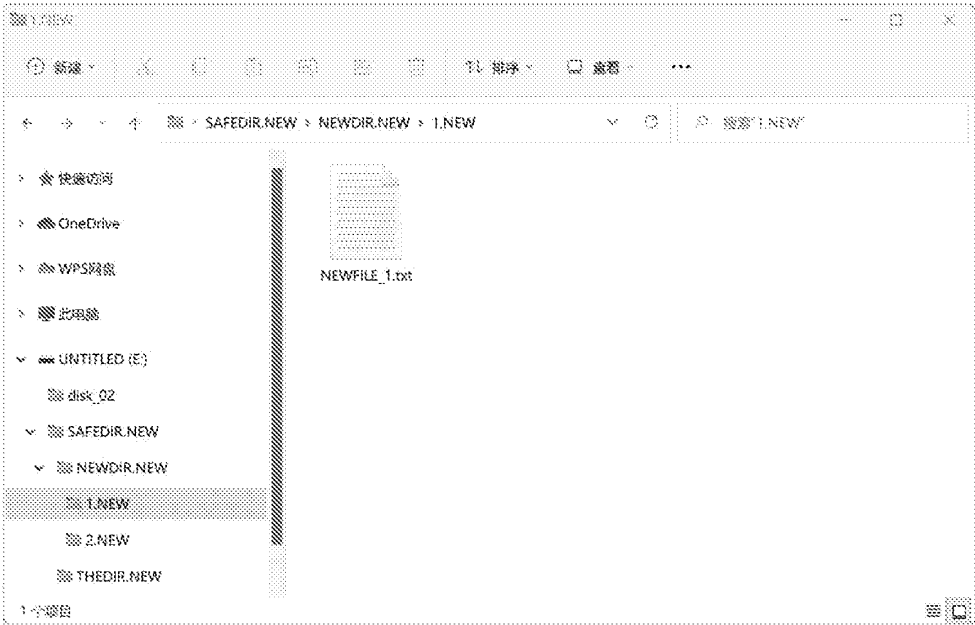


图 11a

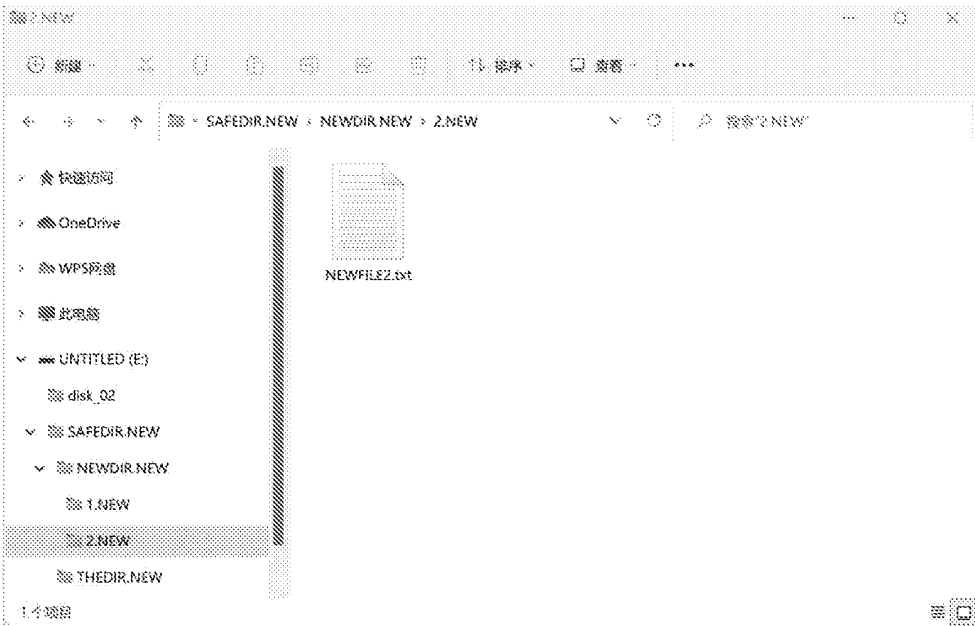


图 11b

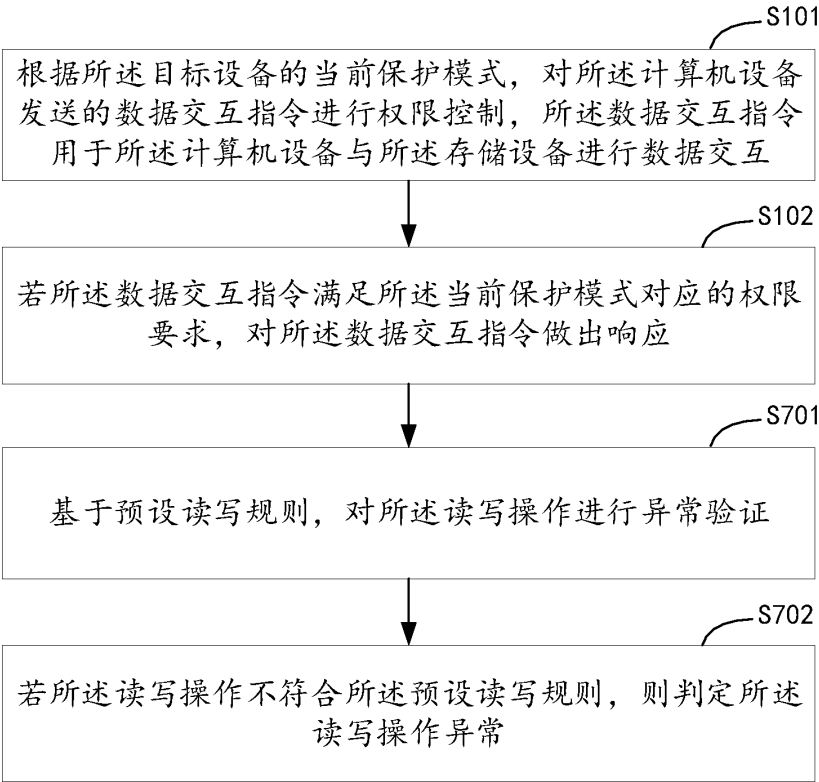


图 12

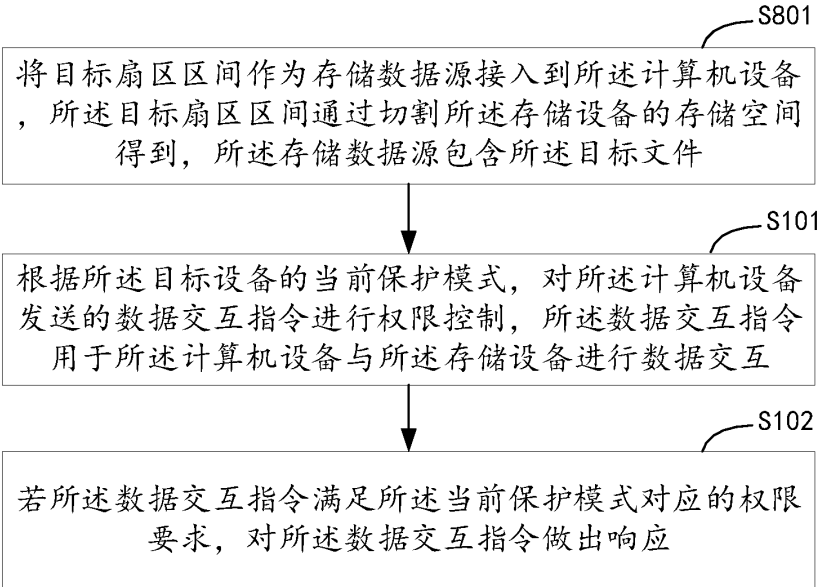


图 13

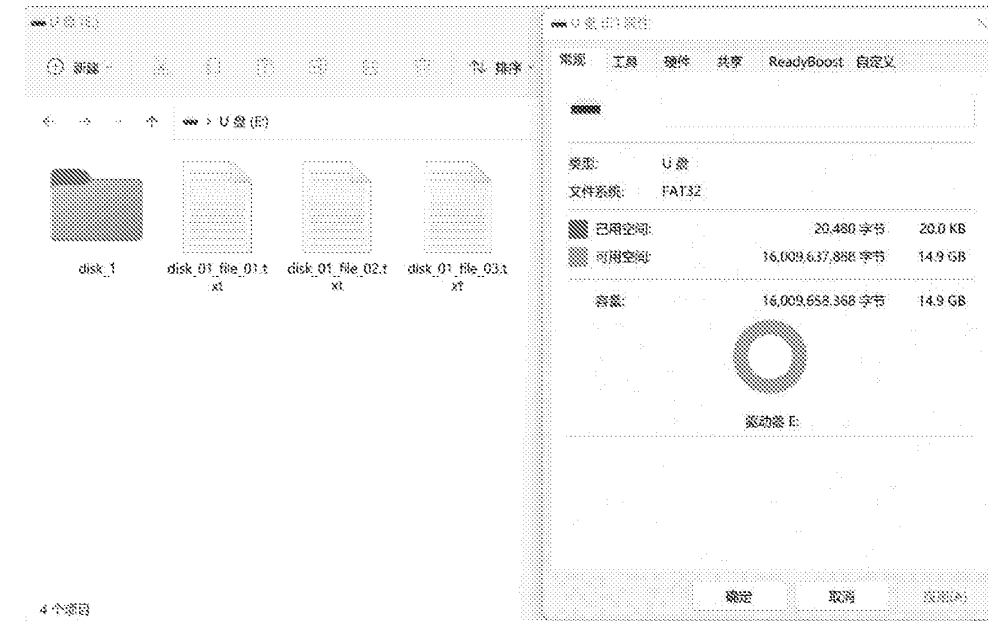


图 14a

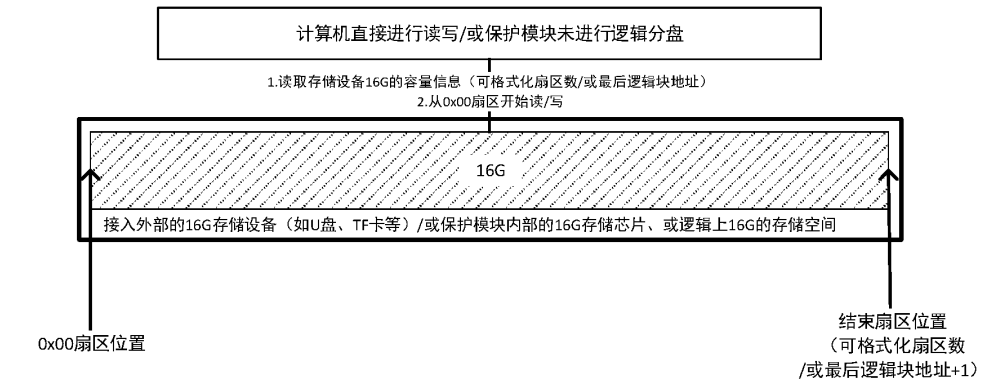


图 14b

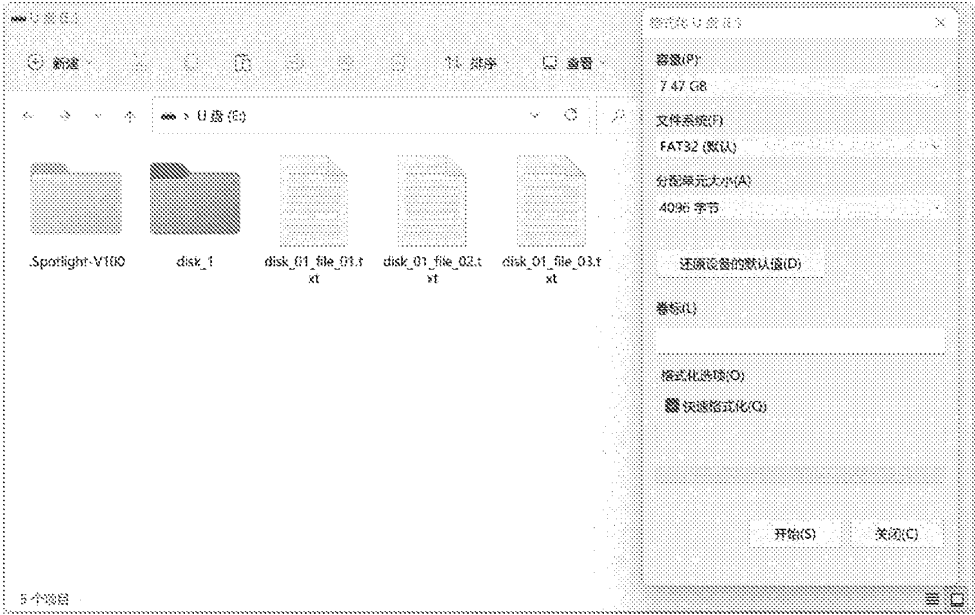


图 14c

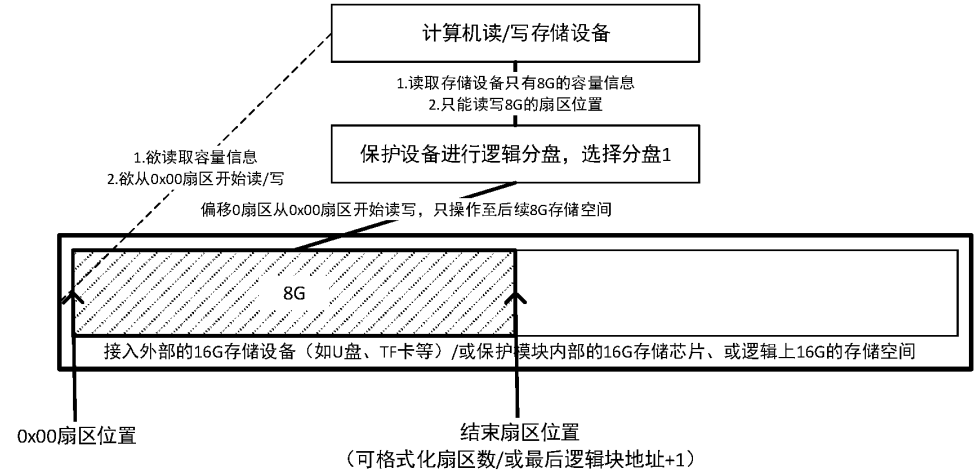


图 14d

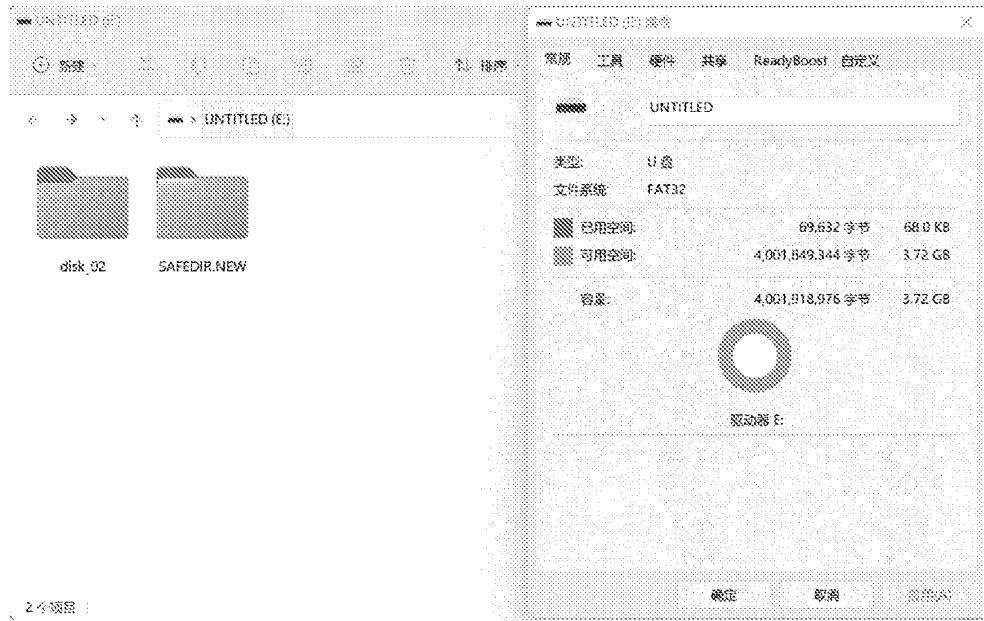


图 14e

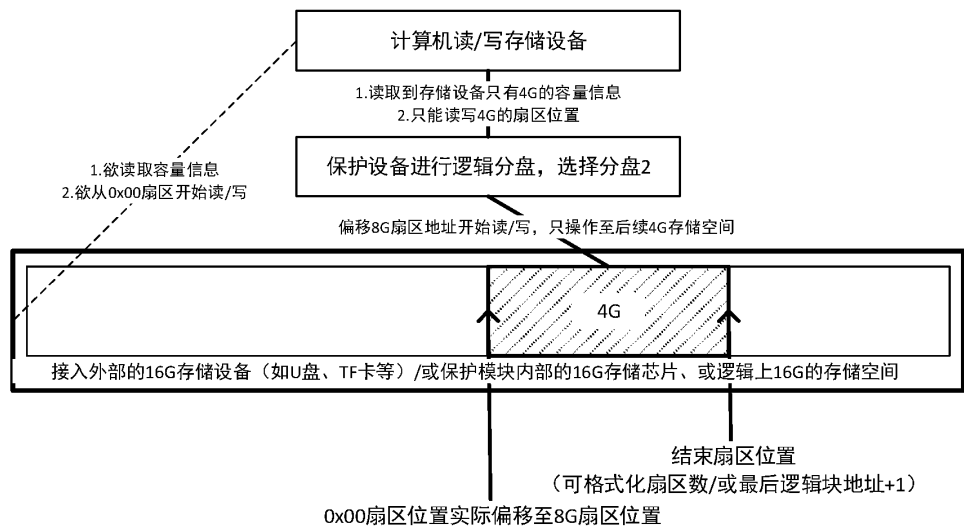


图 14f



图 14g

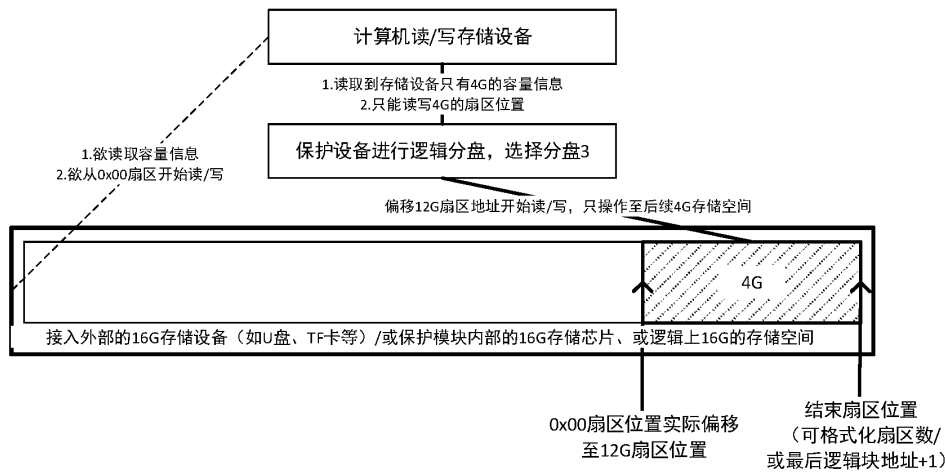


图 14h

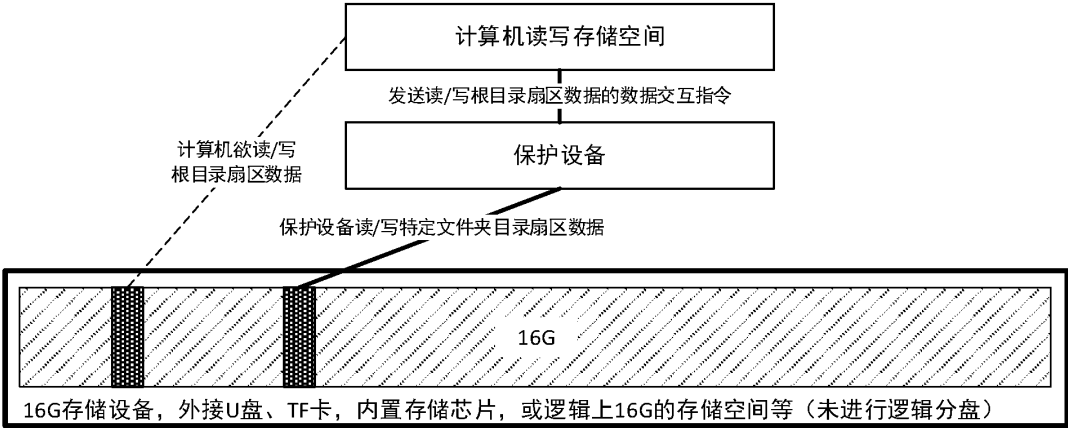


图 14i

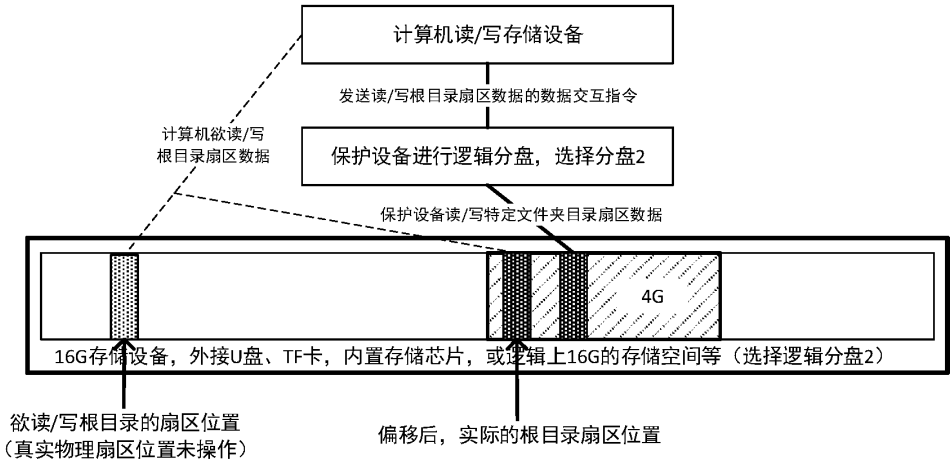


图 14j

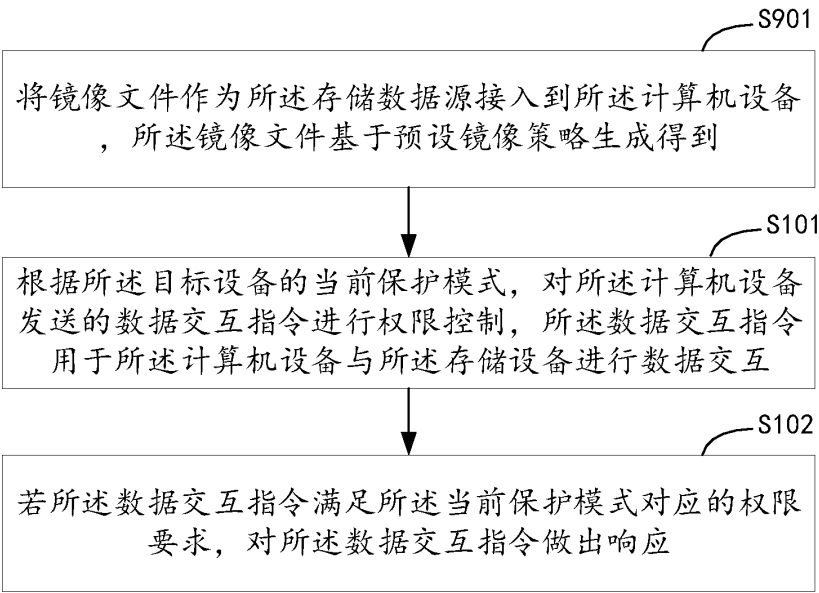


图 15

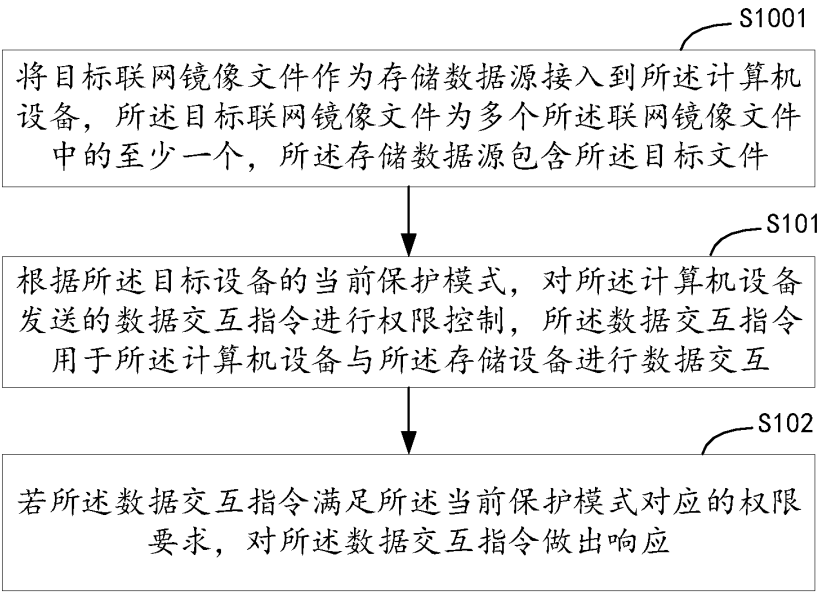


图 16

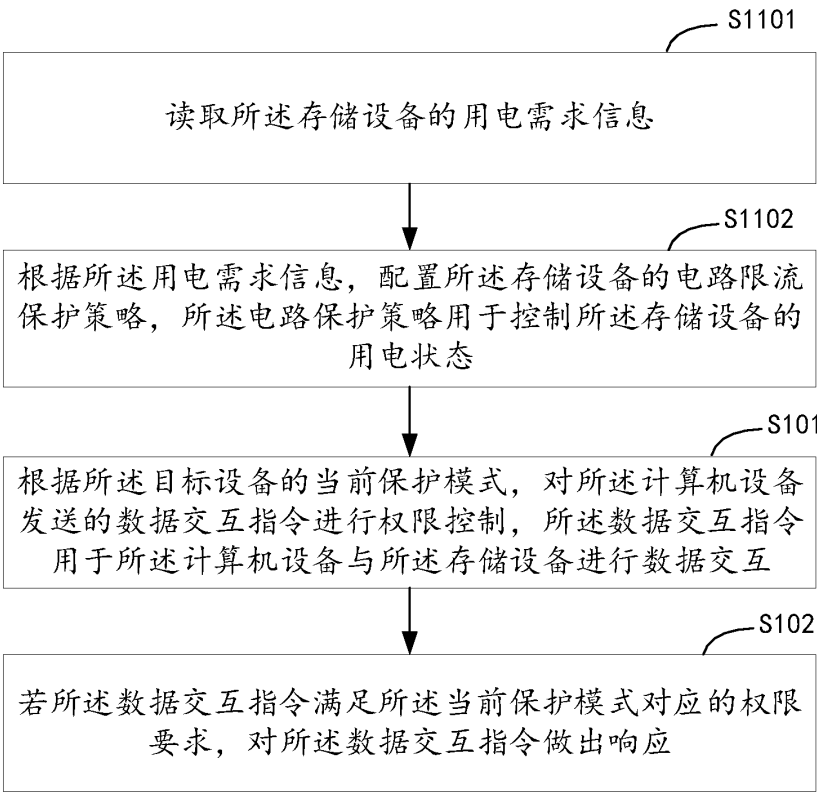


图 17

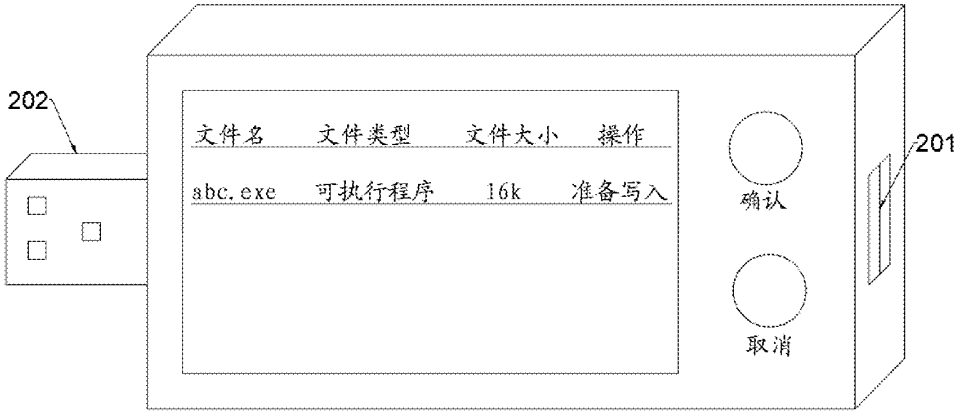


图 18a

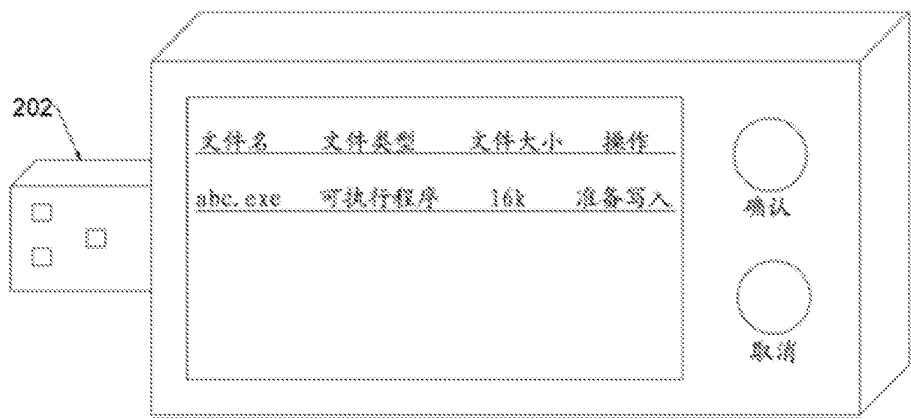


图 18b

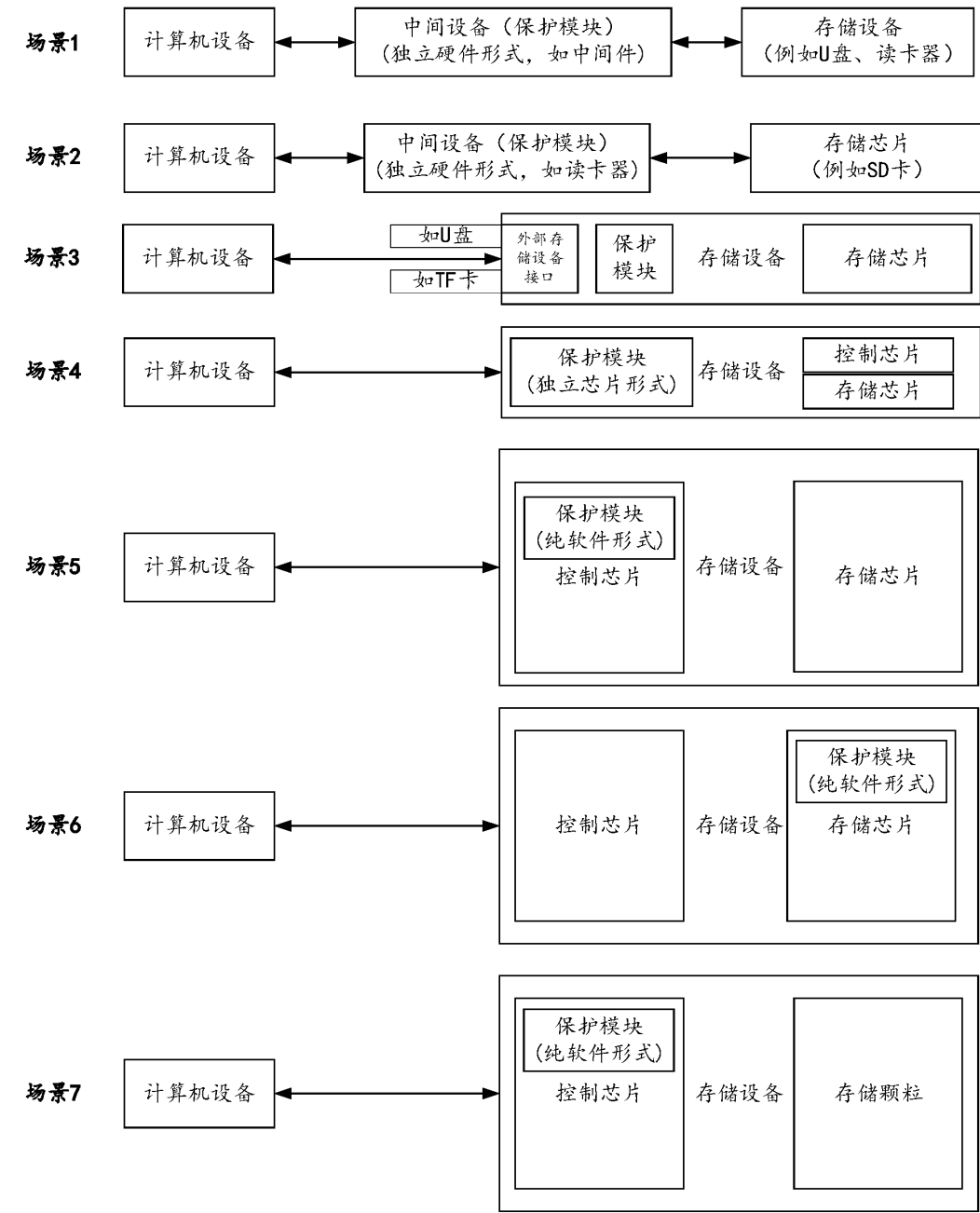


图 19

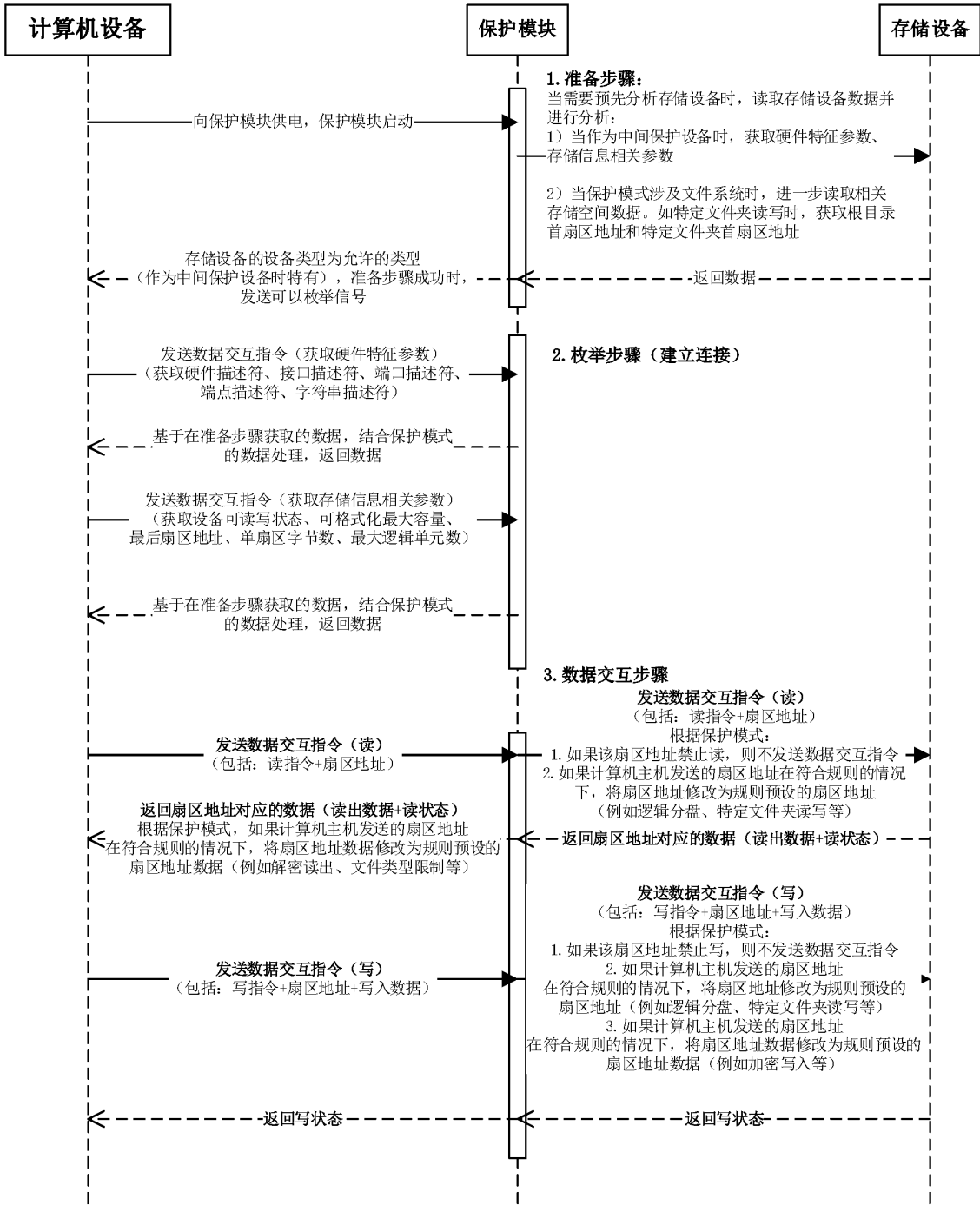


图 20a

计算机主机	保护模块 (以下1、2、3非层次递进关系) (对于符合以下规则的执行,可以自动执行,或人工确认后执行)	存储设备
枚举阶段 建立接口连接	1. 访问控制。根据访问控制规则,读取存储设备的描述符数据,判断是否符合预设要求,允许/或禁止计算机设备建立连接。 2. 内容修改。根据内容修改规则,向计算机设备返回已修改或者替换后的描述符数据。	描述符数据 (硬件描述符、接口描述符、端口描述符、端点描述符、字符串描述符) (注:以上为USB设备特有的数据,例如USB设备的U盘。如果为存储芯片则没有描述符数据)
枚举阶段 读取存储设备信息	1. 访问控制。根据访问控制规则,读取存储设备的存储信息数据,判断是否符合预设要求,允许/或禁止计算机设备建立连接。 2. 内容修改。根据内容修改规则,向计算机设备返回已修改或者替换后的存储信息数据	存储信息数据 (设备可读写状态、可格式化最大容量、最后扇区地址、单扇区字节数、最大逻辑单元数)
数据交互阶段 读/写存储地址数据 当读出时,读取扇区地址对应的数据。 当写入时,将数据写入至对应的扇区地址。	判断计算机设备的读/写扇区地址是否符合预设: 1. 访问控制。根据访问控制规则,允许/或禁止计算机设备对该扇区地址的读/写操作。 2. 地址映射。根据地址映射规则,读/写存储设备相应的被映射扇区地址的数据,并向计算机设备返回(读数据或写状态)。 3. 内容修改。根据内容修改规则,读/写存储设备相应扇区地址数据进行修改,并向计算机设备返回(读数据或写状态)。	存储空间扇区地址对应的数据

图 20b

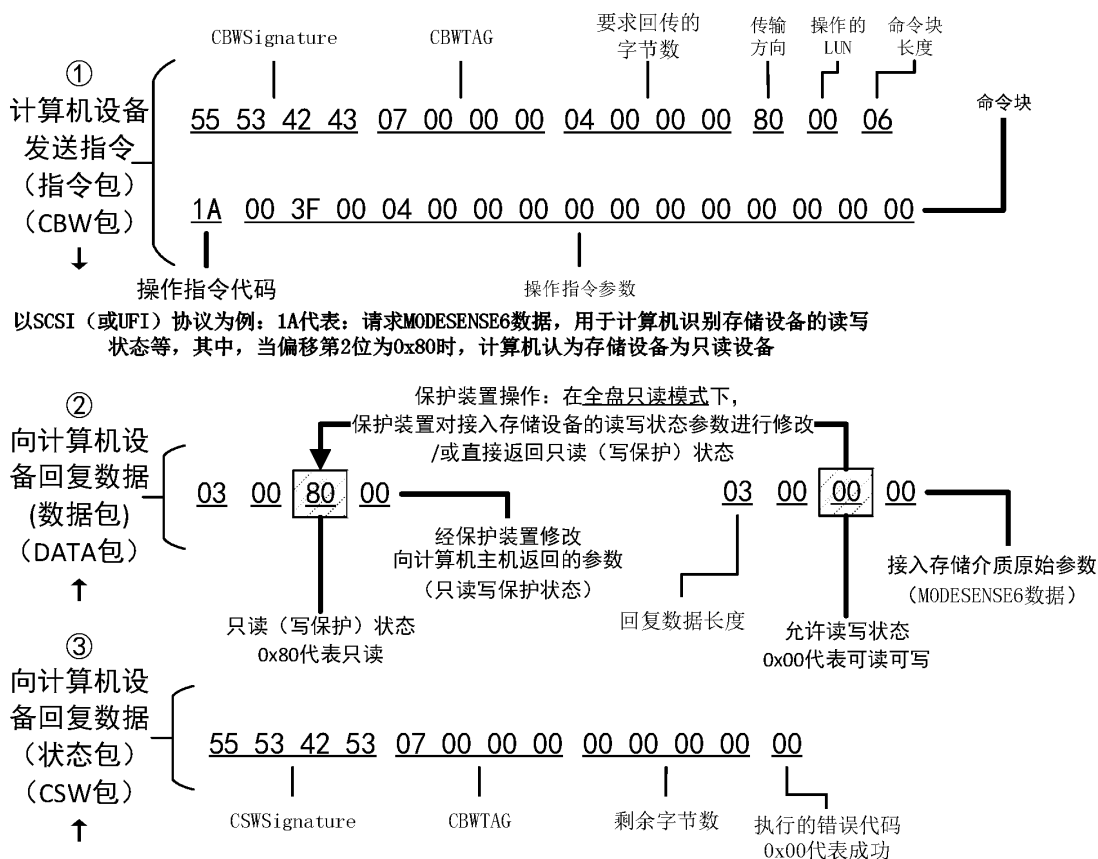


图 21

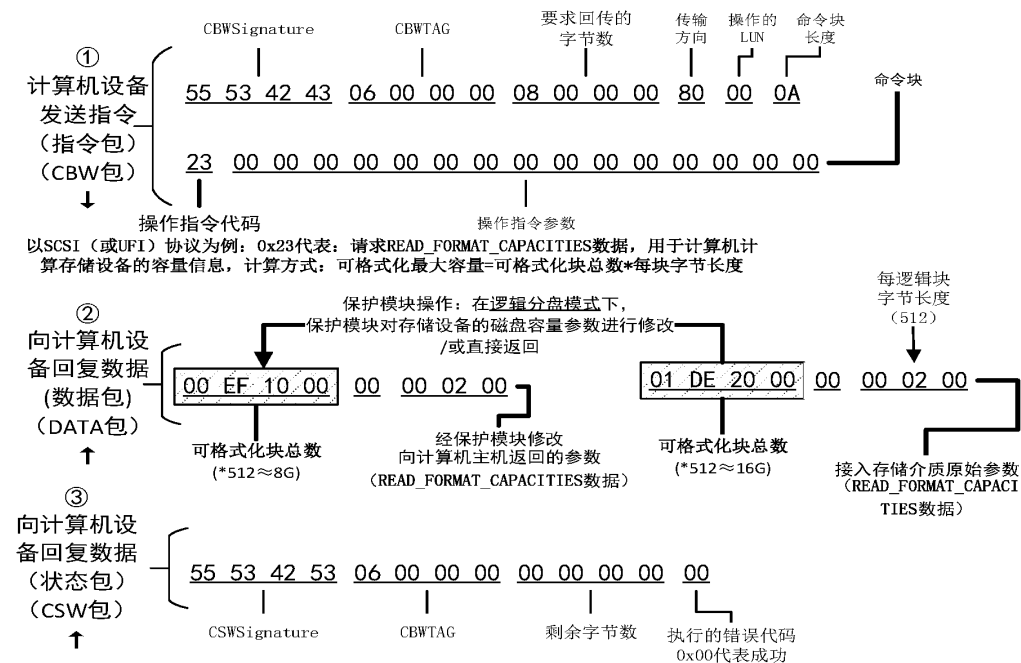


图 22

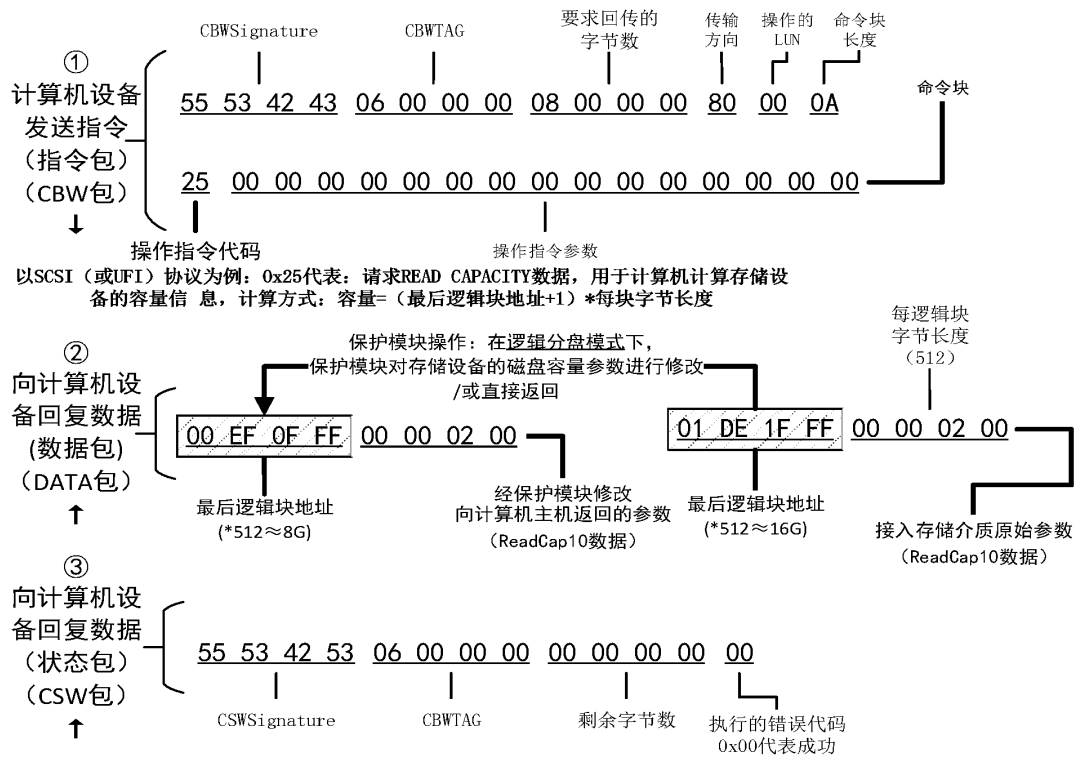


图 23

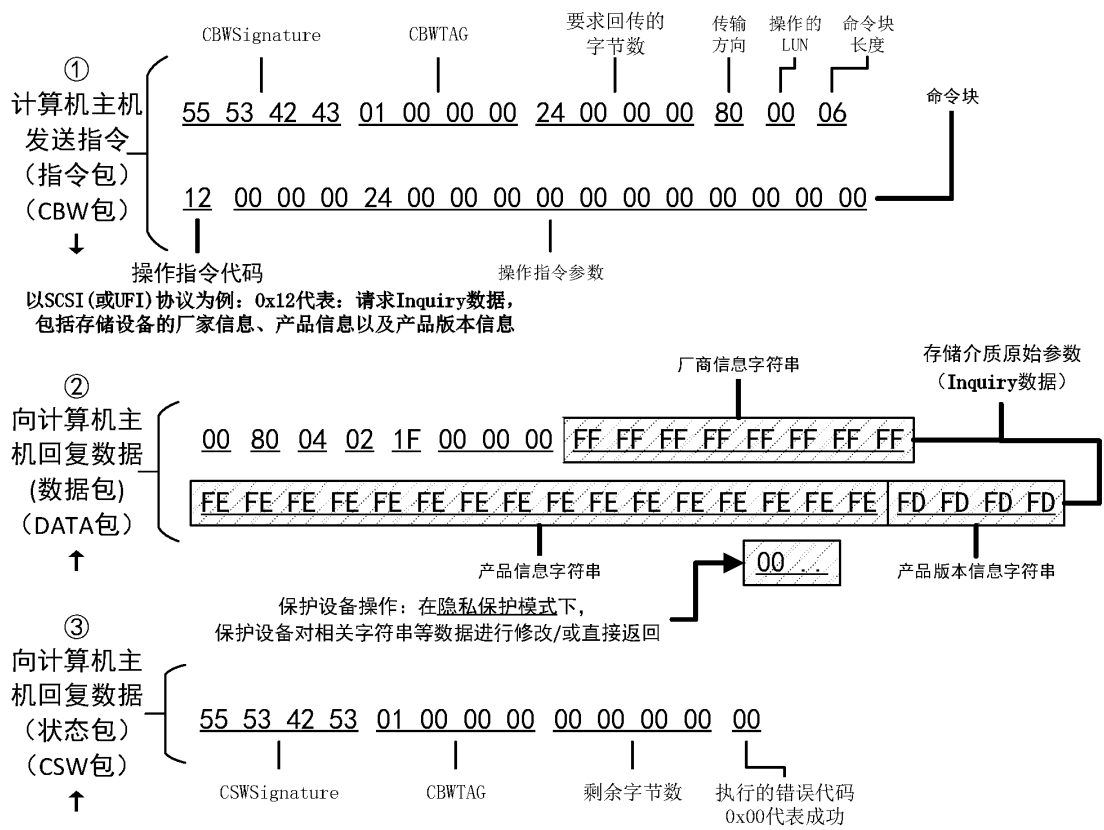


图 24

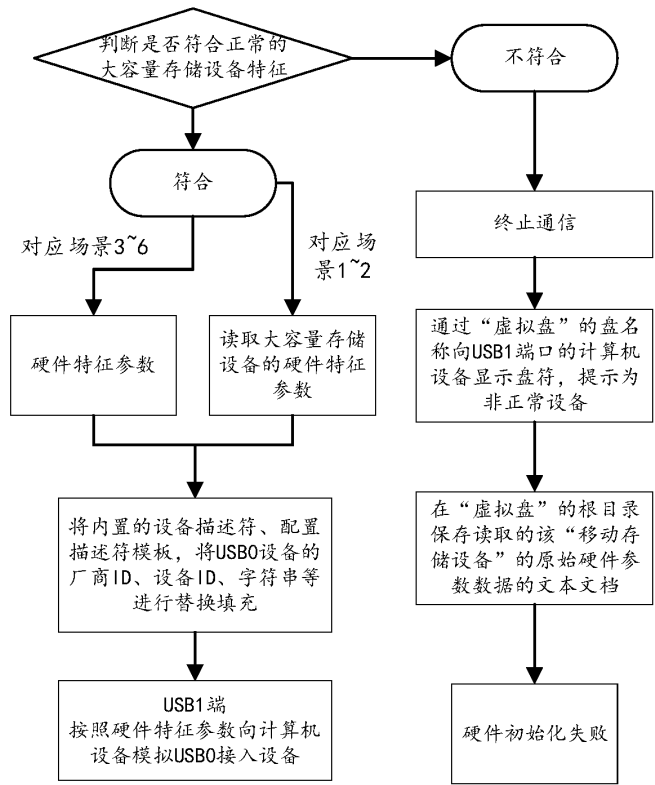


图 25

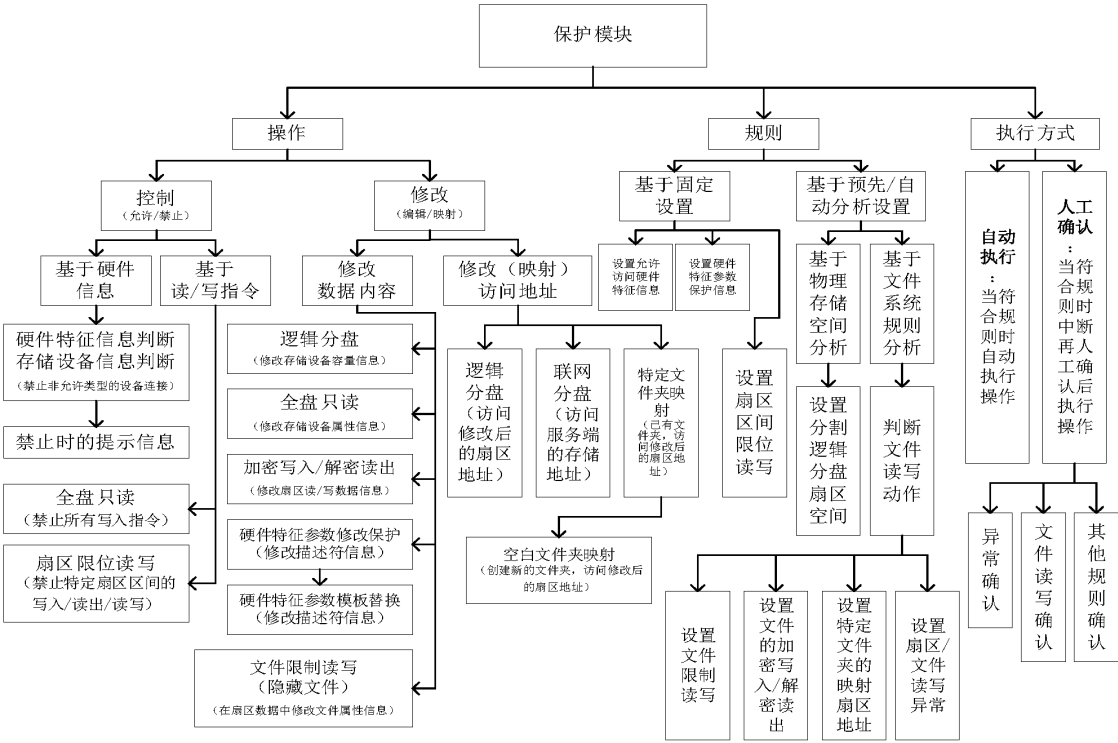


图 26a

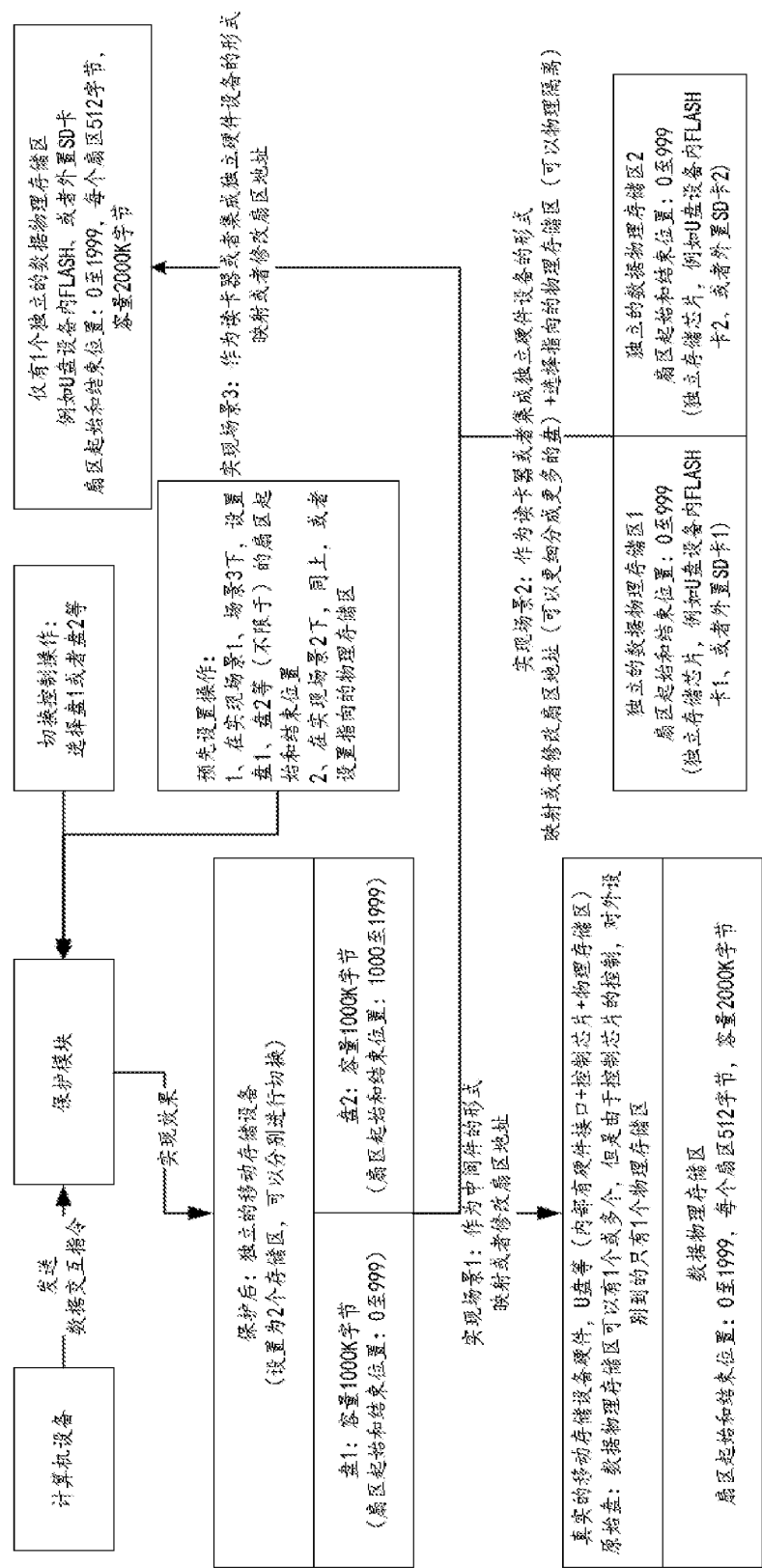


图 26b

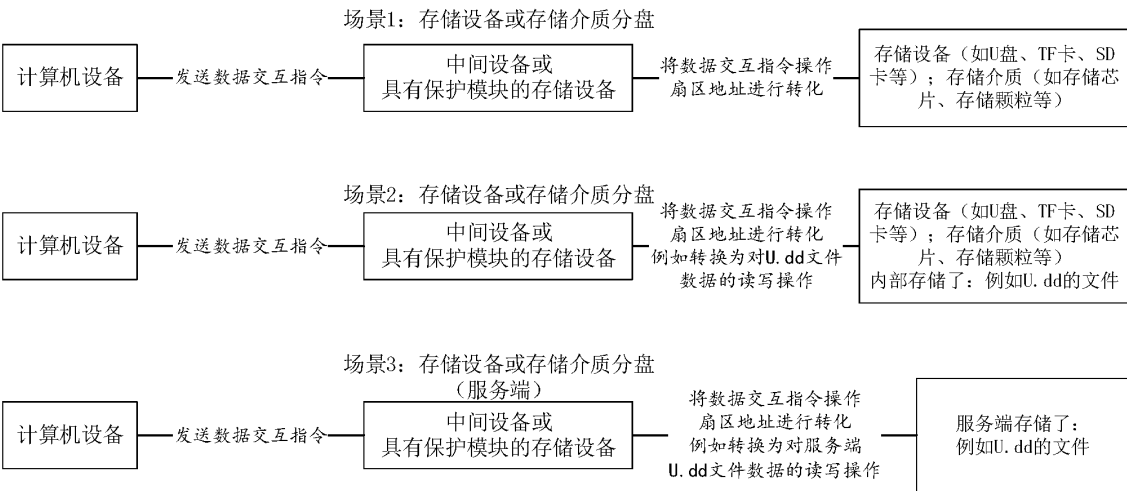


图 27

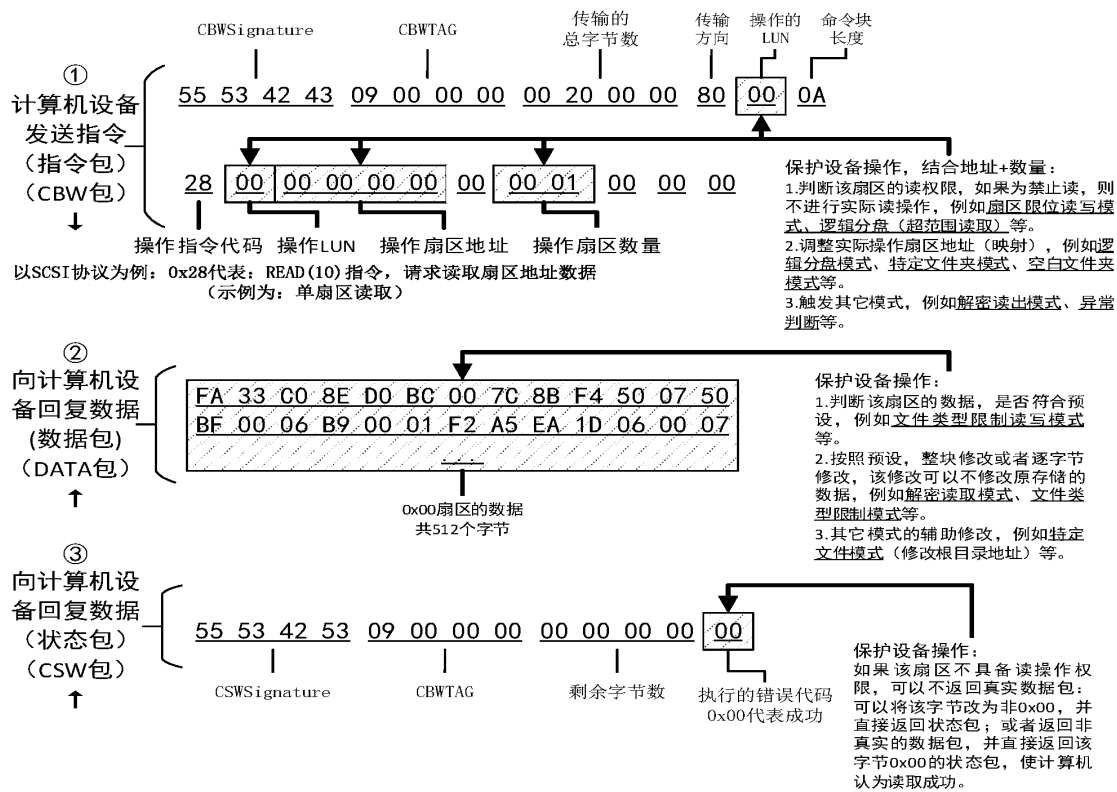


图 28a

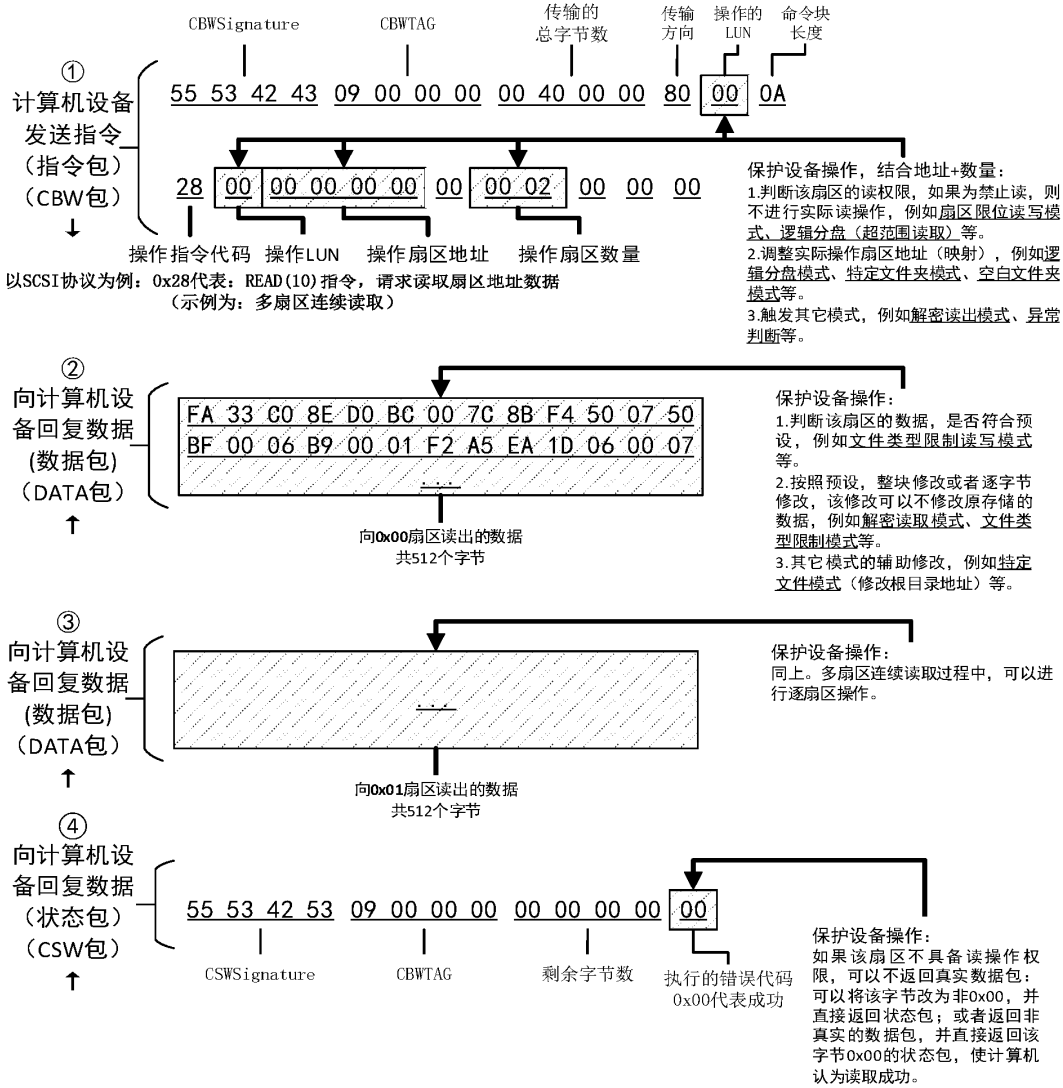


图 28b

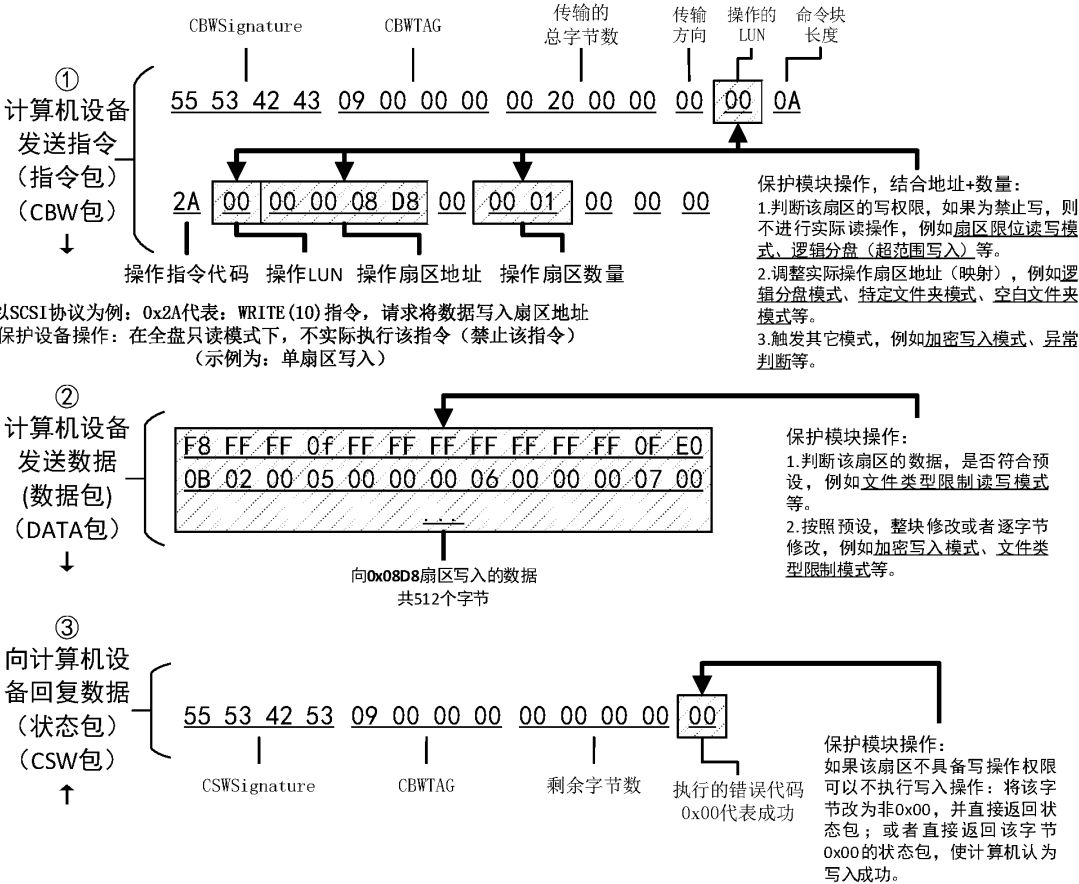


图 28c

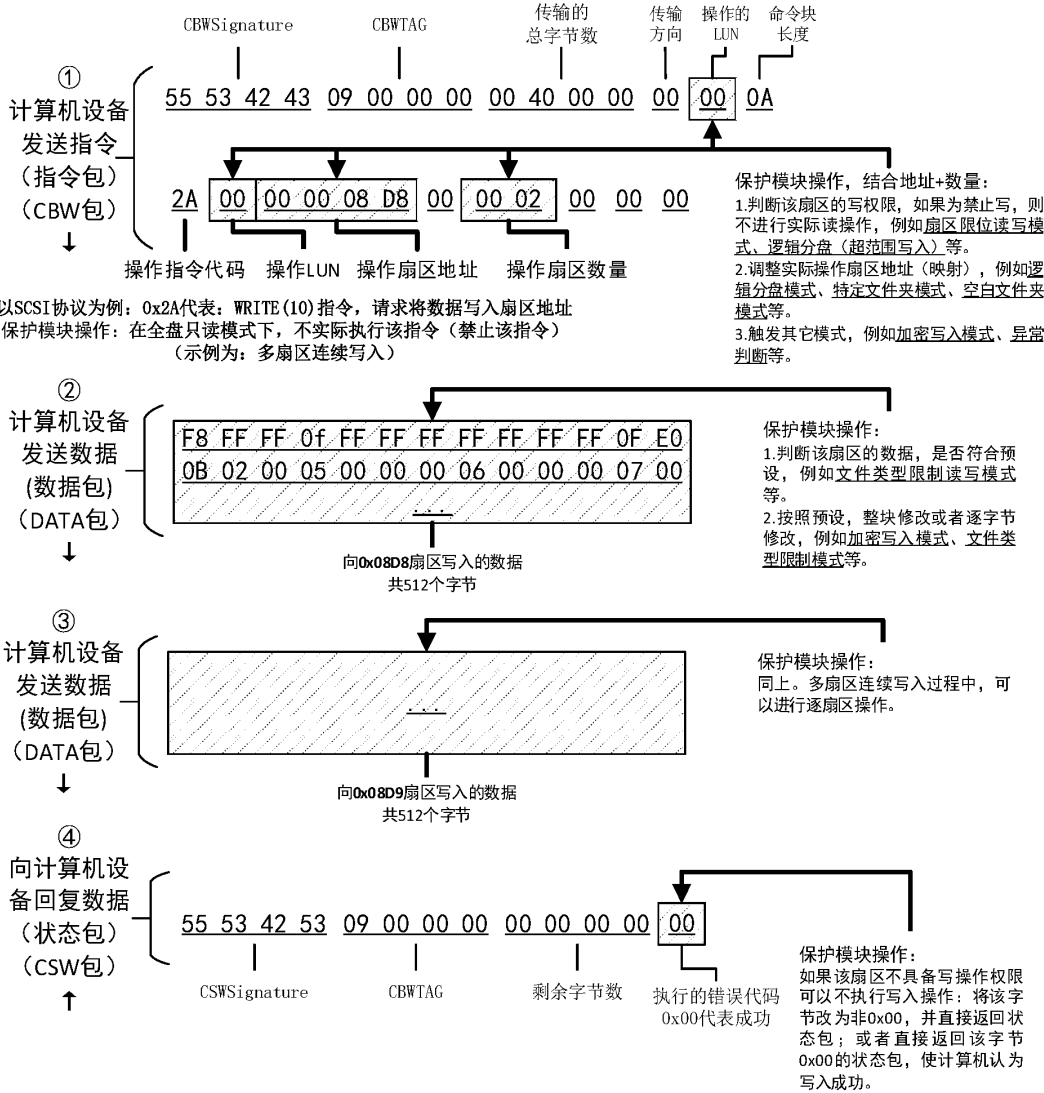


图 28d

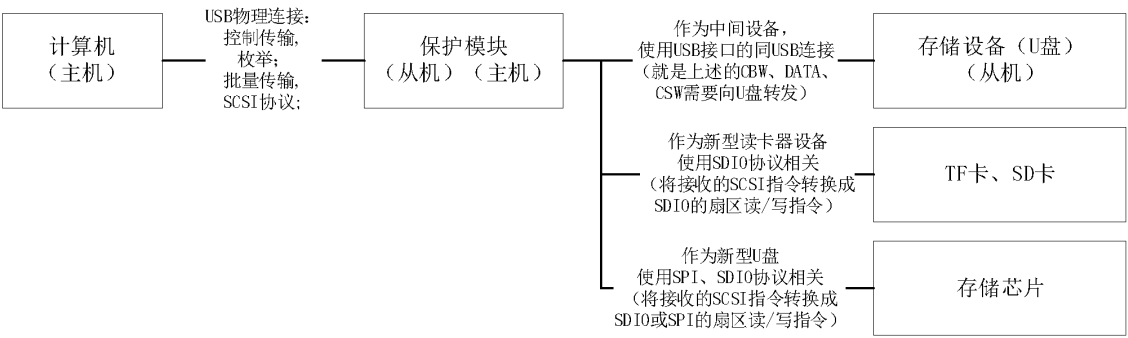


图 29

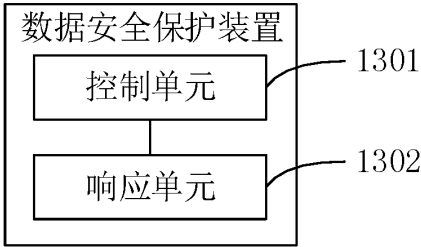


图 30

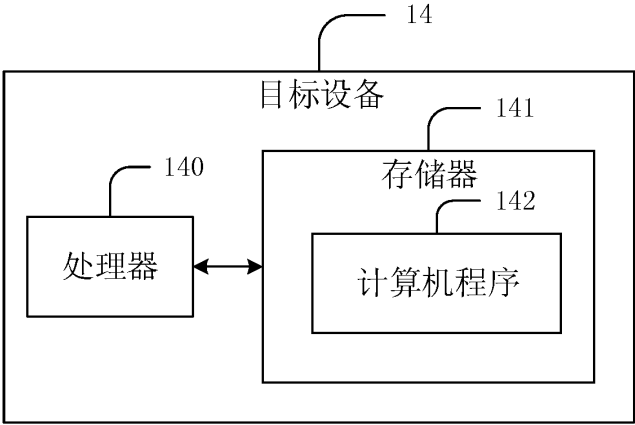


图 31