

(12) 按照专利合作条约所公布的国际申请

(19) 世界知识产权组织
国际局

(43) 国际公布日
2025 年 6 月 5 日 (05.06.2025)



(10) 国际公布号
WO 2025/113477 A1

(51) 国际专利分类号:
G06F 9/455 (2018.01)

(21) 国际申请号: PCT/CN2024/134821

(22) 国际申请日: 2024 年 11 月 27 日 (27.11.2024)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202311605963.X 2023 年 11 月 28 日 (28.11.2023) CN

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(54) Title: DATA ACCESS METHOD AND APPARATUS

(54) 发明名称: 数据访问方法和装置

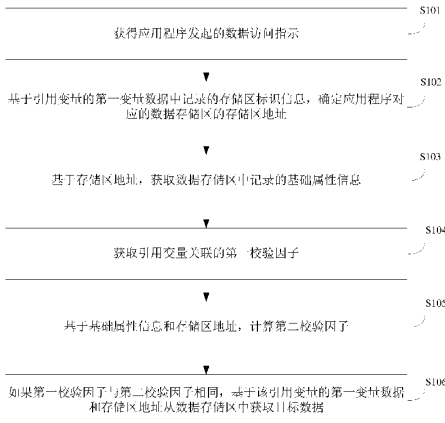


图 1

S101 Obtain a data access instruction initiated by an application program
S102 On the basis of storage area identification information recorded in first variable data of a reference variable, determine a storage area address of a data storage area corresponding to the application program
S103 On the basis of the storage area address, acquire basic attribute information recorded in the data storage area
S104 Acquire a first check factor associated with the reference variable
S105 On the basis of the basic attribute information and the storage area address, calculate a second check factor
S106 If the first check factor and the second check factor are identical, acquire target data from the data storage area on the basis of the first variable data of the reference variable and the storage area address

(57) Abstract: Provided in the present application are a data access method and apparatus, which are applied to an operating system based on a WebAssembly virtual machine. The method comprises: obtaining a data access instruction initiated by an application program, wherein the data access instruction carries first variable data of a reference variable; on the basis of storage area identification information in the first variable data of the reference variable, determining a storage area address of a data storage area corresponding to the application program; on the basis of the storage area address, acquiring basic attribute information recorded in the data storage area; acquiring a first check factor associated with the reference variable; on the basis of the basic attribute information and the storage area address, calculating a second check factor; and if the first check factor and the second check factor are identical, acquiring target data from the data storage area on the basis of the first variable data of the reference variable and the storage area address. The solution of the present application can improve the security and reliability of data access regarding an operating system based on a WebAssembly virtual machine.

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本国际公布:
— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本申请提供了一种数据访问方法和装置, 应用于基于WebAssembly虚拟机的运行系统, 该方法包括: 获得应用程序发起的数据访问指示, 数据访问指示携带有引用变量的第一变量数据; 基于引用变量的第一变量数据中的存储区标识信息, 确定应用程序对应的数据存储区的存储区地址; 基于存储区地址, 获取数据存储区中记录的基础属性信息; 获取引用变量关联的第一校验因子; 基于基础属性信息和存储区地址, 计算第二校验因子; 如果第一校验因子与第二校验因子相同, 基于引用变量的第一变量数据和存储区地址从数据存储区中获取目标数据。本申请的方案可以提高基于WebAssembly虚拟机的运行系统中数据访问的安全性和可靠性。