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- (71) 申请人: 蚂蚁区块链科技(上海)有限公司
(**ANT BLOCKCHAIN TECHNOLOGY (SHANGHAI) CO., LTD.**) [CN/CN]; 中国上海市黄浦区外马路 618 号 8 层 803 室 200010 (CN)。
- (72) 发明人: 卓海振 (**ZHUO, Haizhen**); 中国上海市黄浦区外马路 618 号 8 层 803 室 200010 (CN)。
闫莺 (**YAN, Ying**); 中国上海市黄浦区外马路 618 号 8 层 803 室 200010 (CN)。 蒋国飞 (**JIANG,**

Guofei); 中国上海市黄浦区外马路 618 号 8 层 803 室 200010 (CN)。

(74) 代理人: 北京亿腾知识产权代理事务所(普通合伙) (**E-TONE INTELLECTUAL PROPERTY FIRM (GENERAL PARTNERSHIP)**); 中国北京市海淀区中关村紫金数码园 3 号楼 707 100190 (CN)。

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(54) **Title:** BLOCKCHAIN SYSTEM MANAGEMENT METHOD AND BLOCKCHAIN NODE

(54) 发明名称: 区块链系统的管理方法和区块链节点

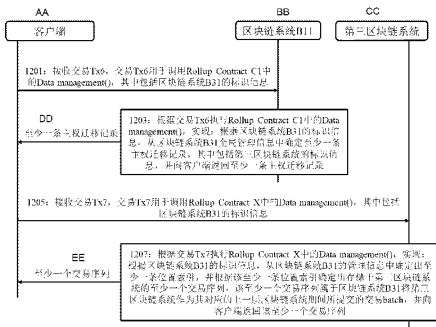


图 12

- 1201 Receive a transaction Tx6, wherein the transaction Tx6 is used for calling Data management in Rollup Contract C1, and comprises identification information of a blockchain system B31
- 1203 Execute Data management in Rollup Contract C1 on the basis of the transaction Tx6, to implement the following: on the basis of the identification information of the blockchain system B31, determining at least one sovereignty migration record from global management information of the blockchain system B31, wherein the at least one sovereignty migration record comprises identification information of a third blockchain system, and returning the at least one sovereignty migration record to the client
- 1205 Receive a transaction Tx7, wherein the transaction Tx7 is used for calling Data management in Rollup Contract X, and comprises the identification information of the blockchain system B31
- 1207 Execute Data management in Rollup Contract X on the basis of the transaction Tx7, to implement the following: on the basis of the identification information of the blockchain system B31, determining at least one location index from management information of the blockchain system B31; on the basis of the at least one location index, determining at least one transaction sequence stored in the third blockchain system, wherein the at least one transaction sequence belongs to a transaction batch submitted during a period when the blockchain system B31 takes the third blockchain system as a corresponding upper-layer blockchain system thereof, and returning the at least one transaction sequence to the client
- AA Client
- BB Blockchain system B11
- CC Third blockchain system
- EE At least one sovereignty migration record
- At least one transaction sequence

(57) **Abstract:** A blockchain system management method and a blockchain node. The method comprises: a first blockchain system receives a first transaction from a client, wherein the first transaction is used for calling a first method function in a first rollup contract, and comprises identification information of an i-th second blockchain system; and the first blockchain system executes the first method function on the basis of the first transaction to implement the following: determining at least one sovereignty migration record from global management information of the i-th second blockchain system, wherein the at least one sovereignty migration record comprises identification information of a third blockchain system; and returning the at least one sovereignty migration record to the client, wherein the at least one sovereignty migration record is used for supporting the client to obtain at least one transaction sequence from the third blockchain system, and the transaction sequence belongs to a transaction batch submitted during a period when the i-th second blockchain system takes the third blockchain system as a corresponding upper-layer blockchain system thereof.

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(84) 指定国(除另有指明, 要求每一种可提供的地区保护): ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), 欧亚 (AM, AZ, BY, KG, KZ, RU, TJ, TM), 欧洲 (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG)。

本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 一种区块链系统的管理方法和区块链节点, 该方法包括: 第一区块链系统从客户端接收第一交易, 用于调用第一卷叠合约中的第一方法函数, 其中包括第*i*个第二区块链系统的标识信息; 第一区块链系统根据第一交易执行第一方法函数, 实现: 从第*i*个第二区块链系统的全局管理信息中确定出至少一条主权迁移记录, 其中包括第三区块链系统的标识信息, 向客户端返回至少一条主权迁移记录, 该至少一条主权迁移记录用于支持客户端从第三区块链系统获取至少一个交易序列, 该交易序列属于第*i*个第二区块链系统将第三区块链系统作为其对应的上一层区块链系统期间所提交的交易组。