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- (81) 指定国(除另有指明, 要求每一种可提供的国家保护): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MU, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD,

(54) Title: DISTRIBUTED LOCK PROCESSING METHOD, DEVICE, STORAGE MEDIUM, AND SYSTEM

(54) 发明名称: 分布式锁处理方法、设备、存储介质和系统

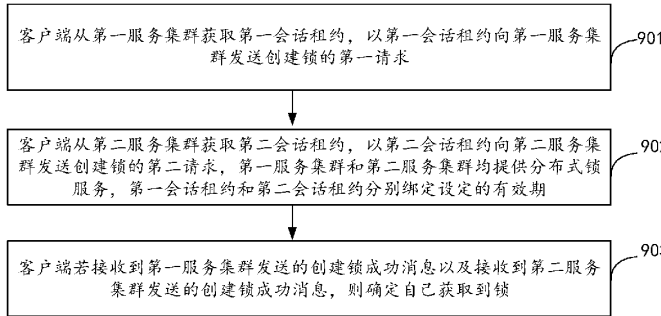


图 9

- 901 A client acquires a first session lease from a first service cluster, and sends, on the basis of the first session lease, to the first service cluster a first request for creating a lock
- 902 The client acquires a second session lease from a second service cluster; and sends, on the basis of the second session lease, to the second service cluster a second request for creating a lock, wherein the first service cluster and the second service cluster both provide a distributed lock service, and the first session lease and the second session lease are respectively bound with set validity periods
- 903 Upon receiving a lock creation success message sent by the first service cluster and a lock creation success message sent by the second service cluster, the client determines that the client itself has acquired the locks

(57) Abstract: The present disclosure provides a distributed lock processing method, a device, a storage medium, and a system. The method comprises: a client sequentially acquires a first session lease from a first service cluster, sends, on the basis of the first session lease, to the first service cluster a first request for creating a lock, acquires a second session lease from a second service cluster, and sends, on the basis of the second session lease, to the second service cluster a second request for creating a lock; the first service cluster and the second service cluster respectively create locks for the client when determining that no other client is occupying the locks, and send lock creation success messages to the client; and then, upon receiving the lock creation success messages sent by the two service clusters, the client determines that the client itself has acquired the locks. The high robustness of the locks is achieved by improving the complexity of a lock contention stage, thereby maintaining the high availability of a distributed lock service when the entire single service cluster is unavailable.

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SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ,
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根据细则4.17的声明:

— 关于申请人有权要求在先申请的优先权(细则
4.17(iii))

本国际公布:

— 包括国际检索报告(条约第21条(3))。

(57) 摘要: 本公开提供一种分布式锁处理方法、设备、存储介质和系统, 该方法包括: 客户端依次从第一
服务集群获取第一会话租约, 以第一会话租约向第一服务集群发送创建锁的第一请求, 从第二服务集群
获取第二会话租约, 以第二会话租约向第二服务集群发送创建锁的第二请求。第一服务集群和第二服务
集群分别在确定没有其他客户端占用锁时为客户端创建锁, 向客户端发送创建锁成功消息。从而客户端
接收到两个服务集群发送的创建锁成功消息时确定自己获取到锁。通过提升抢锁阶段的复杂性换取锁更
高的健壮性, 使得在单个服务集群整体不可用的情况下继续保持分布式锁服务的高可用性。