

(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
2023 年 9 月 28 日 (28.09.2023)



(10) 国际公布号
WO 2023/179505 A1

(51) 国际专利分类号:
H04L 67/1004 (2022.01)

(21) 国际申请号: PCT/CN2023/082353

(22) 国际申请日: 2023 年 3 月 17 日 (17.03.2023)

(25) 申请语言: 中文

(26) 公布语言: 中文

(30) 优先权:
202210287989.3 2022 年 3 月 22 日 (22.03.2022) CN

(71) 申请人: 北京有竹居网络技术有限公司
(**BEIJING YOUZHUJU NETWORK TECHNOLOGY CO., LTD.**) [CN/CN]; 中国北京市平谷区林荫北街 13 号信息大厦 802 室, Beijing 101299 (CN)。

(72) 发明人: 施纯满 (**SHI, Chunman**); 中国北京市朝阳区七圣中街 12 号院融中心 B1 小邮局,

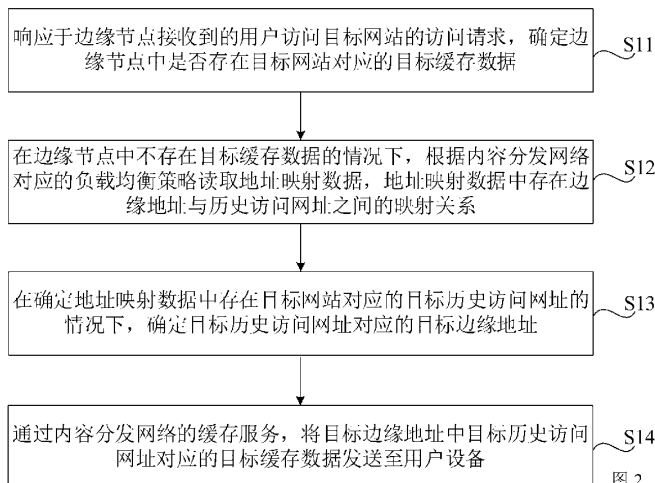
Beijing 100028 (CN)。王剑 (**WANG, Jian**); 中国北京市朝阳区七圣中街 12 号院融中心 B1 小邮局, Beijing 100028 (CN)。

(74) 代理人: 上海光栅知识产权代理有限公司
(**LINKER IP LLC**); 中国上海市长宁区延安西路 889 号 702 室, Shanghai 201109 (CN)。

(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:** SCHEDULING METHOD AND APPARATUS FOR CONTENT DELIVERY NETWORK, AND STORAGE MEDIUM AND ELECTRONIC DEVICE

(54) 发明名称: 内容分发网络的调度方法、装置、存储介质及电子设备



S11 In response to an access request, received by an edge node, of a user for accessing a target website, determine whether target cached data corresponding to the target website is present in the edge node

S12 When there is no target cached data in the edge node, read address mapping data according to a load balancing policy corresponding to a content delivery network, wherein there is a mapping relationship between an edge address and a historical access website in the address mapping data

S13 When it is determined that a target historical access website corresponding to the target website is present in the address mapping data, determine a target edge address corresponding to the target historical access website

S14 Send, by means of a cache service of the content delivery network and to a user equipment, the target cached data corresponding to the target historical access website in the target edge address

图 2

(57) **Abstract:** The present disclosure relates to a scheduling method and apparatus for a content delivery network, and a storage medium and an electronic device. The method comprises: in response to an access request, received by an edge node, of a user for accessing a target website, determining whether target cached data corresponding to the target website is present in the edge node; when there is no target cached data in the edge node, reading address mapping data according to a load balancing policy corresponding to a content delivery network, wherein there is a mapping relationship between an edge address and a historical access website in the address mapping data; when it is determined that a target historical access website corresponding to the target website is present in the address mapping data, determining a target edge address corresponding to the target historical access website; and sending, by means of a cache service of the content delivery network and to a user equipment, the target cached data corresponding to the target historical access website in the target edge address. Therefore, the cost of the internal loss of a content delivery network is reduced.

[见续页]

WO 2023/179505 A1

SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW。

(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: 本公开涉及一种内容分发网络的调度方法、装置、存储介质及电子设备, 该方法包括: 响应于边缘
节点接收到的用户访问目标网站的访问请求, 确定边缘节点中是否存在目标网站对应的目标缓存数据, 在边缘
节点中不存在目标缓存数据的情况下, 根据内容分发网络对应的负载均衡策略读取地址映射数据, 地址映射数
据中存在边缘地址与历史访问网址之间的映射关系, 在确定地址映射数据中存在目标网站对应的目标历史访问
网址的情况下, 确定目标历史访问网址对应的目标边缘地址, 通过内容分发网络的缓存服务, 将目标边缘地址
中目标历史访问网址对应的目标缓存数据发送至用户设备。从而降低了内容分发网络的内部损耗成本。