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- (71) 申请人: 北京火山引擎科技有限公司
(**BEIJING VOLCANO ENGINE TECHNOLOGY CO., LTD.**) [CN/CN]; 中国北京市海淀区紫金数码园 4 号楼 13 层 1309, Beijing 100190 (CN)。
- (72) 发明人: 陈宏智 (**CHEN, Hongzhi**); 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: 北京世辉律师事务所(**SHIHUI PARTNERS**); 中国北京市朝阳区建国门外大街 2 号北京银泰中心 C 座 42 层, Beijing 100022 (CN)。
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(54) **Title:** GRAPH NEURAL NETWORK TRAINING METHOD AND SYSTEM, AND ABNORMAL ACCOUNT IDENTIFICATION METHOD

(54) 发明名称: 图神经网络的训练方法、训练系统及异常账号识别方法

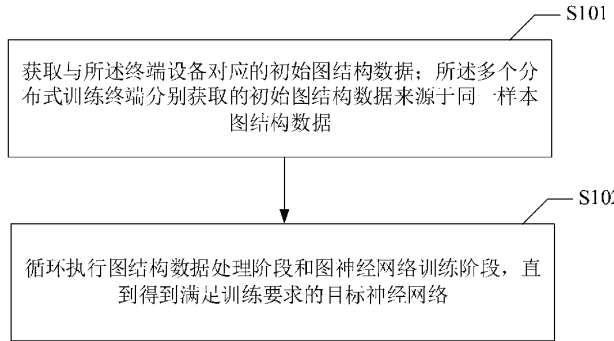


图 1

- S101 Acquire initial graph structure data corresponding to a terminal device, wherein initial graph structure data acquired by each of a plurality of distributed training terminals comes from the same sample graph structure data
- S102 Cyclically execute a graph structure data processing stage and a graph neural network training stage until a target neural network meeting training requirements is obtained

(57) **Abstract:** Provided in the present disclosure are a graph neural network training method and system, and an abnormal account identification method. The graph neural network training method comprises: acquiring initial graph structure data corresponding to a terminal device, wherein initial graph structure data acquired by each of a plurality of distributed training terminals comes from the same sample graph structure data; and cyclically executing the following graph structure data processing stage and graph neural network training stage until a target neural network meeting training requirements is obtained: determining a processing occasion of the

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current instance of execution of the graph structure data processing stage according to historical execution data of historical instances of execution of the graph structure data processing stage and the graph neural network training stage; according to the processing occasion, performing graph structure data processing on the initial graph structure data in the graph structure data processing stage, so as to generate target graph structure data, wherein the graph structure data processing comprises data sampling processing and feature extraction processing; and in the graph neural network training stage, training the target neural network on the basis of the target graph structure data.

(57) 摘要: 本公开提供了一种图神经网络的训练方法、训练系统及异常账号识别方法, 其中, 图神经网络的训练方法包括: 获取与终端设备对应的初始图结构数据; 多个分布式训练终端分别获取的初始图结构数据来源于同一样本图结构数据; 循环执行以下图结构数据处理阶段和图神经网络训练阶段, 直到得到满足训练要求的目标神经网络: 根据历史次执行图结构数据处理阶段和图神经网络训练阶段的历史执行数据, 确定当前次执行图结构数据处理阶段的处理时机; 按照处理时机, 在图结构数据处理阶段对初始图结构数据进行图结构数据处理, 生成目标图结构数据; 图结构数据处理包括数据采样处理和特征提取处理; 在图神经网络训练阶段基于目标图结构数据对目标神经网络进行训练。