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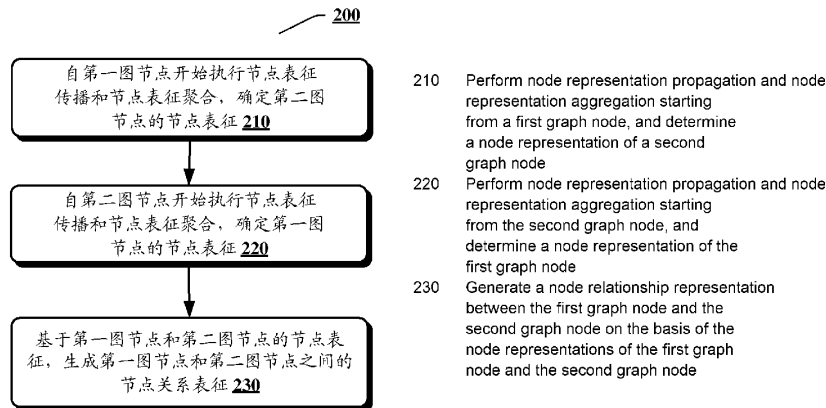
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(54) Title: GRAPH NODE RELATIONSHIP REPRESENTATION GENERATION AND GRAPH NODE SERVICE RELATIONSHIP PREDICTION

(54) 发明名称: 图节点关系表征生成和图节点业务关系预测



(57) Abstract: Embodiments of the present description provide a graph node relationship representation generation method and device, and a graph node service relationship prediction method and device. During the generation of a graph node relationship representation, node representation propagation and node representation aggregation are performed respectively starting from first and second graph nodes, and node representations of the second and first graph nodes are determined; and a node relationship representation between the first and second graph nodes is generated on the basis of the node representations of the first and second graph nodes. During node representation propagation, a previous node propagation representation of each source graph node is propagated to each target graph node of a target graph node set of the source graph node; and current node propagation representations of the target graph nodes are generated according to the node propagation representations received by the target graph nodes and their own previous node propagation representations. During node representation aggregation processing, a current node representation of an aggregation graph node is generated according to a previous node representation of the aggregation graph node and a previous node representation of a neighbor graph node.

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— 包括国际检索报告 (条约第21条(3))。

(57) 摘要: 本说明书实施例提供图节点关系表征生成和图节点业务关系预测方法及装置。在生成图节点关系表征时, 分别自第一和第二图节点开始执行节点表征传播和节点表征聚合, 确定第二和第一图节点的节点表征; 并且基于第一和第二图节点的节点表征, 生成第一和第二图节点之间的节点关系表征。在节点表征传播时, 将每个源图节点的上一节点传播表征传播给该源图节点的目标图节点集合的每个目标图节点; 根据各个目标图节点接收的节点传播表征以及自身上一节点传播表征, 生成各个目标图节点的当前节点传播表征。在节点表征聚合处理时, 根据聚合图节点的上一节点表征以及邻居图节点的上一节点表征, 生成聚合图节点的当前节点表征。