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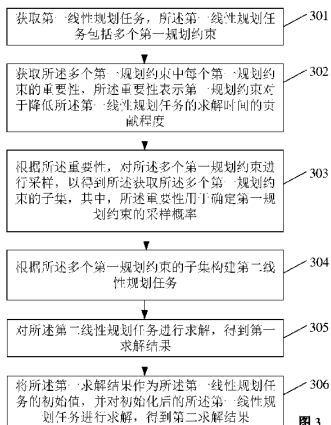
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(54) Title: JOB SOLVING METHOD AND APPARATUS

(54) 发明名称: 一种任务求解方法及其装置



(57) Abstract: A job solving method. The method comprises: acquiring the importance of each of a plurality of first programming constraints in a first linear programming job, wherein the importance represents the degree of contribution of each first programming constraint to the reduction in a solving time of the first linear programming job; sampling the plurality of first programming constraints according to the importance, so as to obtain a subset of the plurality of first programming constraints, wherein the importance is used for determining a sampling probability of the first programming constraint; constructing a second linear programming job according to the subset of the plurality of first programming constraints; and using a first solving result as an initial value of the first linear programming job, and solving the initialized first linear programming job. Since the importance represents the degree of contribution of a first programming constraint to the reduction in a solving time of a first linear programming job, the solution of a sub-model obtained by means of sampling can be close to an optimal solution, thereby accelerating the solving process of the first linear programming job.

(57) 摘要: 一种任务求解方法, 方法包括: 获取第一线性规划任务中多个第一规划约束中每个第一规划约束的重要性, 重要性表示第一规划约束对于降低第一线性规划任务的求解时间的贡献程度; 根据所述重要性, 对多个第一规划约束进行采样, 以得到获取所述多个第一规划约束的子集, 其中, 所述重要性用于确定第一规划约束的采样概率; 根据所述多个第一规划约束的子集构建第二线性规划任务; 将第一求解结果作为第一线性规划任务的初始值, 并对初始化后的第一线性规划任务进行求解。由于重要性表示第一规划约束对于降低第一线性规划任务的求解时间的贡献程度, 可以使采样得到的子模型的解接近于最优解, 从而加速第一线性规划任务的求解过程。

301 Acquire a first linear programming job, wherein the first linear programming job comprises a plurality of first programming constraints.
302 Acquire the importance of each of the plurality of first programming constraints, wherein the importance represents the degree of contribution of each first programming constraint to the reduction in a solving time of the first linear programming job.
303 Sample the plurality of first programming constraints according to the importance, so as to obtain a subset of the plurality of first programming constraints, wherein the importance is used for determining a sampling probability of the first programming constraint.
304 Construct a second linear programming job according to the subset of the plurality of first programming constraints.
305 Solve the second linear programming job to obtain a first solving result.
306 Use the first solving result as an initial value of the first linear programming job, and solve the initialized first linear programming job to obtain a second solving result.

图 3

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