

**DEVICE AND METHOD FOR PREDICTING A PATH TAKEN BY A VEHICLE
FOR A TRANSPORT TASK**

Aspects concern a method for predicting a path taken by a vehicle for a transport task comprising obtaining training data specifying paths taken, representing a set of valid paths as a Boolean formula, converting the Boolean formula into an OBBD[Λ] comprising, for each variable of a set of variables on which the Boolean formula operates, a decision node representing the variable, wherein the decision node has, for each assignment of a value to the variable represented by the decision node, an outgoing edge associated with the value, augmenting each outgoing edge of each decision node with a probability depending on the number of times the location represented by the decision node was visited in the paths specified by the training data elements and predicting a path for a given transport task by sampling an assignment of values to the variables by traversing the OBBD[Λ].

FIG. 4