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(54) Title: METHOD AND SYSTEM FOR AUTOMATICALLY FORMULATING OPTIMIZATION PROBLEM USING MACHINE LEARNING

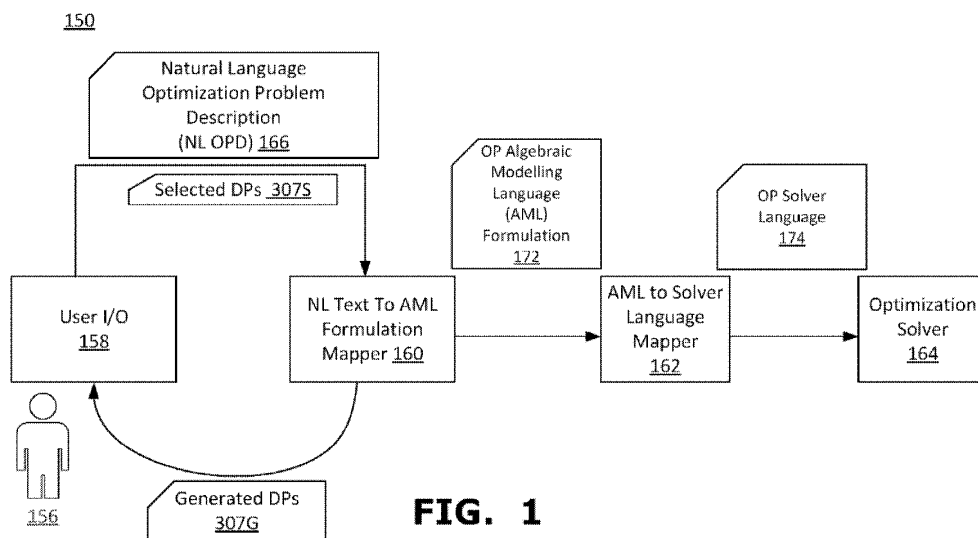


FIG. 1

(57) Abstract: The present disclosure provides a computer implemented method and system for generating an algebraic modelling language (AML) formulation of natural language text description of an optimization problem. The computer implemented method includes generating, based on the natural language text description, a text markup language intermediate representation (IR) of the optimization problem, the text markup language IR including an IR objective declaration that defines an objective for the optimization problem and a first IR constraint declaration that indicates a first constraint for the optimization problem. The computer implemented also includes generating, based on the text markup language IR, the AML formulation of the optimization problem, the AML formulation including an AML objective declaration that defines the objective for the optimization problem and a first AML constraint declaration that indicates the first constraint for the optimization problem. This improves the accuracy in generating an AML formation of an optimization problem.

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