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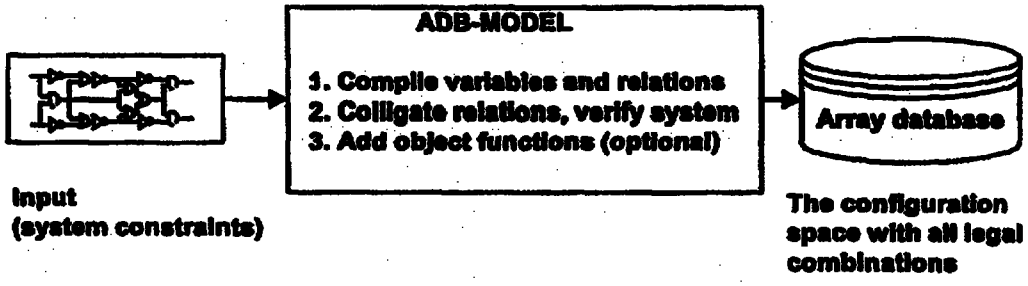
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(54) Title: A DATABASE USEFUL FOR CONFIGURING AND/OR OPTIMIZING A SYSTEM AND A METHOD FOR GENERATING THE DATABASE



(57) Abstract

The invention provides the ability to generate and use a database representing all solutions (legal combinations) satisfying all constraints of configuration problems on finite domains and/or intervals. The configuration space with all legal combinations is stored in a compact way in terms of nested arrays, where each legal Cartesian subspace has a unique index. Thus, the complete configuration space (which can be extended with object functions for optimization) is easily addressable by parallel indexing techniques and the database is therefore suitable for run–time applications (e.g. configuration on the Internet), which must be performed in real time.