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# (12) United States Patent Amid et al.

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### (54) AUTOMATED MULTI-OBJECTIVE SOLUTION SELECTION

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#### (57) ABSTRACT

A method, apparatus and product for automated multiobjective solution selection. The method comprises obtaining a set of solutions to a multi-objective problem, wherein each solution is a non-dominated solution. The method further comprises computing outranking weights for each pair of solutions and selecting a subset of the set of solutions based upon a defensive criteria in with respect to the outranking weights, wherein the defensive criteria relates to a number of solutions that outrank the subset. The method further comprises outputting the subset of the set of solutions.

#### 19 Claims, 2 Drawing Sheets

