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Salcudean et al.

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(54) THREE-DEGREE-OF-FREEDOM PARALLEL PLANAR MANIPULATOR

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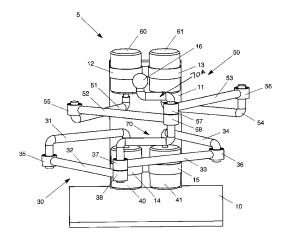
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ABSTRACT

A pair of five-bar mechanisms having their pivotal axes parallel are each mounted at one end to a base and are interconnected at their other ends by a crankshaft to obtain a manipulator generating three degrees of freedom planar motion of an end-effector. Redundant actuation may be used to generate an unlimited rotation range and an extensible link in the crankshaft may be used to provide adjustable torque capabilities during operation.

17 Claims, 13 Drawing Sheets

