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Terpstra

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(54) **PICK AND PLACE DEVICE HAVING TWO PARALLEL AXES**

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(58) **Field of Search** **212/316, 319; 414/749.1, 749.6, 751.1, 626, 917**

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(57) **ABSTRACT**

An apparatus and method for picking and placing an object is disclosed. The apparatus includes an elongated frame, first and second carriages slidingly engaged with the frame, first and second connecting rods pivotally engaged with the first carriage at one end and at least a third connecting rod pivotally engaged with the second carriage at one end, and a gripper pivotally and operatively attached to the connecting rods at their other ends. The method of operation includes moving the gripper in a first direction (upwardly) by sliding the first and second carriages away from each other along the frame, moving the gripper in a second direction (laterally), perpendicular to the first direction, by sliding the first and second carriages together along the frame in the same direction, and moving, the gripper in a third direction (downwardly), opposite to the first direction, by sliding the first and second carriages toward each other along the frame.

17 Claims, 9 Drawing Sheets

