

SNAKE-ARM ROBOT AND JOINT THEREFOR

Abstract of the Disclosure

A snake-arm robot assembly may include a first link and a second link with a joint formed therebetween including first and second contact portions in rolling contact with one another to allow the first and second links to pivot with respect to one another. The first and second contact portions are configured to contact one another at first and second contact points corresponding to a first orientation and third and fourth contact points corresponding to a second orientation. The joint may be configured such that a line of action of a net force acting on the joint is incident with a first reference line extending between the first and second contact points with the links in the first orientation, and the line of action is incident with a second reference line extending between the third and fourth contact points when the links are in the second orientation.

[Figure 2]