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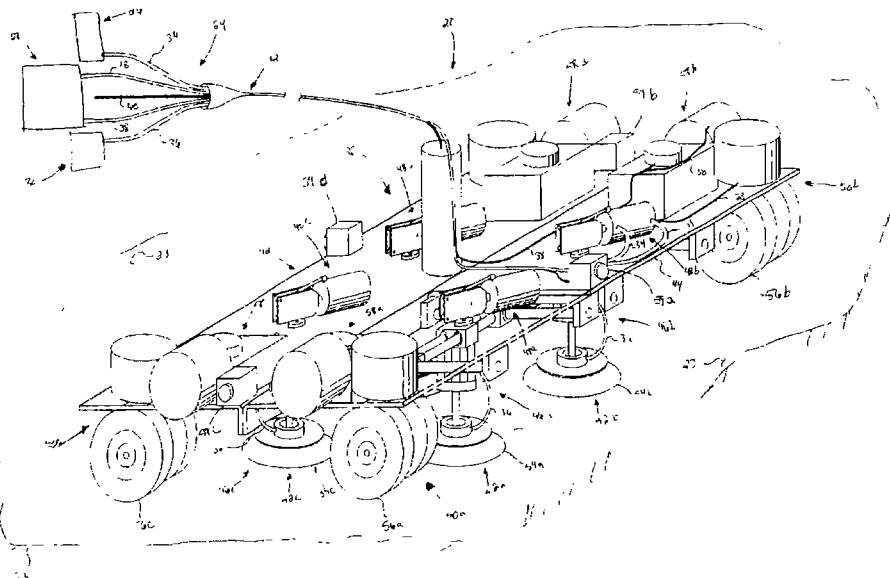
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(54) Title: APPARATUS AND METHOD FOR TRAVERSING CURVED SURFACES BY ADHESION



(57) Abstract: A traction unit (22) capable of traversing and turning on surfaces that include compound curves like the surface of a sphere or are inverted like a ceiling. The traction unit includes a plurality of trucks (50a-50d) operable to propel the unit across a surface and a plurality of adherence members operable to releasably secure the unit (22) to the surface (23). In operation, the adherence members (46a-46d) cyclically attach to and release from the surface as the trucks propel the unit across the surface. Within each cycle, after the unit has traveled a predetermined distance relative to an attached member, the member releases the surface and reattaches to the surface at a different point.

WO 02/060746 A1



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