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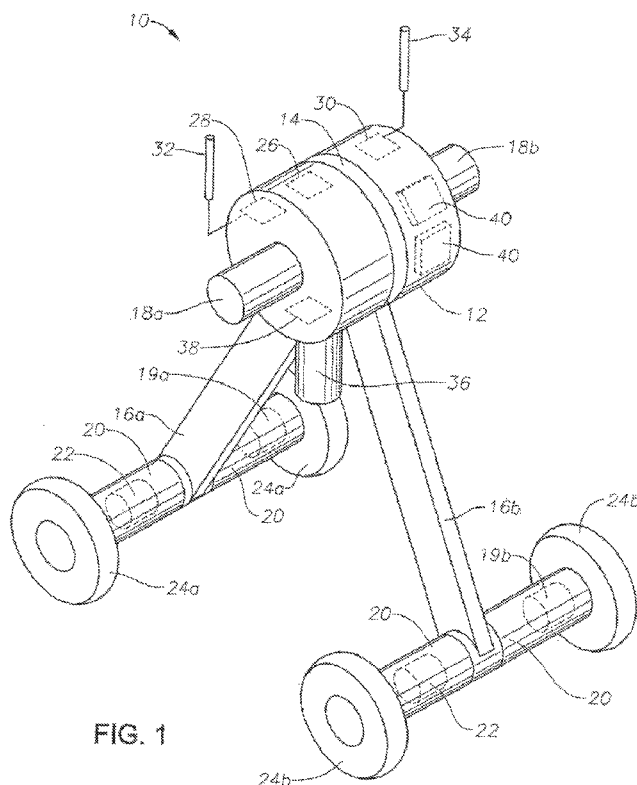
(54) **Title:** OUTER SURFACE INSPECTING ROBOT WITH FLIPPING OVER FLANGE MECHANISM

FIG. 1

(57) **Abstract:** A pipe inspecting robot (10) for traveling along the surface of a pipeline (42), the robot (10) having a body (12), first and second independently articulating legs (16a, 16b) attached to the body (12), and first and second leg motors (18a, 18b) in controlling communication with the first and second articulating legs (16a, 16b), respectively. The robot (10) also has first and second pairs of wheels (24a, 24b) attached to the first and second articulating legs (16a, 16b) at an opposite end of the legs (16a, 16b) from the body (12). The first and second leg motors (18a, 18b) are configured so that when the first pair of wheels (24a) encounters an obstacle, the second leg motor (18b) rotates the second leg (16b) upward away from the surface of the pipeline (42) and radially around the body (12) until the second pair of wheels (24b) contacts the surface of the pipeline (42) on an opposite side of the obstacle, after which the first leg motor (18a) rotates the first leg (16a) upward away from the surface of the pipeline (42) and radially around the body (12) until the first pair of wheels (24a) contacts the surface of the pipeline (42), thereby causing the robot (10) to pass over the obstacle.



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