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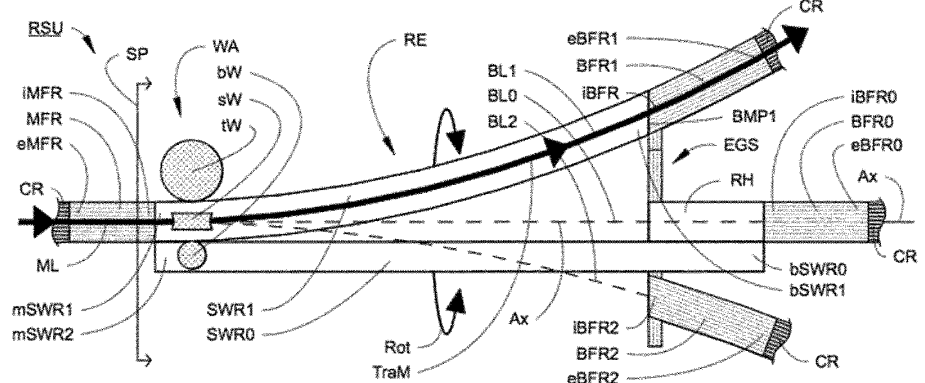
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(54) Title: RAIL-SWITCHING UNIT

FIG. 11A



(57) Abstract: A rail-switching unit, functioning singly or combined with other same units as part of a track-switching unit of a track-switching system of a vehicle-guiding system, comprising a rotatable ensemble (rotatable-hub with attached switch-rails and auxiliary components) and stationary elements (main fixed-rail, branch fixed-rails and supporting structure), wherein the fixed-rails are attached to common rails and the rotatable-hub selectively rotates to allow engagement of each switch-rail simultaneously with the main fixed-rail and with a corresponding branch fixed-rail with the purpose of creating alternative continuous rail paths for the vehicles to move through the rail/track-switching unit. The mechanism is applicable to mono/multi-railed tracks, to supporting/suspended vehicles, to traditional/rail-wrapping wheels-assemblies, to diverge/merge/cross-points, and to a wide variety of track-switching configurations. The invention provides a method and apparatus requiring switch-rails driving forces of minimal magnitude and minimal variability to maximize energy-efficiency, precision and ease of control of the device.

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