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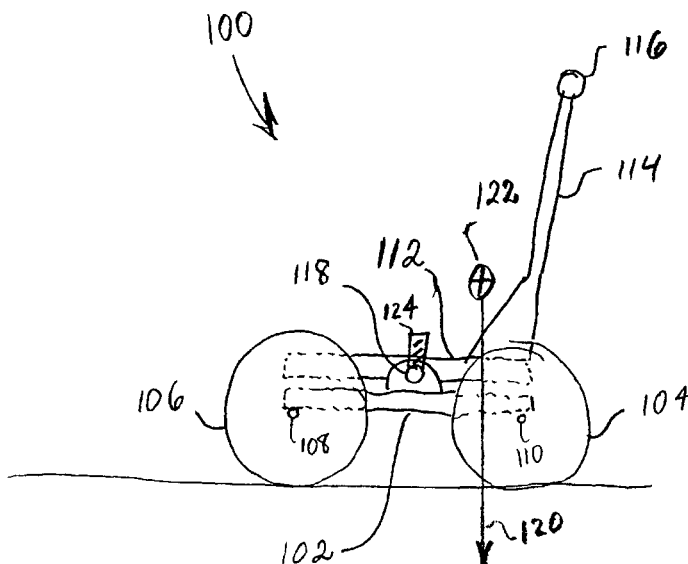
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(54) Title: BALANCING PERSONAL VEHICLE



(57) Abstract: A transportation vehicle (100) for transporting an individual over ground having a surface that may be irregular. The vehicle has a support platform (112) for supporting the subject and the support platform is coupled to a ground-contacting module at a pivot (118). While the ground-contacting module may be statically stable, balance of the support platform with respect to the ground-contacting module (104) is maintained by motion of the ground-contacting module in response to leaning of the support platform. A motorized drive coupled to the ground-contacting module causes locomotion of the vehicle and the subject therewith over the surface, while a control loop, in which the motorized drive is included, dynamically enhances stability in the fore-aft plane by operation of the motorized drive in connection with the ground-contacting module. In the event of failure of the control loop, the pivot connection of the support platform to the ground-contacting module may be locked, thereby ensuring stability of the static assembly.



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