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(56) Cited documents: ---

(57) Abstract:

A robotic lawnmower (100) for movable operation within a work area (205) has a satellite navigation device (190), a deduced reckoning navigation sensor (195) and a controller (110). The controller causes the robotic lawnmower (100) to movably operate within the work area (205) in a first operating mode, the first operating mode being based on positions determined from satellite signals received by the satellite navigation device (190). The controller determines that a position cannot be reliably determined based on satellite signals received by the satellite navigation device (190), and in response thereto causes the robotic lawnmower (100) to movably operate within the work area (205) in a second operating mode. In the second operating mode, a deduced reckoning position estimate is obtained by the deduced reckoning navigation device (195). A search space is defined using the deduced reckoning position estimate, and the satellite navigation device (190) is recalibrated based on the defined search space. Once the satellite navigation device (190) has been recalibrated, the controller causes the robotic lawnmower (100) to again operate in the first operating mode.