

Title (en)

ROBOT LAWN MOWER BUMPER SYSTEM

Title (de)

ROBOTERRASENMÄHERSTOSSFÄNGERSYSTEM

Title (fr)

SYSTÈME DE PARE-CHOCS DE TONDEUSE À GAZON ROBOTIQUE

Publication

**EP 3562630 A1 20191106 (EN)**

Application

**EP 16901162 A 20161230**

Priority

US 2016069530 W 20161230

Abstract (en)

[origin: WO2018125222A1] In one aspect, a mobile robot includes a chassis, a shell moveably mounted on the chassis by a shell suspension system, and a sensor assembly configured to sense a distance and a direction of shell movement relative to the chassis. The sensor assembly includes a magnet disposed on an underside of the shell. The sensor assembly further includes three or more Hall effect sensors disposed on the chassis in a triangular pattern at fixed distances such that the three or more Hall effect sensors are positioned beneath the magnet when no force is applied to the shell, wherein relative motion between the magnet and the Hall effect sensors causes the sensors to produce differing output signals. The mobile robot also includes a controller configured to receive output signals from the Hall effect sensors and to determine a distance and a direction of movement of the shell relative to the chassis.

IPC 8 full level

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