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[U.S. Patent No. 12,005,912](#) entitled “System and Method for Selective Derating of Self-Propelled Work Vehicle Parameters Based on Operating Modes” issued June 11, 2024 to Deere & Company of Moline, Illinois. Invented by Todd F. Velde, Benjamin J. Morrison and John R. Mahrenholz all of Dubuque, Iowa. **Abstract:** A method is provided for controlling a self-propelled work vehicle comprising a work attachment and at least left and right ground engaging units driven by respective first and second drivetrains. Upon determining transition from a first operating mode to a second operating mode (e.g., creep mode), the method includes selectively derating at least a portion of the drivetrain speed commands corresponding to propulsion of the work vehicle (e.g., the average of left and right track speeds), independent of a portion of the drivetrain speed commands corresponding to steering (e.g., the difference between the track speeds). The derate value may optionally be applied only to propulsion commands that produce forward motion, and not for reverse motion. Separate (non-zero) derate settings may optionally be provided for reverse and/or steering functions. Derate functionality may optionally be implemented upon detecting particular types (e.g. dozer) of attachments, or an associated work state.

[U.S. Patent No. 12,006,744](#) entitled “Locking Apparatuses and a Method of Providing Access Control” issued June 11, 2024 to HavenLock Inc. of Franklin, Tennessee. Invented by Alexander Michael Bertelli of Nashville, Tennessee and Kenneth Clay Banks of Franklin, Tennessee. **Abstract:** Apparatuses, methods, and systems for providing a locking apparatus for resisting movement of an openable element are described. The locking apparatus includes a body, an actuator, a lifting member, at least a portion of the lifting member being configured to be raised or lowered relative to the body according to an output of the actuator, the lifting member comprising a contact surface configured to restrict movement of the openable element, and a strap coupled to the body and to the lifting member, the strap configured to permit the lifting member to flex based at least in part upon contact between the lifting member and the openable element and to transfer energy received at the lifting member into the body of the locking apparatus into a surface to which the locking apparatus is mounted.

[U.S. Patent No. 12,006,663](#) entitled “Calibrating Mounting Misalignments of Sensors on an Implement of a Work Machine Using Swing Motion” issued June 11, 2024 to Deere & Company of Moline, Illinois. Invented by Michael G. Kean of Odense, Denmark. **Abstract:** A computer-implemented method of operating an implement for a work machine as disclosed herein includes a calibration mode and an operation mode. In the calibration mode: at least one of one or more components of the implement may be rotated about at least one linkage joint corresponding to the at least one of the one or more components into one or more poses; for the one or more poses, the implement may be revolved about a frame of the work machine; output signals may be received from at least one sensor associated with the at least one of the one or more components; and at least one characteristic for the at least one of the one or more components may be tracked. In the operation mode, movement of the at least one of the one or more components may be based in part on the tracked at least one characteristic.

[U.S. Patent No. 12,006,642](#) entitled “Road Milling Machine and Method for Measuring the Milling Depth” issued June 11, 2024 to Wirtgen America, Inc. of Nashville, Tennessee. Invented by Christian Berning of Zulpich, Germany and Dieter Simons of Buchholz, Germany. **Abstract:** A method is provided for measuring the milling depth of a road milling machine, the machine being operative to mill a ground surface with a milling roller lowered to a milling depth to create a milling track, the machine including at least one side plate located to at least one side of the milling roller to engage an untreated ground surface, and the machine including a stripping plate operative to be lowered onto the milling track generated by the milling roller. The method includes measuring the milling depth of the milling track, the measuring including detecting a measurement value of a ground engaging sensor engaging the milling track.

[U.S. Patent No. D1,031,089](#) entitled “Shade Structure” issued June 11, 2024 to MoveStrong Functional Fitness Equipment, LLC of Charleston, South Carolina. Invented by Jared Kuka also of Charleston, South Carolina. **Claims:** What is claimed is the ornamental design for a shade structure, as shown and described.