

## Patent Protection & Registration

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[U.S. Patent No. 11,629,614](#) entitled “Exhaust Gas Turbocharger Having a Hydrodynamic Plain Bearing or a Hydrodynamic Plain Bearing” issued April 18, 2023 to BMTS Technology GmbH & Co. KG of Stuttgart, Germany and Martin Berger of Oberderdingen, Germany. Invented by Martin Berger of Oberderdingen, Germany; Rüdiger Kleinschmidt of Besigheim, Germany; Frieder Stetter of Stuttgart, Germany; Oliver Kuhne of Stuttgart, Germany; and Steffen Schmitt of Ditzingen, Germany. Abstract: An exhaust gas turbocharger having a hydrodynamic plain bearing or a hydrodynamic plain bearing, comprising a rotor (10) and a counter-bearing part (50) assigned to the rotor (10), wherein a rotor bearing surface (17.1, 17.2, 17.3) of the rotor (10) and a counter-surface of the counter-bearing part (50) face each other to form a hydrodynamic plain bearing, wherein the rotor bearing surface and/or the counterface, when cut along and through the axis of rotation (R) in sectional view, form(s) a continuous bearing contour forming at least two contour sections (44.1 to 44.3; 53.1 to 53.3) to provide hydrodynamic load capacities in both radial and axial directions, and wherein the counter-bearing part (50) is mounted in a bearing housing (60) or housing part. In order to be able to provide such an exhaust gas turbocharger with a compact and efficient bearing arrangement having a hydrodynamic plain bearing, wherein at the same time the hydrodynamic plain bearing can be easily mounted with a small number of parts, provision is made according to the invention that in that a preferably circumferential gap area (57) for forming a trapped oil film is formed between an outer contour of the counter-bearing part (50) and the bearing housing (60) or the housing part, wherein the gap area (57) is spatially connected to a lubricant guide channel (61), and in that the gap area (57) and the continuous bearing contour of the rotor (10) and/or of the counter-bearing part (50) overlap at least sectionally in the direction of the axis of rotation (R).

[U.S. Patent No. 11,629,477](#) entitled “Self-propelled Work Vehicle and Control Method for Blade Stabilization Accounting for Chassis Movement” issued April 18, 2023 to Deere & Company of Moline, Iowa. Invented by Todd F. Velde of Dubuque, Iowa and Daniel M. Kassen of Hazel Green Wisconsin. Abstract: Systems and methods are disclosed herein for controlling a work implement (e.g., front-mounted blade) relative to a work vehicle to produce a desired profile in a ground surface. Chassis-mounted sensor(s) detect an actual pitch velocity and an actual pitch angle of the chassis relative to the ground. Further sensor(s) detect an actual lift position of the blade relative to the chassis. A

desired profile to be produced by the blade with respect to the ground surface is determined, for example via an automated grade control system, via manually-initiated trigger(s), and/or via time-based rolling averages of detected values. A position of the implement is automatically controlled as a function of each of the actual pitch velocity, the actual pitch angle of the chassis relative to the ground, and the actual lift position of the work implement relative to the chassis, corresponding to the desired profile with respect to the ground surface.

[U.S. Patent No. 11,629,463](#) entitled “Machine Train Composed of Road Milling Machine and Road Finisher, and Method for Operating Road Milling Machine and Road Finisher” issued April 18, 2023 to Wirtgen GmbH of Windhagen, Germany. Invented by Christoph Menzenbach of Neustadt (Wied), Germany; René Müller of Vettelschoss, Germany and Cyrus Barimani of Königswinter, Germany. Abstract: A machine train is composed of a road milling machine that travels in front and a road finisher that travels behind. The road milling machine has a profile data determining device configured so that a sequence of height profile data describing the height of the road surface in the longitudinal direction is determined while the road milling machine advances. For transmission of the height profile data, a data transmission device is provided on the road milling machine and a data receiving device is provided on the road finisher. To change the position of the screed, the road finisher has a levelling device that comprises at least one actuator and a control unit, which is configured so that the control unit generates a control signal for controlling the at least one actuator in accordance with a height profile data set.