

## **Patent Protection & Registration**

Patents grant property rights on new and useful inventions, allowing the patent holder to prevent others from using, making, or selling that invention without permission for a limited time. U.S. patents are permitted by the U.S. Constitution and are designed to promote scientific progress and invention. By allowing inventors to profit from licensing or selling their patent rights, inventors can recoup their research and development costs and benefit financially from their inventing efforts. There are three main types of patents utility, plant, and design. Utility and plant patents can last up to 20 years, while design patents can last up to 15 years. When a patent expires, the patented material enters the public domain, making it free to use by anyone without a license. U.S. patents are issued by the United States Patent and Trademark Office (USPTO).

U.S. Patent No. 11,852,651 entitled "System and Method for Determining Accelerometer Orientation" issued December 26, 2023 to Webfleet Solutions B.V. of Amsterdam, Netherlands. Invented by Martin Marenz and Christian Meissner also of Amsterdam, Netherlands. Abstract: Disclosed is a method for determining the installation orientation of an accelerometer system relative to a vehicle within which it has been installed. The method comprises obtaining a plurality of acceleration measurements within the coordinate frame of the accelerometer system and then analysing the distribution of these measurements to determine the relative installation orientation. In particular, the measurements can be grouped according to the vehicle movement phase at which they were obtained and the measurements within the groups then used to determine the lateral and horizontal planes of the vehicle.

U.S. Patent No. 11,851,829 entitled "Earth Working Machine Having a Dust Extraction System with Selectable Filtration of the Extracted Dust-Laden Air" issued December 26, 2023 to Wirtgen GmbH of Windhagen, Germany. Invented by Christian Berning of Zulpich, Germany and Stephan Drumm of Vettelschoss, Germany. Abstract: A selfpropelled earth working machine (10), for example a road milling machine, recycler, or surface miner, includes: a working apparatus (12) for material-removing working of a region of a substrate (U); and an extraction device (40) that is embodied to extract dustladen air from at least one machine region at least one extraction location (46), and to exhaust extracted air at a discharge location (50) different from the extraction location (46), the extraction device (40) comprising a filter apparatus (42) arranged along an operational flow path from the at least one extraction location (46) to the discharge location (50), the filter apparatus (42) encompassing: a filter housing (54); and a filter element (52) received in the filter housing (54), the filter element (52) being embodied to remove dust particles from the air flowing through the filter apparatus (42). The filter apparatus (42) comprises a bypass valve (60) shiftable between two different operating positions, such that a filtering operating position connects the at least one extraction location (46) to the exhaust location (50) with passage through the filter element (52); and a bypass operating position connects the at least one extraction location (46) to the



exhaust location (50) while bypassing the filter element (52)