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 14 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).

Patterson Intellectual Property Law is pleased to announce the following recently issued patents obtained for our clients:

U.S. Patent No. 11,013,827 entitled "Microstructured Haptotaxic Implant" issued May 25, 2021 to BVW Holding AG of Cham, China. The invention relates to the field of tissue engineering and regenerative medicine, and particularly to a three-dimensional biomimetic tissue scaffold that exploits the use of three-dimensional print technology. Surface energy is controlled by precisely placing polymers with differing surface chemistry, and using surface texture and bulk composition to pattern absorbable and non-absorbable polymers for the purpose of promoting functional healing in a mammalian body.

U.S. Patent No. 11,015,304 entitled "Self-propelled Construction Machine and Method for Operating a Self-propelled Construction Machine" issued May 25, 2021 to Wirtgen GmbH of Windhagen, Germany. The self-propelled construction machine, in particular road-milling machine, recycler, stabiliser or surface miner, comprises a machine frame 2, which is supported by a chassis 1, which has wheels or tracks 1A, 1B. A milling drum 4 is arranged on the machine frame. The wheels or tracks 1A, 1B and the milling drum 4 are driven by a drive unit 8. Furthermore, the construction machine comprises a control unit 19 for controlling the drive unit 8 and a signal-receiving unit 18 for detecting at least one measurement variable M(t) which is characteristic of an operating state of the milling drum 4. The construction machine is characterised in that the rotational speed of the milling drum 4 is adapted, on the basis of at least one measurement variable M(t) which is characteristic of a critical operating state of the milling drum, to the operating conditions of the construction machine in such a way that the milling drum is operated in a non-critical operating state. The adaptive open-loop control of the milling drum rotational speed allows the construction machine to be operated at an optimum operating point with respect to the milling drum rotational speed.

U.S. Patent No. 11,015,306 entitled "Automotive Milling Machine, as well as Method for Discharging Milled Material" issued May 25, 2021 to Wirtgen GmbH of Windhagen, Germany. In an automotive milling machine, comprising a machine frame, comprising a controller for the travelling and milling operation, comprising a working drum, comprising a transport conveyor, where the transport conveyor is slewable, relative to

the machine frame, about a first axis extending essentially horizontally under an elevation angle, and sideways about a second axis extending orthogonally to the first axis under a slewing angle, where the transport conveyor discharges the milled material onto a loading surface of a transport vehicle at a specified conveying speed, and where the controller continuously controls positioning of the milled material automatically via, as a minimum, the slewing angle of the transport conveyor, it is provided for the following features to be achieved: the controller specifies and monitors limit values for a maximum permissible slewing angle range for slewing the transport conveyor variable in accordance with the current operating situation.