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).

U.S. Patent No. 11,103,340 entitled "Bio-selective Surface Textures" issued August 31, 2021 to BVW Holding AG of Cham, Switzerland. Invented by Lukas Bluecher of Eurasburg, Germany and Michael Milbocker of Holliston, Massachusetts. Abstract: Bio-selective textured surfaces are described which mediate foreign body response, bacterial adhesion, and tissue adhesion on devices implanted in a mammalian body. Hierarchical levels of texture, some capable of establishing a Wenzel state others a Cassie state, are employed to interface with living structures, either to promote or discourage a particular biological response/interaction. Since a gaseous state is traditionally required to establish a Cassie or Wenzel state, and gases do not remain long in living tissue, described are tissue/device interactions analogous to the above states with the component normally represented by a gas replaced by a bodily constituent, wherein separation of tissue constituents develops and a desired interaction state evolves.

U.S. Patent No. 11,103,944 entitled "Self-sharpening Cutting Tooth for a Felling Apparatus" issued August 31, 2021 to Deere & Company of Moline, Illinois. Invented by Adam G. Harwood and Russell R. Reeg of Dubuque, Iowa. Abstract: A cutting tooth includes a tooth body having a mounting side, a front face spaced from the mounting side, and a plurality of lateral faces extending between the mounting side and the front face, the tooth body having an interior hardness, and a coating applied to at least one of the lateral faces to form a lateral hardface, the lateral hardface having a hardface hardness greater than the interior hardness, an edge of the lateral hardface closest to the front face and a portion of the front face adjacent the edge of the lateral hardface defining a cutting edge region of the tooth.

U.S. Patent No. 11,105,052 entitled "Self-propelled Construction Machine and Method for Working a Ground Pavement" issued August 31, 2021 to Wirtgen GmbH of Windhagen, Germany. Invented by Christian Berning of Zulpich, Germany; Hanjo Held of Windhagen, Germany; and Rene Muller of Vettelschoss, Germany. Abstract: In a self-propelled construction machine (1), in particular road milling machine or surface miner, for working a ground pavement, comprising a milling drum (10), which is mounted in a machine frame, wherein a milling cut develops during milling of the ground pavement with the milling drum (10), wherein the milling drum (10) comprises a first and a second

end side, at least a first measuring device, which is arranged next to the first end side of the milling drum (10) and measures the distance of the machine frame relative to the ground pavement next to the first end side of the milling drum (10), at least a second measuring device, which is arranged next to the second end side of the milling drum (10) and measures the distance of the machine frame relative to the ground pavement next to the second end side of the milling drum (10), and a control device (40) for controlling the milling depth, wherein, in a first milling operation, the control device (40) determines the milling depth by means of measurements performed by the first and the second measuring device, it is provided for the following features to be achieved: a second milling operation is detectable by means of the control device (40), in which the milling drum (10) is positioned on an as yet non-milled milling cut that is arranged next to a previously milled milling cut, wherein the control device (40), as soon as the second milling operation is detected, uses measurements performed by at least a third measuring device in lieu of the first and/or the second measuring device for determining the milling depth.

U.S. Patent No. 11,105,574 entitled “Firearm” issued August 31, 2021 to Caleb Crye of Brooklyn, New York, also invented by Caleb Crye. Abstract: A compact rifle-caliber firearm is provided herein comprising a receiver body, a barrel, and a grip. The barrel is coupled to the receiver body and extends in a forward direction relative to the receiver body. The barrel includes a bore and a bore axis. The grip is coupled to the receiver body and positioned rearward relative to the barrel. The grip is operable to accept a magazine sized for rifle cartridges. The grip includes a grip depth that is less than or equal to two inches. The compact rifle-caliber firearm may further include a magazine operable to be inserted into the grip and operable to receive rifle cartridges. An interior magazine depth may be less than a length of the rifle cartridges. Rifle cartridges positioned in the magazine may be angled relative to an uppermost cartridge.