## **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 <u>United States Patent and Trademark Office (USPTO)</u>

U.S. Patent No. 12,060,261 entitled "Extremal Microstructured Surfaces" issued August 13, 2024 to BVW Holding AG of Cham, China. Invented by Lukas Bluecher of Eurasberg, Germany and Michael Milbocker of Holliston, Massachusetts. Abstract: The present application relates to multifunctional hierarchically microstructured surfaces and threedimensional anchored interfacial domain structures. The multifunctional properties are extremal. In one aspect the microstructured surfaces may be super-adhesive. Examples of super-adhesive mechanisms may include gas trapping, fluid trapping, and solid wrinkle trapping. In another aspect the micro structured surfaces may be nearly adhesive-less. Examples of adhesive-less mechanisms may include inter-solid surface lubrication, energy conserving fluid flows, and super-low drag phase-phase lateral displacement. The extremal structures may be obtained by anchoring mechanisms. Examples of anchoring mechanisms may include Wenzel-Cassie formation, contact angle confusion, and capillary effects.

U.S. Patent No. 12,059,783 entitled "Hand Operated Gripping Tools" issued August 13, 2024 to Nigel Buchanan of Fife, United Kingdom. Also invented by Nigel Buchanan. Abstract: A hand operated gripping tool has a first handle (301), a first jaw (201) connected with the first handle, a second handle (302) pivotably connected with the first handle to permit relative pivoting movement of the second handle with respect to the first handle and a second jaw (202) connected with the second handle. One of the first jaw and second jaw is a removable jaw and the removable jaw is push-fit attachable to the respective handle.