

## **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. 11,179,923 entitled "Nano urethane acrylic with primer coated on a wood board or veneer bonded to PVC sheeting for interior and exterior application" issued November 23, 2021 to Eric R. Hart from Woodburn, Kentucky and James R, Knickerbocker of Nashville, Tennessee. Also invented by Eric R. Hart from Woodburn, Kentucky and James R, Knickerbocker of Nashville, Tennessee. Abstract: A composite laminate system for indoor and outdoor applications, comprising a wood layer comprised of a thin plank or veneer. An aqueous, penetrating primer is applied in a first coating to all surfaces of the wood layer, and the primer is designed to prevent and resist decay from bio attack, insects and other intrinsic bacteria, featuring antibacterial and mold inhibiting properties, including a UV inhibitor. A first aqueous nano urethane acrylic coating is applied on all surfaces of the wood layer on top of the primer coating. At least a second aqueous nano urethane acrylic coating is applied to a top surface of the wood layer on top of the first aqueous nano urethane acrylic coating. A polyvinyl chloride (PVC) foam sheeting layer is glued to the wood layer with coatings using a resin adhesive glue layer interposed between the PVC foam sheeting and the wood layer.

<u>U.S. Patent No. 11,179,829</u> entitled "Ratchet wrenches" issued November 23, 2021 to Nigel Buchanan of Fife, Great Britain. Also invented by Nigel Buchanan of Fife, Great Britain. Abstract: The ratchet 1 is designed such that the flexible clutch ring 500 forms the mid part of an extremely strong laminate like housing 200 structure, under torque conditions the resultant compression forces applied to the clutch ring 500 are substantially dissipated around its circumference 507 and inner surface 508, this inward force clamping upon the inherently strong drive outer surface 405. The resultant pseudo laminate like construction of the drive 400, clutch 500 and housing 201, 202 enables a proportionately far stronger reduced width ratchet 1.