

## 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. 11,452,671](#) entitled “Vibration and Heat Generation Apparatus for Use with Compression Wraps” issued September 27, 2022 to Hyper Ice, Inc. of Irvine, California. Invented by Robert Marton of Yorba Linda, California and Anthony Katz of Laguna Niguel, California. A system applies compression, vibration and heat to a body part of a person. The system includes a portable vibration and heat generation apparatus having a flexible support platform and a bag-like enclosure extending from the support platform. A cylindrical control unit is mounted to the support platform and extends perpendicularly from the support platform. The control unit has a diameter of between 50 millimeters and 100 millimeters. The control unit houses electronic circuitry and at least one battery. Four vibration pods extend from the support platform into the bag-like structure. The bag-like structure also houses a heat generation unit. The control unit extends through a circular bore in a compression wrap. The compression wrap is securable to a body part with a distal wall of the bag-like enclosure against the body part. The system selectively applies vibration, heat or a combination of vibration and heat to the body part.

[U.S. Patent No. 11,453,103](#) entitled “Locking Clutch Ratchet Wrenches” issued September 27, 2022 to Nigel Buchanan of Fife, United Kingdom. Also invented by Nigel Buchanan. A locking clutch ratchet wrench (1) is configured such that a clutch ring (500) forms the mid part of a laminate like structure. Under torque applying conditions, the compression forces applied to the clutch ring (500) are substantially dissipated around the circumference (507) of the clutch ring. This inwardly directed force clamp against the inherently strong outer surface 405 of the drive element (400). The resultant pseudo laminate structure of the drive element (400), clutch (500) and housing (201, 202) enables the construction of a proportionately stronger ratchet wrench of reduced height or width.

[U.S. Patent No. 11,453,510](#) entitled “Apparatuses, Systems, and Methods for Improved Landing of Aerial Vehicles” issued September 27, 2022 to Opti-Logic Corporation of Tullahoma, Tennessee. Invented by Jonathan Murphy also of Tullahoma, Tennessee. A



device attachable to an aerial vehicle that incorporates electronics to control sensor position data and verify safety of aerial vehicle landing area. The device may be easily attached to an existing aerial vehicle. The device monitors sensor data from one or more distance measuring sensors and pressure sensors to set an angle of incidence for the distance measuring sensors. This pressure sensor derived angle setting allows for a continual data mapping of the aerial vehicles landing area to enhance and improve the landing zone.

[U.S. Patent No. 11,454,046](#) entitled "Security Keypad Mount Assembly" issued September 27, 2022 to Kalen Thompson of Thompson Station, Tennessee. Also invented by Kalen Thompson. The present disclosure relates, in one embodiment to a security keypad mount assembly. The assembly may include a front and rear plate wherein the rear plate is slidably attached to the front plate to adjustability. The front plate may include slots for the rear plate to slide along. The front plater may further include through-holes for mounting the assembly to a door frame or building structure. The rear plate may include a chamber to allow a wire loom exiting a security keypad to be hidden and limit tampering when the security keypad and mount assembly are installed.