

## 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 [United States Patent and Trademark Office \(USPTO\)](#).

U.S. Patent No. 11,882,793 entitled “System and Method for Estimating or Predicting the Life State of Components in an Agricultural Baler” issued January 30, 2024 to Deere & Company of Moline, Illinois. Invented by Timothy J. Kraus of Blakesburg, Iowa. Abstract: Systems and methods for estimating remaining life in an agricultural baler comprise a reciprocating plunger for compressing gathered agricultural material into bales. A first sensor generates signals corresponding to force applied to the reciprocating plunger and any baling components configured to at least partially carry forces applied to the plunger. Based on input signals from at least the first sensor, forces associated with a load are recorded and a life state is estimated for the reciprocating plunger and/or at least one associated baler component. An output signal is then generated corresponding to the one or more estimated life states. In an embodiment, an input signal from a second sensor indicates completion of a bale, wherein an amount of life consumed from the plunger and/or baling components is determined in association with the bale, based at least in part on operating conditions of the baled material.

U.S. Patent No. 11,883,937 entitled “Hand Operated Gripping Tools” issued January 30, 2024 to Nigel Buchanan of Fife, United Kingdom. Also invented by Nigel Buchanan. Abstract: The main fixed handle optionally incorporates two swivel out arms, which can form part of a three-legged base. When operated thus, the jaws and moving handle point generally upwards from the formed base, the moving handle can now be operated by one hand leaving the other free to position the workpiece. The moving handle can incorporate a further locking switch that can be utilised in both a switchable locking position or non-locking position upon a sprung toothed strut between the handles, at least one of which further incorporates a curved resilient portion in order to provide useful sprung closure of the parallel moving jaws upon the workpiece in the locking method. A lanyard can be optimally attached to the swivel out arm ends to provide the user with a chest mounted portable vice.

U.S. Patent No. 11,882,890 entitled “Pre-Knotted Adjustable Necktie” issued January 30, 2024 to John William Dodd of Nashville, Tennessee. Also invented by John William Dodd.



Abstract: A pre-knotted adjustable necktie eliminates the difficulty of tying a knot with a panel of flexible material, and preserves the adjustability of a conventional necktie. The pre-knotted adjustable necktie includes: a panel of flexible material, having a proximal blade end portion, a distal tail end portion, and a middle portion; a passage through the flexible material at a location in the tail end portion proximate to the middle portion; a coupling member connecting edges of the middle portion to form a first loop; a knot having the tail end portion extending through the first loop to form a second loop, and the blade end portion extended through the first loop to form a third loop; and a neck loop formed by an extension of the tail end portion through the second loop and the third loop, and the tail end portion further extended through the passage.