## **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. 11,504,471 entitled "Systems and Methods for Detecting Disruptions in Fluid Delivery Devices" issued November 22, 2022 to Diatech Diabetes Inc. of Memphis, Tennessee. Invented by Luis E. Blanco of Seattle, Washington; John H. Wilcox of Rockledge, Florida; Nicholas R. Cooper of Riverview, Florida; and John Clark Gray of Tallahassee, Florida. Abstract: A sensor system capable of detecting tissue counter pressure from patients that utilize infusion pumps to administer their medication is provided. Embodiments include a retrofitted piece that is placed between the user's infusion set and pump, as well as a "smart" infusion set configured for measuring characteristics of a fluid traveling therethrough. Hardware is provided that couples with the sensor to store, analyze, and compare data to distinguish between normal and nonnormal injection/infusion profiles. An alert system notifies the user of a malfunction within the pump, within the infusion set, or at the injection/infusion site.

<u>U.S. Patent No. 11,505,016</u> entitled "Tire Damage Detection System and Method" issued November 22, 2022 to Bridgestone Europe NV/SA of Zeventem, Belgium. Invented by Lorenzo Alleva and Marco Pascucci both of Roma, Italy. Abstract: The invention concerns a system and a method for detecting potential damages to tires of motor vehicles due to impacts against/on obstacles.

<u>U.S. Patent No. 11,506,585</u> entitled "Wear Prognosis Method and Maintenance Method" issued November 22, 2022 to Wirtgen GmbH of Windhagen, Germany. Invented by Sven Paulsen of Bonn-Bad Godesberg, Germany; Stefan Wagner of Bad Honnef, Germany; and Cyrus Barimani of Königswinter, Germany. Abstract: A wear prognosis method and a maintenance method for an earth working machine are disclosed, along with an apparatus for performing the method. Provision is made that the current wear state of one or more earth working tools is sensed. The residual wear capacity until the wear limit is reached is then ascertained from the current wear state.