

## 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. 11,580,565](#) entitled “Programmatic Merchandising System and Method for Increasing In-store Transaction Conversions Via Heuristic Advertising” issued February 14, 2023 to NewsBreak Media Networks, Inc. of Knoxville, TN. Invented by Robert Bradley and Brian Nelson also of Knoxville, Tennessee. Abstract: An automated advertising scheduling and distribution process reacts to the effectiveness of sales data. A hosted platform creates location-specific playlists based on key consumer variables that impact buying behavior, and dynamically performs data analytics. Utilizing a programmatic system and machine learning algorithmic methodology, the platform gathers data from the retailer’s data warehouse and automatically pulls location-by-location sales data while simultaneously collecting playback data. If sales are not being affected on the particular item that is being promoted, then the platform may be configured to replace that message with a promotional message for another product with a higher likelihood of engagement and conversion. This virtual feedback loop ensures that the platform is optimizing the most effective series of promotional messages for any given location. The content management administrator accordingly delivers relevant advertising/messages to various display screens integrated into fuel pumps, through the store, and to retailer loyalty program applications.

[U.S. Patent No. 11,577,796](#) entitled “Auto Track Alignment and Undercarriage Swing” issued February 14, 2023 to Deere & Company of Moline, Illinois. Invented by Dnyaneshwar Jagtap of Dhule, Indonesia; Dipankar Dongare of Pune, Indonesia; Rushikesh Jadhav of Parbhani, Indonesia; Lance Sherlock of Asbury, Iowa and David Veasy of Dubuque, Iowa. Abstract: A working machine includes an undercarriage, a main frame, a swing bearing supporting the undercarriage from the main frame, a swing motor configured to pivot the main frame on the swing bearing about a pivot axis, a boom extending from the main frame along a working direction, and a pivot angle sensor configured to provide a pivot angle signal corresponding to a pivot position of the main frame relative to the undercarriage about the pivot axis. A controller is configured to receive the pivot angle signal and to drive the swing motor automatically.

[U.S. Patent No. 11,576,303](#) entitled "Shear Bar" issued February 14, 2023 to Betek GmbH & Co. KG of Aichhalden, Germany. Invented by Wolfgang Essig of Rosenfeld, Germany; Uwe Schneider of Rottweil, Germany; Fabian Seifried of Herrenzimmern, Germany and Julian Roming of Schramberg, Germany. Abstract: The invention relates to a shear bar (20), in particular for a forage harvester or another agricultural or silvicultural machine, having a carrier (21) that comprises a cutting region (30); a plurality of cutting elements (31) being set alongside one another in the cutting region (30); the cutting elements (31) comprising a partial edge and at least some of the partial edges forming a cutting edge (32) that is embodied to form, with a knife bar, a cutting engagement for the material to be shredded; the cutting edge (32) forming a transition between a cutting surface (32.1) that is constituted by the cutting elements (31) and extends transversely to the cutting direction, and an exposed surface (32.2) that extends substantially in a cutting direction and indirectly or directly adjoins the cutting edge (32). A shear bar of this kind can be configured to be break-resistant with little complexity in terms of parts and manufacture if provision is made that an infeed element (34), which is embodied as a sintered part made of hard material having an infeed bevel (34.6) profiled on in the sintering process, is provided on or in the row of cutting elements (31); the infeed bevel (34.6) being carried over indirectly or directly into the cutting edge (32); and the infeed bevel (34.6) being arranged at a tilt with respect to the cutting edge (32) in such a way that it is arranged with a setback with respect to the exposed surface (32.2) and toward the cutting surface (32.1).