

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. 11,661,287](#) entitled “Hopper” issued May 30, 2023 to Kleemann GmbH of Göppingen, Germany. Invented by Elena Burgart of Nürtingen, Germany; Christian Knoblich of Stuttgart, Germany; Reiner Köpf of Gingen an der Fils, Germany. **Abstract:** The invention relates to a hopper, in particular for a rock-crushing plant, a screening plant or the like having a side wall that bounds the hopper space, a wall broadening portion being pivotably coupled to the side wall, an auxiliary means for positioning in an upright state being assigned to the wall broadening portion in order to move the wall broadening portion from a folded-down transport position to an upright working position, and wherein the auxiliary means for positioning in an upright state has an actuator that is coupled to a pivotably mounted lever. In the context of such a hopper, in order to be able to easily move the wall broadening portion in a controlled and reliably manner between the transport position and the working position, it is provided according to the invention that the lever is pivotably coupled to an equalizing lever, and that the equalizing lever is pivotably coupled to the wall broadening portion.

[U.S. Patent No. 11,661,722](#) entitled “System and Method for Customized Visualization of the Surroundings of Self-propelled Work Vehicles” issued May 30, 2023 to Deere & Company of Moline, Iowa. Invented by Rachel Brufloft of Dubuque, Iowa; Michael G. Kean of Maquoketa, Iowa; Keith J. Lensing of Asbury, Iowa and Giovanni A. Wuisan of Epworth, Iowa. **Abstract:** A self-propelled work vehicle is provided with a control system enabling the use of gestures on a touch screen interface to provide a simple and intuitive way to manipulate displayed images, and/or automatically changing a region of interest of a surround view camera unit. Exemplary automatic manipulation may be implemented if a work vehicle is detected as performing a certain function, wherein surround view images can automatically change to a smaller sub-view which gives more focused visibility appropriate to that function. The distortion and simulated field of view of surround view images may also/otherwise be automatically manipulated based on a detected operation/function. The control system can also/otherwise dynamically modify surround view images in accordance with a detected work state, and/or based on outputs from an obstacle detection system. The control system can also/otherwise lock



the sub-view to recognized objects of interest, such as trucks or trenches.