

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. 11,117,747](#) entitled “Feed Unit for a Processing Plant, in Particular for a Crushing or Screening Station” issued September 14, 2021 to Kleemann GmbH of Goppingen, Germany. Invented by Reiner Kopf of Gingen an der Fils, Germany; Christian Knoblich of Stuttgart, Germany and Wolfgang Schmid of Rechberghausen, Germany. Abstract: The invention relates to a feed unit for a processing plant, in particular for a crushing or screening station, having a feed chute which has a chute beam (90), wherein the chute beam (90) has a bottom (92), wherein the bottom (92) extends in the conveying direction (V) of the feed chute, wherein at least one beam (130) extending in the conveying direction (V) is arranged in the area of the underside of the bottom (92) and supports the bottom (92), wherein furthermore a bracket (140) is provided, which supports at least one vibration exciter (150), and wherein the bracket (140) is connected to the beam (130). A particularly resilient and in continuous operation durable feed unit is created according to the invention by the beam forming a closed hollow section or at least a wall segment of the beam (130) in conjunction with a reinforcing section (120) connected thereto forming a closed hollow section, and the hollow section extending with an angular deviation in the range of +/-15.degree. in the direction of the excitation direction.

[U.S. Patent No. 11,118,761](#) entitled “Lighting Structure End Cap Mounts to Secure Cable without Leakage Paths” issued September 14, 2021 to Universal Lighting Technologies of Madison, Alabama. Invented by Arjun Bhovi of Madison, Alabama; Christopher Radzinski of Huntsville, Alabama and Theodore Kluska of Madison, Alabama. Abstract: An end cap mounting system for a lens of a lighting fixture includes a lens engagement portion having a proximal end, a distal end, an outer surface and an inner surface. The inner surface defines a cavity extending distally into the lens engagement portion from the proximal end for a cavity depth to a cavity end surface. The cavity has an inner wall with a perimeter corresponding to a first asymmetric shape of an outer profile of a lens. A central protrusion extends proximally from the cavity end surface towards the proximal end. The protrusion has an outer wall with a perimeter that corresponds to a second asymmetric shape of an inner profile of the lens. A gasket-receiving recess is



positioned proximate to the cavity end surface between the outer wall of the central protrusion and the inner wall of the cavity to receive a gasket.

[U.S. Patent No. 11,122,668](#) entitled “Power Supply and Power Clamping Method at High Ambient Temperatures” issued September 14, 2021 to Universal Lighting Technologies of Madison, Alabama. Invented by Wei Xiong and Levi Shareck also of Madison, Alabama. Abstract: A resonant power converter is disclosed with a method of limiting output current therefrom. A switch operating frequency is regulated to provide output current to a load, wherein an error signal corresponds to a difference between the output current and a reference value. The error value is fed back to switch operating frequency control circuit via an optocoupler. A maximum detector diode current for the optocoupler is clamped to a maximum value when the error signal exceeds or equals a clamping threshold value. The clamping threshold value may correspond to a maximum output current at a maximum normal operating temperature, wherein the method utilizes the relationship between ambient temperature and the current transfer ratio (CTR) for the optocoupler. The CTR decreases when the detector diode current is clamped, which decreases output current and output power, reducing power loss in the enclosure and relieving thermal stress at high temperatures.