

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. 11,626,978](#) entitled "Secure Group Communication in a Cluster of Devices" issued April 11, 2023 to FIMER S.P.A. of Milano, Italy. Invented by Filippo Vernia of La Spezia, Italy; Luigi Lamoglie of Terranuova Bracciolini, Italy; Gianluca Dini, Livorno, Italy and Mariano Basile of Taranto, Italy. Abstract: The method is aimed at providing secure multicast communication between a plurality of devices forming a cluster of devices connected to one another by a local network. The method provides for electing a key distribution device and generating a group encryption key in said key distribution device. A secure communication channel is then established between the key distribution device and each device of a group of devices to be connected to the cluster. The group encryption key is transmitted from the key distribution device to the devices to be connected to the cluster and stored thereby. When all devices of the cluster have received the group encryption key, multicast communication among the devices of the cluster can start.