

Title (en)

SYSTEM AND METHOD FOR TRANSMITTING DATA BY MEANS OF A LIGHT FLUX, AND TECHNICAL UNIT

Title (de)

SYSTEM UND VERFAHREN ZUR DATENÜBERTRAGUNG MITTELS EINES LICHTSTROMS UND TECHNISCHE ANLAGE

Title (fr)

SYSTÈME ET PROCÉDÉ DE TRANSMISSION DE DONNÉES AU MOYEN D'UN FLUX LUMINEUX, ET UNITÉ TECHNIQUE

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Application

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Abstract (en)

[origin: WO2021239377A1] The invention relates to a system for transmitting data by means of a light flux (20), comprising a transmitter (14) for emitting a light flux (20), in which the data to be transmitted is coded, and a receiver (12) for receiving the light flux (20) emitted by the transmitter (14). The transmitter (14) comprises a polarization device (30) which generates the light flux (20) with a data polarization (Θ) that can change over time, said data to be transmitted being coded in the data polarization (Θ) that can change over time of the light flux (20) generated by the polarization device (30); the receiver (12) comprises a polarization unit (16) which detects the respective data polarization (Θ) of the light flux (20); and the receiver (12) comprises an analysis unit (6) which decodes the data to be transmitted from the light flux (20) data polarization (Θ) detected by the polarization unit (16). The invention also relates to a method for transmitting data using a light flux (20) in a system (10) according to the invention and to a technical unit which comprises a system (10) according to the invention and in which a data transmission is carried out by means of a light flux (20) using the method according to the invention, wherein the receiver (12) is arranged in or on an autonomously driving vehicle (25) which has a drive device, an electric energy storage device for supplying the drive device, and a control unit for controlling the drive device.

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