

Title (en)

SYSTEM FOR TRANSMITTING DATA BY MEANS OF OPTICAL RADIATION AND METHOD ASSOCIATED THEREWITH

Title (de)

SYSTEM ZUR ÜBERTRAGUNG VON DATEN MITTELS OPTISCHER STRAHLUNG UND VERFAHREN IM ZUSAMMENHANG DAMIT

Title (fr)

SYSTÈME DE TRANSMISSION DE DONNÉES AU MOYEN D'UN RAYONNEMENT OPTIQUE ET PROCÉDÉ ASSOCIÉ

Publication

EP 3729688 A1 20201028 (EN)

Application

EP 18782796 A 20180910

Priority

- CH 11212017 A 20170908
- IT 201700101057 A 20170908
- IB 2018055679 W 20180730
- IB 2018056879 W 20180910

Abstract (en)

[origin: WO2019048943A1] Transmitter device (99) transmitting by means of optical radiation (108), said device being characterized in that it comprises at least one modulator stage (101) comprising: - an input (105) adapted to receive during use an electrical signal (s(t)) to be modulated, and - an output (107) transmitting, towards at least one photoemitter (100), a voltage or current driving signal (v7(t), i7(t)) for which said electrical signal (s(t)) represents a modulating signal, where said at least one photoemitter (100) transmits an optical radiation (108) with radiation intensity $I_r(t)$ variable in accordance with said driving signal (v7(t), i7(t)), and wherein, between said input and said output of said modulator stage (107), a cascade of a first AM modulator (102) and of a second FM modulator (103) is present, said FM modulator (103) being placed downstream of said AM modulator (102) and having an own output directly connected with the output (107) of said modulator stage (101), wherein said AM modulator (102) has an input directly connected to said input (105) of said modulator stage and is directly supplied by means of said electrical signal (s(t)) to be modulated and wherein said AM modulator (102) has an output on which it generates an intermediate signal (s2(t)) supplied as an input to said FM modulator (103). The present invention also regards a receiver device, also multi-channel, and methods for transmission and modulation, and reception and demodulation, employing a hybrid AM modulation/FM.

IPC 8 full level

H04B 10/114 (2013.01); **H04B 10/50** (2013.01); **H04B 10/516** (2013.01)

CPC (source: EP)

H04B 10/114 (2013.01); **H04B 10/504** (2013.01); **H04B 10/516** (2013.01)

Citation (search report)

See references of WO 2019049093A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2019048943 A1 20190314; EP 3729686 A1 20201028; EP 3729688 A1 20201028

DOCDB simple family (application)

IB 2018055679 W 20180730; EP 18760023 A 20180730; EP 18782796 A 20180910