Title (en)

PLUG

Title (de)

STECKER

Title (fr)

CONNECTEUR

Publication

EP 3493331 A1 20190605 (DE)

Application

EP 17205169 A 20171204

Priority

EP 17205169 A 20171204

Abstract (en)

[origin: WO2019110547A1] The invention relates to a plug (1) for inserting into at least two layers (5, 6) made of electrically conductive material and into a layer (7) made of material conducting light waves, having a housing (2), at least two electrical contact elements (8, 9), which are insulated from each other, and a light-guiding optical contact element (10). The at least two electrical contact elements (8, 9) and the light-guiding optical contact element (10) are arranged on at least one connection pin (3, 3a, 3b, 3c), which protrudes from the housing (2) and which is formed so as to converge to at least one point (S) at the end (3s) furthest from the housing (2), with the electrical contact elements (8, 9) being arranged at different longitudinal positions (L8, L9) on the at least one connection pin (3, 3a, 3b, 3c). The housing (2) has at least one socket (11) for a plug connector (V) of an electrical and/or optical device (G), which is to be connected to the connection pin (3, 3a, 3b, 3c), and the socket (11) has at least one connection (12, 12a, 12b), which is connected to at least one of the electrical contact elements (8, 9) and to the optical contact element (10). The housing (2) has a control unit (13), via which the electrical contact elements (8, 9) and/or the optical contact element (10) are connected to the at least one connection (12, 12a, 12b).

Abstract (de)

Stecker (1) zum Einstechen in zumindest zwei Schichten (5, 6) aus elektrisch leitfähigem Material und in eine Schicht (7) aus Lichtwellen leitendem Material, mit einem Gehäuse (2), zumindest zwei voneinander isolierten elektrischen Kontaktelementen (8, 9) und einem lichtleitenden optischen Kontaktelement (10), wobei die zumindest zwei elektrischen Kontaktelemente (8, 9) und das lichtleitende optische Kontaktelement (10) an zumindest einem vom Gehäuse (2) abstehenden Anschlussstift (3, 3a, 3b, 3c) angeordnet sind, welcher am vom Gehäuse (2) abgewandten Ende (3s) zu zumindest einer Spitze (S) zusammenlaufend ausgebildet ist, wobei die elektrischen Kontaktelemente (8, 9) in unterschiedlichen Längspositionen (L8, L9) an dem zumindest einen Anschlussstift (3, 3a, 3b, 3c) angeordnet sind, wobei das Gehäuse (2) zumindest eine Steckbuchse (11) für einen Steckverbinder (V) eines mit dem Anschlussstift (3, 3a, 3b, 3c) zu verbindenden elektrischen und/oder optischen Geräts (G) aufweist, wobei die Steckbuchse (11) zumindest einen Anschluss (12, 12a, 12b) aufweist, welcher mit zumindest einem der elektrischen Kontaktelemente (8, 9) und/oder mit dem optischen Kontaktelement (10) verbunden ist.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

EP 3163160 A1 20170503 - MAYER SEBASTIAN [AT]

Citation (search report)

- [ID] EP 3163160 A1 20170503 - MAYER SEBASTIAN [AT]
- [I] US 3610933 A 19711005 - SHAVER JOHN A, et al
- [A] CA 2684819 A1 20110502 - SU ALLEN H L [CA]
- [A] US 3809966 A 19740507 - TIRRELL C, et al
- [A] US 3860317 A 19750114 - WILLIAMS LON A, et al
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- [A] FR 2694322 A1 19940204 - ISOLANTS THERMIQUES EXPANSES C [FR]

Designated contracting state (EPC)

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DOCDB simple family (application)

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