

Title (en)

AXIAL PRELOAD FOR DEMOUNTABLE CONNECTORS

Title (de)

AXIALE VORSPANNUNG FÜR LÖSBARE STECKVERBINDUNGEN

Title (fr)

PRÉCHARGE AXIALE POUR CONNECTEURS DÉMONTABLES

Publication

EP 3274751 A1 20180131 (EN)

Application

EP 16717732 A 20160322

Priority

- US 201562136599 P 20150322
- US 2016023648 W 20160322

Abstract (en)

[origin: WO2016154233A1] The present invention provides a spring bias that is particularly suited for use to preload a low profile ferrule of an optical connector. In one embodiment, the spring bias is effected by a planar flexure (20) external of the connector. The ferrule (11) is coupled to the planar flexure with its longitudinal axis through the center of the planar flexure. The planar flexure (20) is structured with flexure members (26) in a plane that are configured to not create any torque load on the ferrule, or if torque loading is present, insignificant torque load to cause misalignment of the ferrule, when the flexure flexes out of its nominal plane to create an axial preload on the ferrule. In another embodiment, a common yoke (45) is applied to bias planar flexures against a plurality of ferrules (11), wherein a planar flexure is coupled to each ferrule connector. In a further embodiment of the present invention, instead of using planar flexures, a yoke is provided to apply an axial preload to all ferrule connectors coupled to the yoke, by means of a coil spring applied to center of the yoke, external of the ferrule connectors.

IPC 8 full level

G02B 6/42 (2006.01)

CPC (source: CN EP)

G02B 6/3821 (2013.01 - CN); **G02B 6/3869** (2013.01 - CN); **G02B 6/4248** (2013.01 - CN EP); **G02B 6/4249** (2013.01 - CN EP)

Citation (search report)

See references of WO 2016154233A1

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 2016154233 A1 20160929; AU 2016235238 A1 20171109; BR 112017019128 A2 20180502; CA 2978957 A1 20160929; CN 107407785 A 20171128; EP 3274751 A1 20180131; IL 254362 A0 20171130; JP 2018509654 A 20180405; KR 20170127566 A 20171121; MX 2017012156 A 20180219; RU 2017136257 A 20190423

DOCDB simple family (application)

US 2016023648 W 20160322; AU 2016235238 A 20160322; BR 112017019128 A 20160322; CA 2978957 A 20160322; CN 201680017670 A 20160322; EP 16717732 A 20160322; IL 25436217 A 20170906; JP 2017546851 A 20160322; KR 20177030026 A 20160322; MX 2017012156 A 20160322; RU 2017136257 A 20160322