

(12) International Application Status Report

Received at International Bureau: 06 September 2017 (06.09.2017)

Information valid as of: 20 November 2017 (20.11.2017)

Report generated on: 17 July 2019 (17.07.2019)

(10) Publication number:

WO2018/043289

(43) Publication date:

08 March 2018 (08.03.2018)

(26) Publication language:

Japanese (JA)

(21) Application Number:

PCT/JP2017/030366

(22) Filing Date:

24 August 2017 (24.08.2017)

(25) Filing language:

Japanese (JA)

(31) Priority number(s):

2016-168270 (JP)

(31) Priority date(s):

30 August 2016 (30.08.2016)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

G02B 6/02 (2006.01); H01S 3/067 (2006.01)

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(54) Title (EN): CHIRPED FIBER GRATING ELEMENT AND FIBER LASER

(54) Title (FR): ÉLÉMENT DE RÉSEAU DE FIBRES À PAS VARIABLE ET LASER À FIBRE

(54) Title (JA): ファイバチャープドグレーティング素子及びファイバレーザ

(57) Abstract:

(EN): The present invention achieves a chirped fiber grating element with less heat generation in the vicinity of an incident end surface than the conventional. Along with making a grating (11a) pitch #i become larger with increasing distance from one end surface (1A), the difference #ni in index of refraction for the grating (11a) increases with increasing distance from the end surface (1A).

(FR): La présente invention permet d'obtenir un élément de réseau de fibres à pas variable avec moins de génération de chaleur dans le voisinage d'une surface d'extrémité incidente que les techniques classiques. Le long de la réalisation d'un pas (11a) de réseau est plus grand avec une distance croissante depuis une surface d'extrémité (1A), la différence #ni dans l'indice de réfraction pour le réseau (11a) augmente avec une distance croissante de la surface d'extrémité (1A).

(JA): 従来よりも入射端面近傍における発熱量の小さいファイバチャープドグレーティング素子を実現する。グレーティング(11a)のピッチ*Λ_i*を、一方の端面(1A)から遠ざかるに従って大きくすると共に、グレーティング(11a)の屈折率差*Δn_i*を、端面(1A)から遠ざかるに従って大きくする。

International search report:

Received at International Bureau: 20 November 2017 (20.11.2017) [JP]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JO, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

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

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Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, RU, TJ, TM