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(71) Applicant(s):

FUJIKURA LTD. [JP/JP]; 1-5-1, Kiba, Koto-ku, Tokyo 1358512 (JP) (for all designated states)

(72) Inventor(s):

SAKAMOTO, Shinichi; c/o FUJIKURA LTD. SAKURA WORKS, 1440, Mutsuzaki, Sakura-shi, Chiba 2858550 (JP)

(74) Agent(s):

HARAKENZO WORLD PATENT & TRADEMARK; Daiwa Minamimorimachi Building, 2-6, Tenjinbashi 2-chome Kita, Kita-ku, Osaka-shi, Osaka 5300041 (JP)

(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。

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