

(12) International Application Status Report

Received at International Bureau: 20 June 2018 (20.06.2018)

Information valid as of: 21 November 2018 (21.11.2018)

Report generated on: 24 April 2019 (24.04.2019)

(10) Publication number:

WO2018/225842

(43) Publication date:

13 December 2018 (13.12.2018)

(26) Publication language:

Japanese (JA)

(21) Application Number:

PCT/JP2018/021951

(22) Filing Date:

07 June 2018 (07.06.2018)

(25) Filing language:

Japanese (JA)

(31) Priority number(s):

2017-113111 (JP)

(31) Priority date(s):

08 June 2017 (08.06.2017)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

G02B 15/16 (2006.01); G02B 13/18 (2006.01)

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(54) Title (EN): ZOOM LENS AND IMAGING DEVICE

(54) Title (FR): ZOOM ET IMAGEUR

(54) Title (JA): ズームレンズ及び撮像装置

(57) Abstract:

(EN): Provided is a zoom lens that is small-sized and that has a relatively large zoom ratio. The present invention essentially comprises, in order from the object side, a first lens group Gr1 fixed on an optical axis AX and having a positive refractive power, a second lens group Gr2 having a negative refractive power, a third lens group Gr3 fixed on the optical axis AX and having a positive refractive power, and a fourth lens group Gr4 having a positive refractive power, magnification being varied by changing the interval between lens groups, the first lens group Gr1 having at least five lenses, and a positive lens in the first lens group Gr1 satisfying the conditional expression $\#_{ave} > 85$, where $\#_{ave}$ is the average value of the Abbe number.

(FR): L'invention concerne un zoom de petite taille qui a un niveau de zoom relativement élevé. La présente invention comprend essentiellement, dans l'ordre depuis le côté objet, un premier groupe de lentilles (Gr1) fixé sur un axe optique (AX) et ayant une réfringence positive, un deuxième groupe de lentilles (Gr2) ayant une réfringence négative, un troisième groupe de lentilles (Gr3) fixé sur l'axe optique (AX) et ayant une réfringence positive, et un quatrième groupe de lentilles (Gr4) ayant une réfringence positive, le grossissement étant modifié en changeant l'intervalle entre des groupes de lentilles, le premier groupe de lentilles (Gr1) ayant au moins cinq lentilles, et une lentille positive dans le premier groupe de lentilles (Gr1) satisfaisant l'expression conditionnelle $\#_{ave} > 85$, où $\#_{ave}$ est la valeur moyenne du nombre d'Abbe.

(JA): 小型で、変倍比が比較的大きいズームレンズを提供する。物体側から順に、光軸AX上に固定された正の屈折力を有する第1レンズ群Gr1と、負の屈折力を有する第2レンズ群Gr2と、光軸AX上に固定された正の屈折力を有する第3レンズ群Gr3と、正の屈折力を有する第4レンズ群Gr4と、から実質的になり、各レンズ群間隔を変化させることにより変倍を行い、第1レンズ群Gr1は少なくとも5枚のレンズを有し、第1レンズ群Gr1内の正レンズは、アッベ数の平均値を v_{ave} として、条件式 $v_{ave} > 85$ を満たす。

International search report:

Received at International Bureau: 14 September 2018 (14.09.2018) [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, JP, 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

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG

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