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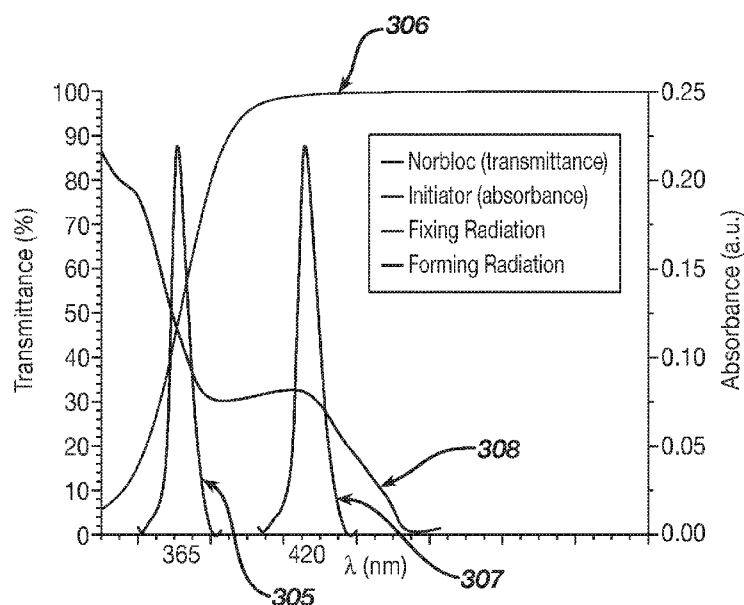
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(54) Title: MULTIPLE-WAVELENGTH LENS FORMING SYSTEM AND METHOD

**FIG. 3**

(57) **Abstract:** An apparatus and method for forming a contact lens. The method includes the steps of obtaining a Lens Reactive Mixture; submerging a convex optical quality surface of a forming optic in a reservoir containing the Lens Reactive Mixture; projecting a first Actinic Radiation having a first spectrum of wavelengths through pre-selected regions of the forming optic; wherein the pre-selected regions correspond to locations of the contact lens to be formed having a thickness greater than a pre-determined thickness, and wherein the first Actinic Radiation is selectively controlled to selectively polymerize or partially polymerize the Lens Reactive Mixture on a Voxel by Voxel basis at the pre-selected regions; projecting a second Actinic Radiation having a second different spectrum of wavelengths through the forming optic over a second region corresponding to an entirety of the contact lens to be formed, wherein the second Actinic Radiation is selectively controlled to selectively polymerize or partially polymerize the Lens Reactive Mixture on a





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.

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- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - B29D 11/00; B29C 35/08; B29K 101/00; B29L 11/00; G02C 7/04 (2019.01)

CPC - B29D 11/00153; B29C 35/0805; B29C 2035/0827; B29C 2035/0833; B29D 11/00038; B29D 11/00134; B29K 2101/00; B29L 2011/0041; G02C 7/047; G02C 2202/08 (2019.08)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

See Search History document

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

USPC - 264/1.38 (keyword delimited)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

See Search History document

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 8,318,055 B2 (WIDMAN et al) 27 November 2012 (27.11.2012) entire document	1-15
Y	US 4,165,265 A (NAKABAYASHI et al) 21 August 1979 (21.08.1979) entire document	1-15
A	US 4,411,931 A (DUONG) 25 October 1983 (25.10.1983) entire document	1-15
A	US 2018/0250899 A1 (HON HAI PRECISION INDUSTRY CO., LTD.) 06 September 2018 (06.09.2018) entire document	1-15
A	US 8,317,505 B2 (WIDMAN et al) 27 November 2012 (27.11.2012) entire document	1-15

☐ Further documents are listed in the continuation of Box C.☐ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

18 December 2019

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