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- (81) Designated States (*unless otherwise indicated, for every kind of national protection available*): 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, IT, 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, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(54) Title: SPECTACLE LENS AND A METHOD FOR PRODUCING A SPECTACLE LENS

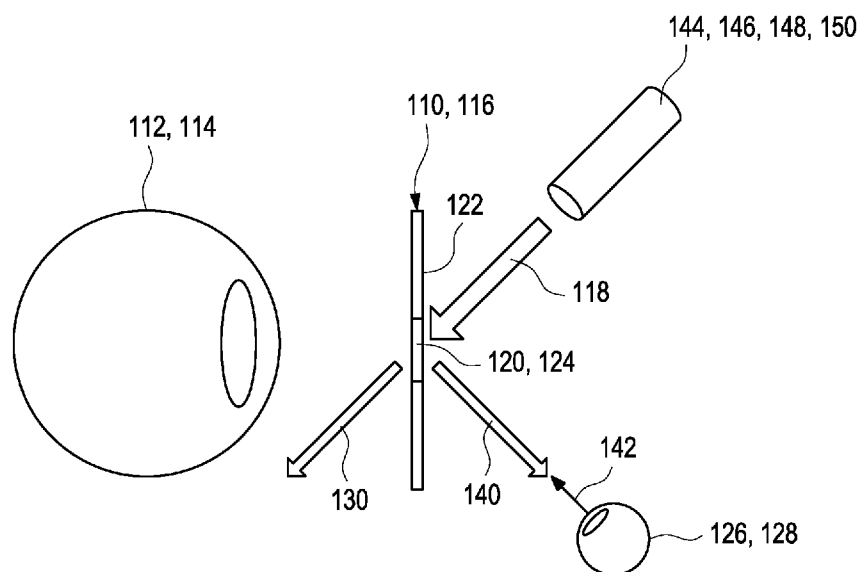


Fig. 2

(57) Abstract: The present invention relates to a spectacle lens (110) for at least one eye (112) of a user (114), a method for producing a spectacle lens (110), and a computer program product comprising executable instructions for performing the method for producing the spectacle lens (110). The spectacle lens (110) comprises at least one permanent marking (120), wherein the at least one permanent marking (120) is or comprises at least one diffractive structure (124), wherein at least one diffractive pattern generated by illumination of the diffractive structure (124) is designated to be invisible upon a first kind of illumination (132) and designated to be visible only upon a second kind of illumination (144). The permanent markings (120) on the spectacle lens (110) is, on one hand, invisible to the user (114) or to a spectator looking at the user (114) wearing the at least one spectacle lens (110) without utilizing specially selected optical aids but, on the other hand, enables continued control of the at least one spectacle lens (110) in front of the at least one eye (112)

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INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER

INV. G02C7/02 G02C13/00

ADD.

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)

G02C G03H B29D B42D

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

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

EPO-Internal, WPI Data**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2017/261765 A1 (DANGELMAIER ANDREAS [DE] ET AL) 14 September 2017 (2017-09-14) paragraph [0002] paragraph [0004] paragraph [0006] paragraph [0012] paragraph [0016] - paragraph [0020] paragraph [0035] paragraph [0037] paragraph [0039] - paragraph [0042] paragraph [0043] - paragraph [0046] paragraph [0052] - paragraph [0057] paragraph [0068] ----- -/-	1-27



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

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"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

27 January 2022

Date of mailing of the international search report

09/02/2022

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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2021/072138

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2019/231517 A1 (GENGLER RÉGIS Y N R [NL] ET AL) 1 August 2019 (2019-08-01) paragraph [0005] paragraph [0006] - paragraph [0010] paragraph [0035] paragraph [0042] - paragraph [0043] paragraph [0044] - paragraph [0045] paragraph [0046] - paragraph [0047] paragraph [0048] - paragraph [0049]; figures 6, 7 paragraph [0052] paragraph [0054] - paragraph [0056] paragraph [0059] paragraph [0006] paragraph [0008] paragraph [0035] -----	1-27
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Y	US 2015/029459 A1 (TABIRIAN NELSON [US] ET AL) 29 January 2015 (2015-01-29) paragraph [0007] paragraph [0015] paragraph [0044] paragraph [0049] -----	12, 26
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INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2021/072138

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2021/072138

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☒ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims;; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-13

Spectacle lens with diffractive structure that is visible only under near-infrared or near-ultraviolet light

2. claims: 14-27

Spectacle lens with diffractive structure that is visible only under an illumination angle of 45° or less

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2021/072138

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Information on patent family members

International application No

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