

Title (en)
EYEWEAR AND METHODS FOR MAKING EYEWEAR

Title (de)
BRILLE UND VERFAHREN ZUR HERSTELLUNG EINER BRILLE

Title (fr)
ARTICLES DE LUNETTERIE ET PROCÉDÉS DE FABRICATION D'ARTICLES DE LUNETTERIE

Publication
EP 3729186 A4 20210714 (EN)

Application
EP 17935572 A 20171221

Priority
CA 2017051570 W 20171221

Abstract (en)
[origin: WO2019119101A1] Conventional eyewear devices such as spectacles typically include one or more refractive lenses. Such lenses may be thick or bulky. According to an aspect of the disclosure, a metalens-based eyewear device is provided. The eyewear device includes one or more lenses. Each lens comprises a substantially transparent lens body. Each lens further comprises at least one metalens integrated with the body. Each metalens comprises a respective substantially transparent substrate, and a respective plurality of subwavelength structures arranged on the substrate in a pattern to interact with visible light. The lens body may be planar. The lenses of such eyewear (including at least one metalens) may be thinner and/or lighter than conventional refractive lenses.

IPC 8 full level
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CPC (source: EP)
G02B 1/002 (2013.01); **G02B 3/10** (2013.01); **G02C 7/022** (2013.01); **G02C 7/061** (2013.01); **B82Y 20/00** (2013.01); **G02B 2207/101** (2013.01); **G02C 2202/16** (2013.01)

Citation (search report)
• [E] EP 3721286 A1 20201014 - FACEBOOK TECH LLC [US]
• [Y] US 2017219739 A1 20170803 - LIN DIANMIN [US], et al
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• [A] US 9664817 B1 20170530 - DI FALCO ANDREA [GB]
• [Y] BORKHATARIA ET AL: "Will your next spectacles have METAL lenses? Harvard researchers reveal radical new material that could replace glass in everything from phones to eyewear", DAILY MAIL., 9 February 2017 (2017-02-09), XP055621022, Retrieved from the Internet <URL:http://news.asiantown.net/r/57050/will-your-next-spectacles-have-metal-lenses-harvard-researchers-reveal-radical-new-material-that-could-replace-glass-in-everything-from-phones-to-eyewear> [retrieved on 20190911]
• See references of WO 2019119101A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

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