

Title (en)

MULTIFOCAL LENS HAVING A PROGRESSIVE OPTICAL POWER REGION AND A DISCONTINUITY

Title (de)

MULTIFOKALE LINSE MIT OPTISCHEM GLEITSICHTBEREICH UND DISKONTINUITÄT

Title (fr)

LENTE MULTIFOCAL AYANT UNE RÉGION DE PUISSANCE OPTIQUE PROGRESSIVE ET UNE DISCONTINUITÉ

Publication

EP 2140303 A4 20111102 (EN)

Application

EP 08744801 A 20080331

Priority

- US 2008058930 W 20080331
- US 90736707 P 20070329
- US 92497507 P 20070607
- US 93522607 P 20070801
- US 93549207 P 20070816
- US 93557307 P 20070820
- US 95681307 P 20070820
- US 97002407 P 20070905

Abstract (en)

[origin: WO2008121975A2] Embodiments of the present invention relate to a multifocal lens having a diffractive optical power region and a progressive optical power region. Embodiments of the present invention provide for the proper alignment and positioning of each of these regions, the amount of optical power provided by each of the regions, the optical design of the progressive optical power region, and the size and shape of each of the regions. The combination of these design parameters allows for an optical design having less unwanted astigmatism and distortion as well as both a wider channel width and a shorter channel length compared to conventional PALs. Embodiments of the present invention may also provide a new, inventive far-intermediate distance zone and may further provide for increased vertical stability of vision within a zone of the lens.

IPC 8 full level

G02C 7/02 (2006.01)

CPC (source: EP)

G02C 7/061 (2013.01); **G02C 7/063** (2013.01); **G02C 7/066** (2013.01); **G02C 2202/16** (2013.01); **G02C 2202/20** (2013.01)

Citation (search report)

- [X] FR 2884622 A1 20061020 - ESSILOR INT [FR]
- [X] EP 0987578 A2 20000322 - JOHNSON & JOHNSON VISION PROD [US]
- [X] US 2005270481 A1 20051208 - BLUM RONALD D [US], et al
- [X] FR 2793038 A1 20001103 - ESSILOR INT [FR]
- [X] WO 9742530 A1 19971113 - INNOTECH INC [US]
- [A] US 2006066808 A1 20060330 - BLUM RONALD D [US], et al
- See references of WO 2008121975A2

Citation (examination)

WO 0055680 A1 20000921 - JOHNSON & JOHNSON VISION CARE [US]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2008121975 A2 20081009; WO 2008121975 A3 20081127; WO 2008121975 A4 20090122; CA 2680870 A1 20081009;
CA 2680870 C 20141021; EP 2140303 A2 20100106; EP 2140303 A4 20111102; JP 2010522903 A 20100708; TW 200912425 A 20090316

DOCDB simple family (application)

US 2008058930 W 20080331; CA 2680870 A 20080331; EP 08744801 A 20080331; JP 2010501284 A 20080331; TW 97111800 A 20080331