

Title (en)

SYSTEMS AND METHODS FOR LENTICULAR LASER INCISION

Title (de)

SYSTEME UND VERFAHREN FÜR LINSENFÖRMIGEN LASEREINSCHNITT

Title (fr)

SYSTÈMES ET MÉTHODES POUR UNE INCISION LENTICULAIRE AU LASER

Publication

**EP 3840702 A4 20220511 (EN)**

Application

**EP 19851297 A 20190819**

Priority

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- IB 2019056981 W 20190819

Abstract (en)

[origin: WO2020039328A1] Embodiments of this invention generally relate to ophthalmic laser procedures and, more particularly, to systems and methods for lenticular laser incision. In an embodiment, an ophthalmic surgical laser system comprises a laser delivery system for delivering a pulsed laser beam to a target in a subject's eye, an XY-scan device to deflect the pulsed laser beam, a Z-scan device to modify a depth of a focus of the pulsed laser beam, and a controller configured to form a top lenticular incision and a bottom lenticular incision of a lens in the subject's eye, where each of the top and bottom lenticular incision includes a center spherical portion and an edge transition portion that is not located on the same spherical surface as the spherical portion but has a steeper shape.

IPC 8 full level

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Citation (search report)

- [X] WO 2018005877 A1 20180104 - AMO DEV LLC [US]
- [X] EP 2765965 A1 20140820 - WAVELIGHT GMBH [DE]
- [A] WO 2010142311 A1 20101216 - WAVELIGHT GMBH [DE], et al
- See references of WO 2020039328A1

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