

Title (en)
OPHTHALMOLOGIC DEVICE FOR LASER THERAPY

Title (de)
OPHTHALMOLOGISCHES GERÄT ZUR LASERTHERAPIE

Title (fr)
APPAREIL POUR OPHTALMOLOGIE AU LASER

Publication
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Application
EP 99973776 A 19990204

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Abstract (en)
[origin: WO9939669A1] The present invention may be used in the laser stimulation of the ciliary muscle for improving the adaptation capacity of the eye, for increasing the visual capacity, for reducing discomfort during the therapy process and for applying a combined action using a laser beam, i.e. a transscleral action on the ciliary body and on the central region of the retina. The device of the present invention comprises an optical unit (1) including a plurality of laser emitters (2) with shaping optics (3) and a local reducer (4) of the field of vision which is made in the shape of a diaphragm and defines a vision channel (5) representing the direction in which the patient is looking. The diaphragm (4) is arranged on a same axis (6) together with the inlet aperture (7). The optical unit (1) may further comprise a visible laser-beam source (8) which is optically connected through a semi-transparent mirror (9) to the vision channel (5) so as to apply an action on the central region of the retina. The transmission ratio of the mirror (9) is selected so that the patient is not prevented from observing a distant object through the outlet aperture (10) of the unit (1). It is further possible to include a diffused dispersion structure (11) allowing the patient to observe a speckle diagram formed by the laser beam emitted from the source (8).

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Citation (search report)
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WO 9939669 A1 19990812; AU 2645599 A 19990823; CA 2322525 A1 19990812; CA 2322525 C 20090929; CN 1198545 C 20050427; CN 1290155 A 20010404; EP 1079775 A1 20010307; EP 1079775 A4 20020731; HK 1037510 A1 20020215; JP 2002510512 A 20020409; RU 2204971 C2 20030527

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