

(12) **United States Patent**
Christie et al.

(10) **Patent No.:** **US 8,460,374 B2**
(45) **Date of Patent:** ***Jun. 11, 2013**

(54) **MASK CONFIGURED TO MAINTAIN NUTRIENT TRANSPORT WITHOUT PRODUCING VISIBLE DIFFRACTION PATTERNS**

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 1429 days.
This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/290,201**

(22) Filed: **Nov. 30, 2005**

(65) **Prior Publication Data**
US 2006/0079960 A1 Apr. 13, 2006

Related U.S. Application Data

(63) Continuation of application No. 10/854,033, filed on May 26, 2004, now Pat. No. 7,628,810.

(60) Provisional application No. 60/473,824, filed on May 28, 2003, provisional application No. 60/479,129, filed on Jun. 17, 2003.

(51) **Int. Cl.**
A61F 2/14 (2006.01)

(52) **U.S. Cl.**
USPC **623/5.12; 623/5.13**

(58) **Field of Classification Search**
USPC 623/5.12, 5.13, FOR. 104
See application file for complete search history.

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(57) **ABSTRACT**

A mask configured to be implanted in a cornea of a patient to increase the depth of focus of the patient includes an anterior surface, a posterior surface, and a plurality of holes. The anterior surface is configured to reside adjacent a first corneal layer. The posterior surface is configured to reside adjacent a second corneal layer. The plurality of holes extends at least partially between the anterior surface and the posterior surface. The holes of the plurality of holes are configured to substantially eliminate visible diffraction patterns.

25 Claims, 31 Drawing Sheets

