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(54) **TUNABLE ACOUSTIC GRADIENT INDEX OF REFRACTION LENS AND SYSTEM**

(71) Applicants: **Christian Theriault**, Princeton, NJ (US); **Craig B. Arnold**, Princeton, NJ (US)

(72) Inventors: **Christian Theriault**, Princeton, NJ (US); **Craig B. Arnold**, Princeton, NJ (US)

(73) Assignee: **TAG OPTICS INC.**, Princeton, NJ (US)

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CPC ***G02B 3/14*** (2013.01); ***G02B 3/0087*** (2013.01); ***G02B 21/00*** (2013.01); ***G02B 21/025*** (2013.01)

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CPC G02B 3/14; G02B 21/00; G02B 3/0087; G02B 21/025

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See application file for complete search history.

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Primary Examiner — Frank Font

(74) *Attorney, Agent, or Firm* — Barnes & Thornburg LLP; Thomas J. McWilliams; Edward F. Behm, Jr.

(57) **ABSTRACT**

A microscope, comprising a stage onto which is placed an item, a lens having a tunable acoustic gradient index of refraction (TAG lens) sufficiently proximate to said stage to magnify an image of the item, a viewing point for providing for viewing of the magnified image, and a pulsed illuminator capable of illuminating the stage and synchronously pulsed with an operating frequency of the TAG lens.

3 Claims, 30 Drawing Sheets

