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(71) Applicant: **NuFlare Technology, Inc.**, Yokohama (JP)

(72) Inventors: **Toshiaki Otaki**, Kanagawa (JP); **Riki Ogawa**, Kanagawa (JP)

(73) Assignee: **NuFlare Technology, Inc.**, Yokohama (JP)

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(58) **Field of Classification Search**

None
See application file for complete search history.

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Primary Examiner — Gordon J Stock, Jr.

(74) *Attorney, Agent, or Firm* — Oblon, McClelland, Maier & Neustadt, L.L.P.

(57) **ABSTRACT**

An illumination apparatus according to embodiments includes: a light source generating laser light; a rotational phase plate having a plurality of randomly arranged stepped regions, the rotational phase plate transmitting the laser light to give a phase change to the laser light; and an integrator including a plurality of lenses arranged in an array, the laser light transmitted through the rotational phase plate being incident on the integrator, an allowable angle of incidence for the laser light of the lenses being set at a maximum value of or larger than an angle of diffraction of a first order of the laser light at the rotational phase plate.

5 Claims, 5 Drawing Sheets

