

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
23 March 2023 (23.03.2023)



(10) International Publication Number
WO 2023/043551 A1

(51) **International Patent Classification:**
G01J 1/42 (2006.01) *G01J 1/04* (2006.01)

(21) **International Application Number:**
PCT/US2022/040159

(22) **International Filing Date:**
12 August 2022 (12.08.2022)

(25) **Filing Language:** English

(26) **Publication Language:** English

(30) **Priority Data:**
63/245,631 17 September 2021 (17.09.2021) US

(71) **Applicant: ELECTRO SCIENTIFIC INDUSTRIES, INC.** [US/US]; 14523 SW Millikan Way, Beaverton, OR 97005 (US).

(72) **Inventor: ZABAWA, Patrick;** 14523 SW Millikan Way, Beaverton, OR 97005 (US).

(74) **Agent: EATON, Kurt;** 14523 SW Millikan Way, Beaverton, OR 97005 (US).

(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

(54) **Title:** CONDITIONING DEVICE FOR REDUCING POSITIONAL SENSITIVITY OF LASER BEAM ON PHOTODETECTOR AND METHOD OF USING THE SAME

202: 208, 210, 212, 214, 216

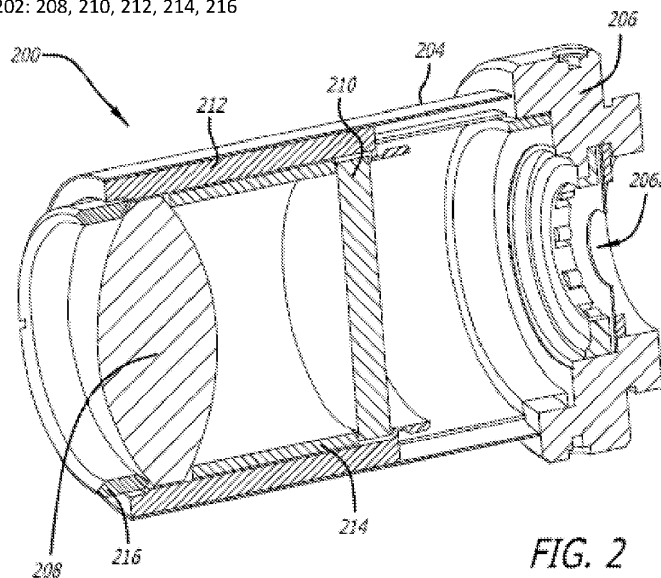


FIG. 2

(57) **Abstract:** In a system, a conditioning device includes a diffuser, a lens configured to focus a beam of laser energy onto the diffuser and an iris configured to transmit at least a portion of the beam of laser energy transmitted by the diffuser.

[Continued on next page]



WO 2023/043551 A1

Published:

— with international search report (Art. 21(3))