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UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON

LUMENTUM OPERATIONS LLC,

Plaintiff,

v.

nLIGHT, INC.; DAHV KLINER; and
ROGER L. FARROW,

Defendants.

NO.

COMPLAINT FOR:

**I) CORRECTION OF
INVENTORSHIP UNDER
35 U.S.C. § 256**

**II) DECLARATION OF PATENT
OWNERSHIP**

III) BREACH OF CONTRACT

JURY TRIAL DEMANDED

Lumentum Operations LLC (“Lumentum”), by and through its counsel, for its Complaint against Defendants nLIGHT, Inc. (“nLIGHT”), Dahv Kliner (“Kliner”), and Roger L. Farrow (“Farrow”), pleads as follows:

NATURE OF THE ACTION

1. Lumentum seeks redress for the unlawful taking, use, and disclosure of its proprietary information and pioneering innovations by former employees Kliner and Farrow. These actions not only constitute breaches of Kliner’s and Farrow’s agreements with Lumentum’s predecessor-in-interest, JDS Uniphase Corporation (“JDSU”), but also resulted in a number of patents purportedly being assigned to nLIGHT, when in fact these patents disclose and claim innovations conceived,

1 developed, and/or reduced to practice at JDSU. Lumentum therefore seeks correction
2 of inventorship on these patents and a declaration that these patent rights are owned by
3 Lumentum, in addition to other relief to compensate for Kliner and Farrow's breaches
4 and the resulting damages to Lumentum.

5 2. Kliner and Farrow were formerly employed by JDSU. At the start of
6 their employment, they each executed an Employee Proprietary Information and
7 Inventions Agreement ("EPIIA"). The EPIIAs, among other things, prohibited the
8 disclosure of JDSU's proprietary information outside of JDSU and provided that
9 Kliner and Farrow irrevocably assigned to JDSU all of their right, title, and interest in
10 and to any innovations that they, solely or jointly with others, conceived, developed or
11 reduced to practice during their employment with JDSU that they had been hired to
12 invent either specifically or in general in their area of employment.

13 3. While employed at JDSU, Kliner and Farrow, together with their
14 colleague at JDSU, Martin Muendel ("Muendel"), conceived, developed, and/or
15 reduced to practice a number of valuable innovations related to fiber laser systems.
16 These innovations were subject to the EPIIA's assignment and non-disclosure
17 provisions. However, in violation of those provisions, Kliner and Farrow used JDSU's
18 innovations and proprietary information to, among other things, accept employment at
19 nLIGHT and then develop new fiber laser products for nLIGHT. Kliner and Farrow
20 also violated the EPIIAs by pursuing patent applications claiming the same
21 innovations that were conceived, developed, and reduced to practice at JDSU, but then
22 purporting to assign these patent rights to nLIGHT. These patent applications all
23 further erroneously omitted Muendel as an inventor, even though he was primarily
24 responsible for the inventive contributions upon which the applications were based.

25 4. nLIGHT's omission of Muendel as an inventor on its applications and
26 patents, and Kliner's and Farrow's breaches of their contracts with JDSU, have caused
27 Lumentum substantial damages and threaten to inflict further irreparable harm. These

1 errors should be corrected so as to rightfully recognize the pioneering work JDSU
2 performed in conceiving, developing, and reducing to practice its groundbreaking fiber
3 laser innovations.

4 **PARTIES**

5 5. Plaintiff Lumentum is a Delaware corporation with its principal place of
6 business in San Jose, California.

7 6. On information and belief, nLIGHT is a Delaware corporation with its
8 corporate headquarters and principal place of business located at 4637 NW 18th Ave,
9 Camas, Washington, 98607.

10 7. On information and belief, Kliner resides in Portland, Oregon.

11 8. On information and belief, Farrow resides in Vancouver, Washington.

12 **JURISDICTION AND VENUE**

13 9. This Complaint alleges certain claims arising under the Patent Laws of
14 the United States, Title 35 of the United States Code. This Court has jurisdiction over
15 the first two causes of action asserted in this matter pursuant to 28 U.S.C. §§ 1331,
16 1338(a), 2201(a), and 35 U.S.C. § 256. This Court has supplemental jurisdiction over
17 the remaining claims under 28 U.S.C. § 1367 because the state-law claims are so
18 related to the federal claims that they form part of the same case or controversy.

19 10. This Court has personal jurisdiction over nLIGHT because, on
20 information and belief, nLIGHT is headquartered in Camas, Washington, and
21 maintains another place of business in Vancouver, Washington.

22 11. In addition, on information and belief, nLIGHT purposefully availed
23 itself of the privilege of conducting business in the state of Washington. nLIGHT is
24 actively registered with the Washington Secretary of State to do business in the state,
25 and has been assigned Unique Business Identifier No. 602 058 075.

1 12. In addition, on information and belief, nLIGHT negotiated employment
2 contracts with Kliner and Farrow from the state of Washington and regularly
3 supervises Kliner and Farrow from nLIGHT's Vancouver and/or Camas offices.

4 13. In addition, on information and belief, nLIGHT filed and continues to
5 file patent applications, including the patent applications giving rise to allegations
6 stated in this Complaint, from the state of Washington.

7 14. This Court has personal jurisdiction over Kliner because, on information
8 and belief, Kliner is permanently employed in the state of Washington by nLIGHT and
9 regularly commutes to conduct business in Washington at nLIGHT's Vancouver
10 and/or Camas offices. On information and belief, Kliner has one or more employment
11 contracts with nLIGHT, regularly communicates with nLIGHT employees in
12 nLIGHT's Vancouver and/or Camas offices, is supervised by employees in nLIGHT's
13 Vancouver and/or Camas offices, and receives payment from nLIGHT in Washington.

14 15. In addition, on information and belief, Kliner executed and continues to
15 execute assignments of intellectual property, including the patents and patent
16 applications giving rise to allegations stated in this Complaint, from the state of
17 Washington.

18 16. This Court has personal jurisdiction over Farrow because, on
19 information and belief, Farrow resides in this district.

20 17. In addition, on information and belief, Farrow is permanently employed
21 in the state of Washington by nLIGHT and regularly commutes to conduct business in
22 Washington at nLIGHT's Vancouver and/or Camas offices. On information and
23 belief, Farrow has one or more employment contracts with nLIGHT, regularly
24 communicates with nLIGHT employees in nLIGHT's Vancouver and/or Camas
25 offices, is supervised by employees in nLIGHT's Vancouver and/or Camas offices,
26 and receives payment from nLIGHT in Washington.

1 18. In addition, on information and belief, Farrow executed and continues to
2 execute assignments of intellectual property, including the patents and patent
3 applications giving rise to allegations stated in this Complaint, from the state of
4 Washington.

5 19. Venue is proper in this judicial district pursuant to 28 U.S.C.
6 § 1391(b)(2), as a substantial part of the events or omissions giving rise to the claims
7 alleged herein occurred in this district. Alternatively, venue is proper in this judicial
8 district pursuant to 28 U.S.C. § 1391(b)(3), as the defendants are subject to this
9 Court's personal jurisdiction with respect to this action.

10 **FACTUAL ALLEGATIONS**

11 **A. JDSU and Lumentum**

12 20. Lumentum is an industry-leading provider of optical and photonic
13 products, including for such applications as optical communications, commercial
14 lasers, and 3D sensing. As just one example, the Laser Products Group within
15 Lumentum researches, develops, designs, and manufactures cutting-edge commercial
16 laser products, which it supplies to customers for incorporation into manufacturing-
17 process tools. Such Lumentum products include systems incorporating a laser and
18 optical fibers to deliver high-power and/or high-intensity laser beams to a process
19 head, which projects the laser light onto a workpiece to perform the required
20 processing task, such as cutting, drilling, welding, or other applications.

21 21. Lumentum was formed in 2015. Prior to Lumentum's formation, the
22 Laser Products Group operated within JDSU. In 2015, ownership of the relevant
23 JDSU assets, including JDSU's rights under the agreements at issue in this action, was
24 transferred to Lumentum.

25 22. During the relevant time period alleged herein, Muendel was Director of
26 Advanced Research within the Laser Products Group. Among other things, Muendel
27

1 oversaw and contributed to research and development and innovation of new products
2 within the Laser Products Group.

3 **B. Kliner’s Employment with JDSU and Execution of the EPIIA**

4 23. In 2008, Muendel encouraged Kliner to apply for a position at JDSU.
5 Kliner applied and was hired as an Optical Development & Research Engineer 4
6 within the Laser Products Group in Milpitas, California.

7 24. On or about March 9, 2008, Kliner signed a letter accepting JDSU’s
8 offer of full-time employment (the “Kliner Offer Letter”). Among other things, the
9 Kliner Offer Letter provided as follows:

10 The Company¹ considers its confidential and proprietary
11 information to be a key to its future success. As a result,
12 pursuant to Company policy, this offer is conditioned upon
13 your acceptance of the terms and conditions of the
14 Company’s Employee Proprietary Information and
15 Inventions Agreement, a copy of which is enclosed.

16 25. Kliner signed the Kliner Offer Letter with the acknowledgement that he
17 “accept[ed] the offer of employment with JDSU under the terms described in this
18 letter.”

19 26. As part of his employment and pursuant to the Kliner Offer Letter,
20 Kliner received a compensation package including salary, benefits, a sign-on bonus,
21 the potential for an annual bonus, and restricted stock units.

22 27. Kliner started work at JDSU on or about April 7, 2008. On the same
23 day, Kliner signed the EPIIA referred to in the Kliner Offer Letter. A copy of the
24 EPIIA that Kliner signed is attached hereto as **Exhibit A** (the “**Kliner EPIIA**”)

25
26
27 ¹ “The Company” is defined by the Kliner Offer Letter and the EPIIA as JDSU. (Ex. A, p. 1.)

1 28. The Kliner EPIIA provided that all “Proprietary Information” was “the
2 sole property of Company Group, Company Group’s assigns, Company Group’s
3 customers and Company Group’s suppliers, as applicable.”² (Ex. A, § 3.) The Kliner
4 EPIIA defined “Proprietary Information” as including:

5 (a) any technical or nontechnical information that is
6 confidential or proprietary, technical or non-technical
7 information of Company Group, including for example and
8 without limitation, information related to Innovations (as
9 defined in Section 4 below), concepts, techniques,
10 processes, methods, know-how, systems, access codes,
11 designs, computer programs, source documentation, trade
12 secrets (whether tangible or intangible, and whether or how
13 stored, compiled or memorialized physically, electronically,
14 graphically, photographically or in writing), formulas,
15 development or experimental work, work in progress,
16 forecasts, proposed and future products, marketing plans,
17 business plans, customers, suppliers and prospective
18 customer databases and any other nonpublic information
19 that has commercial value and (b) any information
20 Company Group has received from others that Company
21 Group is obligated to treat as confidential or proprietary,
22 which may be made known to [Kliner] by Company Group,
23 a third party or otherwise that [he] may learn during [his]
24 employment with Company.

25 (*Id.*, § 2.)

26 _____
27 ² “Company Group” is defined by the EPIIA as JDSU, its affiliates, and its
subsidiaries. (Ex. A, § 1.)

1 29. The Kliner EPIIA further provided that during and after his employment,
2 Kliner would not “disclose any Proprietary Information to anyone outside Company
3 Group, and [would] use and disclose Proprietary Information to those inside Company
4 Group only as may be necessary in the ordinary course of performing [his] duties as an
5 employee of Company.” (*Id.*, § 3.)

6 30. The Kliner EPIIA further provided that Kliner would “promptly disclose
7 and describe to [JDSU] all Company Innovations.” (*Id.*, § 6.) The Kliner EPIIA
8 defined “Company Innovations” as follows:

9 Innovations that [he], solely or jointly with others,
10 conceive[s], develop[s] or reduce[s] to practice during [his]
11 employment with Company that [he] ha[s] been hired to
12 invent either specifically or in general in [his] area of
13 employment with the Company.

14 (*Id.*, § 5.)

15 31. The Kliner EPIIA defined “Innovations” as follows:

16 [A]ll discoveries, designs, developments, improvements,
17 inventions (whether or not protectable under patent laws),
18 works of authorship, information fixed in any tangible
19 medium of expression (whether or not protectable under
20 copyright laws), trade secrets, know-how, ideas (whether or
21 not protectable under trade secret laws), mask works,
22 trademarks, service marks, trade names, and trade dress.

23 (*Id.*, § 4.)

24 32. The Kliner EPIIA further provided that Kliner “hereby irrevocably
25 do[es] and will assign to [JDSU] or [JDSU]’s designee all [his] right, title, and interest
26 in and to any and all Company Innovations.” (*Id.*, § 6.)
27

1 33. Thus, by executing the Kliner EPIIA, Kliner assigned to JDSU all of his
2 right, title, and interest in and to all “discoveries, designs, developments,
3 improvements, inventions (whether or not protectable under patent laws), works of
4 authorship, information fixed in any tangible medium of expression (whether or not
5 protectable under copyright laws), trade secrets, know-how, ideas (whether or not
6 protectable under trade secret laws), mask works, trademarks, service marks, trade
7 names, and trade dress,” that Kliner “solely or jointly with others, conceive[d],
8 develop[ed] or reduce[d] to practice during [his] employment with [JDSU] that [he]
9 ha[d] been hired to invent either specifically or in general in [his] area of employment
10 with [JDSU].”

11 34. The Kliner EPIIA further provided that Kliner would “disclose promptly
12 in writing to Company all Innovations conceived, reduced to practice, created, derived,
13 developed, or made by [him] in whole or in part during the term of [his] employment
14 and for three (3) months thereafter.” (*Id.*, § 7.)

15 35. The Kliner EPIIA further provided that Kliner agreed “to perform,
16 during and after [his] employment, all acts that Company deems necessary or desirable
17 to permit and assist Company, at its expense, in obtaining and enforcing the full
18 benefits, enjoyment, rights and title throughout the world in the Company Innovations
19 or any other Innovations as provided to Company under this Agreement.” (*Id.*, § 9.)

20 36. The Kliner EPIIA further provided that Kliner agreed that during his
21 employment at JDSU and for one year thereafter, he would not “solicit, encourage, or
22 cause others to solicit or encourage any employees, consultants or contractors of
23 Company Group to terminate their employment with, diminish their relationship with
24 or cease providing services to Company Group.” (*Id.*, § 13.)

25 37. The Kliner EPIIA further provides that it “inures to the benefit of
26 successors and assigns of” JDSU. (*Id.*, § 12.) Lumentum is the successor-in-interest
27 of JDSU’s rights under the Kliner EPIIA.

1 **C. Farrow’s Employment with JDSU and Execution of the EPIIA**

2 38. In 2010, Farrow applied for a position at JDSU and was hired as a
3 Research Scientist, Principal, within the Laser Products Group.

4 39. On or about September 6, 2010, Farrow signed a letter accepting JDSU’s
5 offer of full-time employment (the “Farrow Offer Letter”). Among other things, the
6 Farrow Offer Letter provided as follows:

7 The Company considers its confidential and proprietary
8 information to be a key to its future success. As a result,
9 pursuant to Company policy, this offer is conditioned upon
10 your acceptance of the terms and conditions of the
11 Company’s Employee Proprietary Information and
12 Inventions Agreement, a copy of which is enclosed.

13 40. Farrow signed the Farrow Offer Letter with the acknowledgement that
14 he “accept[ed] the offer of employment with JDSU under the terms described in this
15 letter.”

16 41. As part of his employment and pursuant to the Farrow Offer Letter,
17 Farrow received a compensation package including salary, benefits, the potential for
18 an annual bonus, and restricted stock units.

19 42. Farrow started work at JDSU on or about October 4, 2010. On
20 September 6, 2010, Farrow also signed the EPIIA referred to in the Farrow Offer
21 Letter. A copy of the EPIIA that Farrow signed is attached hereto as **Exhibit B** (the
22 “**Farrow EPIIA**”).

23 43. The Farrow EPIIA contains the same provisions set forth above with
24 respect to Kliner. Thus, among other things, Farrow agreed that (1) all “Proprietary
25 Information” was “the sole property of Company Group, Company Group’s assigns,
26 Company Group’s customers and Company Group’s suppliers, as applicable” (Ex. B,
27 § 3); (2) during and after his employment, Farrow would not “disclose any Proprietary

1 Information to anyone outside Company Group, and [would] use and disclose
2 Proprietary Information to those inside Company Group only as may be necessary in
3 the ordinary course of performing [his] duties as an employee of Company” (*id.*); (3)
4 Farrow would “promptly disclose and describe to Company all Company Innovations”
5 (*id.*, § 6); and (4) Farrow “hereby irrevocably do[es] and will assign to Company or
6 Company’s designee all [his] right, title, and interest in and to any and all Company
7 Innovations” (*id.*, § 6).

8 44. Thus, by executing the Farrow EPIIA, Farrow assigned to JDSU all of
9 his right, title, and interest in and to all “discoveries, designs, developments,
10 improvements, inventions (whether or not protectable under patent laws), works of
11 authorship, information fixed in any tangible medium of expression (whether or not
12 protectable under copyright laws), trade secrets, know-how, ideas (whether or not
13 protectable under trade secret laws), mask works, trademarks, service marks, trade
14 names, and trade dress,” that Farrow “solely or jointly with others, conceive[d],
15 develop[ed] or reduce[d] to practice during [his] employment with Company that [he]
16 ha[d] been hired to invent either specifically or in general in [his] area of employment
17 with the Company.”

18 45. The Farrow EPIIA further provided that Farrow agreed “to perform,
19 during and after [his] employment, all acts that Company deems necessary or desirable
20 to permit and assist Company, at its expense, in obtaining and enforcing the full
21 benefits, enjoyment, rights and title throughout the world in the Company Innovations
22 or any other Innovations as provided to Company under this Agreement.” (*Id.*, § 9.)

23 46. The Farrow EPIIA further provides that it “inures to the benefit of
24 successors and assigns of” JDSU. (*Id.*, § 12.) Lumentum is the successor-in-interest
25 of JDSU’s rights under the Farrow EPIIA.

1 **D. JDSU’s Adjustable Beam Innovations**

2 47. During their employment at JDSU, Kliner and Farrow worked
3 extensively with Muendel, who served as their colleague and manager, respectively.
4 Muendel, Kliner, and Farrow worked on a number of proprietary fiber laser initiatives,
5 projects, and research and development activities during their time together at JDSU,
6 including as described further below.

7 48. As noted above, fiber lasers were often used in commercial laser systems
8 to deliver high-power laser beams to a process head for use in cutting, drilling,
9 welding, or other applications. However, different applications typically required
10 different beam characteristics, such as beam diameter, intensity distribution, focal spot
11 size, or other properties. At the time, there were limited options for providing these
12 different characteristics for different applications. For example, a user of a laser
13 system could swap out the process head or process fiber, but this was time-consuming,
14 inconvenient, and could result in contamination or damage to the fiber tips. Similarly,
15 a user could also employ accessories such as zoom lenses or mirrors to vary beam
16 characteristics, but this added expense and complexity and could potentially impede
17 performance. A user could also simply choose to employ a laser system with fixed
18 beam characteristics that could be used for many applications, but this would not result
19 in optimal beam characteristics for most of them.

20 49. In 2010, Muendel, Kliner, Farrow, and others within the Laser Products
21 Group at JDSU began research and development on a “Gen 2” fiber laser that would
22 solve various limitations of existing fiber laser systems.

23 50. In July 2011, Muendel (then in charge of advanced research) and Kliner
24 (then in charge of fiber development) met with JDSU’s customer Amada Co., Ltd.
25 (“Amada”) to discuss the development of the “Gen 2” fiber laser. As a result of these
26 meetings, the team worked to develop a device and method for providing a switchable
27 output beam profile.

1 51. During the second half of 2011, Muendel and Kliner conceived of a laser
2 system that would achieve these objectives. Muendel and Kliner discovered that the
3 key components of such a system were, in general, (1) coupling a laser beam with
4 certain characteristics to a fiber having two or more lengths, each fiber length having a
5 different refractive index profile (“RIP”) than the other; (2) perturbing the first length
6 of fiber or the beam to adjust one or more beam characteristics; and (3) employing two
7 or more confinement regions within a second length of fiber to confine at least a
8 portion of the modified beam characteristics received from the first length of fiber;
9 wherein (4) the two or more lengths of fiber are wholly or partially continuous.

10 52. Muendel and Kliner also conceived of different ways to perturb the fiber
11 or the beam to adjust beam characteristics as noted above. This could include
12 physically manipulating the fiber itself such as by bending the fiber; employing other
13 means to actuate the fiber or beam such as acousto-optic, electro-optic, thermal, piezo-
14 electric, or other perturbation methods; and/or using a graded-index (“GRIN”) fiber
15 that is thermally or mechanically tuned.

16 53. Muendel and Kliner further conceived variations of this system. For
17 example, they realized that while adjusting the beam characteristics all within one
18 continuous fiber length had certain advantages, the concept could also be used in
19 systems employing free-space designs (e.g., a system in which the beam exits a first
20 fiber into free-space, and then is coupled back into a second fiber).

21 54. The four key components, different ways of perturbing the fiber or beam,
22 and variations in employing the system described in paragraphs 51-53 above
23 (collectively and individually, the “**JDSU Adjustable Beam Innovations**”) were all
24 conceived, developed, and/or reduced to practice by Muendel and Kliner at JDSU.
25 Farrow also jointly developed various aspects of the JDSU Adjustable Beam
26 Innovations while he was at JDSU.

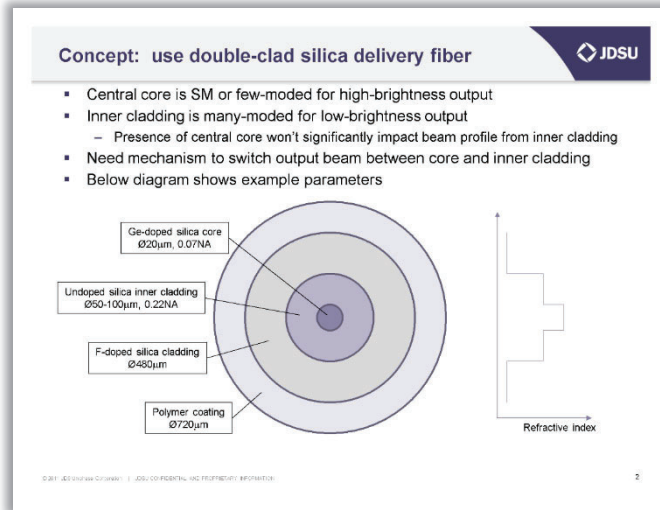
1 55. For example, following the July 2011 meeting with Amada, Muendel
 2 and Kliner conceived of the basic idea of perturbing a fiber or beam to provide
 3 adjustable beam characteristics so that a user of a fiber laser system could switch
 4 between such different beam characteristics depending on the desired application. On
 5 August 17, 2011, Thomas Ho (“Ho”), who was Engineering Program Manager in the
 6 Laser Products Group, circulated a PowerPoint presentation to Muendel, Kliner, and
 7 others, which generally summarized the status of the “Gen 2” fiber laser project. The
 8 PowerPoint noted that “[a]lternate laser module configuration brainstorming
 9 continues,” but also listed the idea of a “[m]ode-switch for ‘thin’ vs. ‘thick’ cutting
 10 application,” which the presentation identified as “Dahv [Kliner]’s ‘patent’ idea”:

11 1.X kW single-module engine

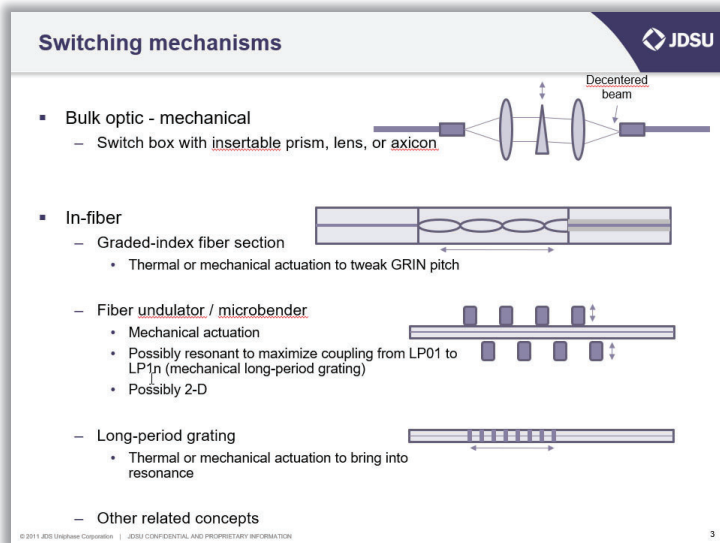
- 12 – $X_{\min} = 5$, $X_{\text{goal}} = 8$, $X_{\text{BHAG}} = 9.9999$
- 13 – Single-mode (BPP ≤ 0.5 mm.mrad)
 - 14 • Samson = 2.5 mm.mrad, Homer = 2.3 mm.mrad
 - 15 • What is the market premium for switchable BPP? - PLM
 - 16 • Mode-switch for “thin” vs. “thick” cutting application – Dahv’s “patent” idea

17 56. In response to Ho’s circulation of the PowerPoint presentation, Kliner on
 18 the same day responded by email to Ho and cc’d Muendel. Kliner stated, “Let’s not
 19 refer to a process fiber with a switchable BPP [Beam Parameter Product] as ‘Dahv’s
 20 patent idea’. I think that Martin [Muendel] had a very similar idea (we haven’t had a
 21 chance to compare notes), and anyway I’d prefer not to personalize the technology in
 22 such a presentation.”

57. In fact, Muendel had indeed developed similar concepts regarding a fiber laser system that could provide switchable beam characteristics. On or about the same day, Muendel drafted a PowerPoint reflecting his conception of potential options for such a system. Muendel proposed using a second length of fiber (i.e., the delivery fiber to the workpiece) with multiple confinement regions:



58. For the “mechanism to switch output beam between core and inner cladding” referred to in Muendel’s slide above, Muendel proposed a number of different potential switching mechanisms that could perturb a fiber or beam, including free-space optics, use of a GRIN fiber section, and mechanical actuation:



1 59. On August 19, 2011, Muendel circulated his PowerPoint to Jeremy
2 Weston (Senior Director of Engineering), Kliner, and Ho. In his email, Muendel
3 stated that the PowerPoint reflected “the switchable BPP [beam parameter product]
4 concepts that [he] was envisioning.” Muendel further stated to Kliner, “Dahv, please
5 comment on whether you were thinking the same, or feel free to add slides.”

6 60. In response, Kliner stated to Muendel that “[w]hat I had described was
7 very similar.” Kliner further added other concepts that he envisioned, including other
8 switching mechanisms, using bend loss to direct light into the second core of the
9 second length of fiber, and using a silica ring:

10 **From:** Dahv Kliner
11 **Sent:** Sunday, August 21, 2011 6:04 AM
12 **To:** Martin Muendel; Jeremy Weston
13 **Cc:** Thomas Ho
14 **Subject:** RE: Switchable BPP concept 2011-08-17.pptx

15 Martin,

16 What I had described was very similar. Here are a few additions:

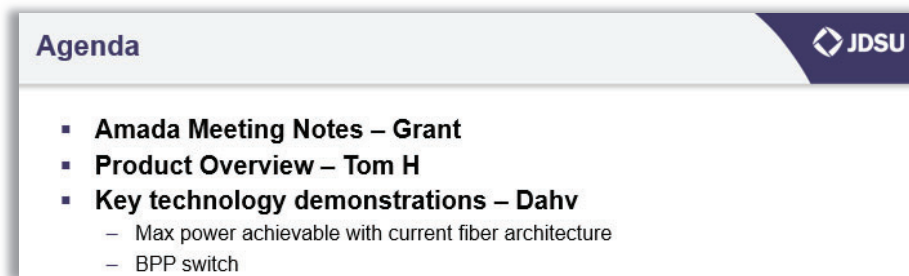
- 17 1. Other switching mechanisms are possible involving translation or angular adjustment of the fibers, lenses, or a mirror (as in a standard multi-output beam switch). In addition to using an offset for the misalignment, angular misalignment or size mismatch (e.g., beam waist translated away from the face of the process fiber) could be used.
- 18 2. Depending on the NA of the central core, bend loss could be used to kick light into the 2nd core.
- 19 3. The fluorosilicate annulus could be surrounded by a silica ring (like some feeding and process fibers).

20 Dahv

21 61. Over the next several weeks, Muendel and Kliner continued to develop
22 and reduce to practice their ideas, with input from Farrow. For example, on August
23 29, 2011, Muendel, Farrow, and Jim Morehead (Staff Optical Engineer), held a group
24 meeting over lunch at Taqueria Los Cuñados in Milpitas, California. During this
25 meeting, Muendel described his and Kliner’s work on the JDSU switchable beam
26 project, including their conceptions regarding perturbation of a fiber, using GRIN
27 fibers, and providing delivery fibers with multiple confinement regions. This included
the double-clad fiber illustrated in Muendel’s earlier PowerPoint, as well as a related
design in which the multiple confinement regions included the central core and one or
more ring cores separated by low-index-doped separator regions. After discussing

1 these concepts, Muendel solicited input from Farrow and Morehead, both of whom
2 indicated that they understood the inventions and believed them to be feasible and
3 practical. Farrow further provided details of earlier work he had done regarding the
4 shifting of a beam in a graded-index fiber when it is bent, which built upon Kliner's
5 suggestion of bending a fiber to provide a mechanical actuation.

6 62. Following continued collaboration over the next few weeks, on
7 September 8, 2011, Kliner presented to a larger team within the Laser Products Group
8 regarding these concepts:



14 63. For his September 8, 2011 presentation, Kliner used Muendel's August
15 17, 2011 presentation slides to describe the innovations conceived and developed thus
16 far, including various potential switching mechanisms and use of a multiple-
17 confinement-region second length of fiber.

18 64. Muendel and Kliner continued to collaborate to develop and reduce to
19 practice these concepts, and on September 23, 2011, Muendel emailed Kliner with the
20 subject line, "Eureka!" In his email, Muendel described his concept of using dual
21 GRIN fiber lenses (which generally are very short lengths of GRIN fiber) to achieve
22 adjustable beam characteristics in a manner that would provide advantages in certain
23 applications. In response, Kliner wrote, "Hooray! Let me know when I can see your
24 calculations."

25 65. Muendel then followed up on the same evening with a second email
26 proposing using the GRIN lenses spliced on both ends of the process fiber. Kliner
27 responded by asking about the dimensions of the GRIN lenses in Muendel's concept.

1 66. Over the next several weeks, Muendel and Kliner further developed
2 various aspects of the JDSU Adjustable Beam Innovations. For example, Muendel
3 and Kliner discussed and developed various options for varying beam characteristics,
4 including use of a second fiber length having multiple discrete confinement regions
5 (such as a double-clad fiber), and a GRIN fiber length that would provide a gradual
6 variation. They also discussed and developed ways of adjusting beam characteristics
7 within a continuous length of fiber.

8 67. On December 9, 2011, JDSU filed a patent application on certain
9 embodiments of the JDSU Adjustable Beam Innovations, listing Muendel and Kliner
10 as joint inventors. This patent application disclosed embodiments focused on use of
11 GRIN lenses, as opposed to other alternatives conceived and developed at JDSU.

12 68. Among other things, the application disclosed various ways of varying
13 the characteristics of a laser beam “in real time during the processing itself, which is
14 not possible by swapping out equipment.” This included techniques such as
15 “deliberately inducing microbends or other perturbations in the fiber,” employing “a
16 short length of graded-index fiber that is thermally or mechanically tuned,” and
17 executing BPP adjustment “fully in fiber.” The application ultimately issued as U.S.
18 Patent No. 9,250,390.

19 69. Muendel, Kliner, and others continued to meet to discuss and refine the
20 JDSU Adjustable Beam Innovations, including meetings in December 2011 and
21 January 2012. On multiple occasions, Kliner advocated for use of a fiber-bending
22 actuation scheme within a continuous fiber length.

23 70. Throughout this time in 2011 and 2012, Farrow participated in additional
24 discussions regarding the JDSU Adjustable Beam Innovations with Muendel and
25 Kliner, and jointly developed various aspects of the JDSU Adjustable Beam
26 Innovations.

1 **E. JDSU’s Triple-Clad Fiber Innovations**

2 71. From 2010 to 2012, Muendel and others in the JDSU Laser Products
3 Group also conceived, developed, and reduced to practice a triple-clad fiber for use
4 with the “Gen 2” fiber laser.

5 72. Before 2010, typical “Gen 1” fiber employed two cladding layers—a
6 first cladding layer surrounding the core of the fiber and having a refractive index
7 lower than the core so as to confine laser light to the core; and a second cladding layer
8 surrounding the first cladding layer and having a refractive index lower than that of the
9 first cladding layer so as to confine laser pump light in the first cladding layer.

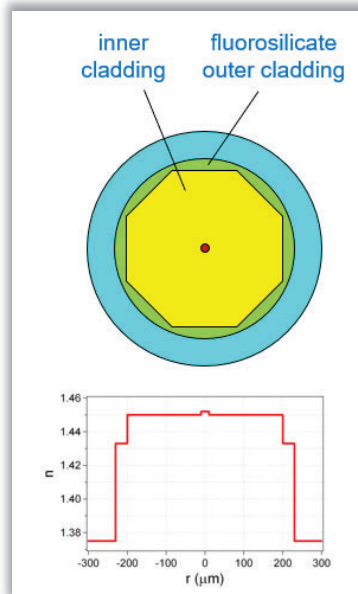
10 73. However, such dual-clad fiber could potentially burn due to excessive
11 power. This is because all of the pump light was guided by the second cladding layer,
12 which typically comprised a low-index polymer and was prone to damage in high-
13 power applications.

14 74. Beginning in 2010, Muendel, Kliner, Farrow, and Wolfgang Gries
15 (“Gries”), who was Senior Director of Engineering within the Laser Products Group at
16 that time, worked to find a solution to this problem. Ultimately, they conceived,
17 developed, and reduced to practice a triple-clad fiber system that could handle
18 increased power levels of “Gen 2” laser fibers. For example, one embodiment of the
19 triple-clad fiber system developed by the team included (1) a pump light source; (2) a
20 laser fiber optically coupled to the pump light source; (3) the laser fiber having a core
21 situated to produce a single-mode output beam with power greater than 1kW; (4) an
22 inner cladding layer surrounding the core; (5) a glass outer cladding layer surrounding
23 the inner cladding layer; (6) a polymer third cladding layer surrounding the outer
24 cladding layer; and (7) a way of partitioning and selecting the pump light received
25 from the pump source so that one portion of the pump light is guided by the boundary
26 between the inner and outer cladding layers and a second portion is guided by the
27 boundary between the outer cladding and polymer third cladding layers; wherein (8)

1 the out-of-band nonlinear optical power is 20% or less than the output beam power.
 2 (Collectively and individually, along with variations, the “**JDSU Triple-Clad Fiber**
 3 **Innovations**”).

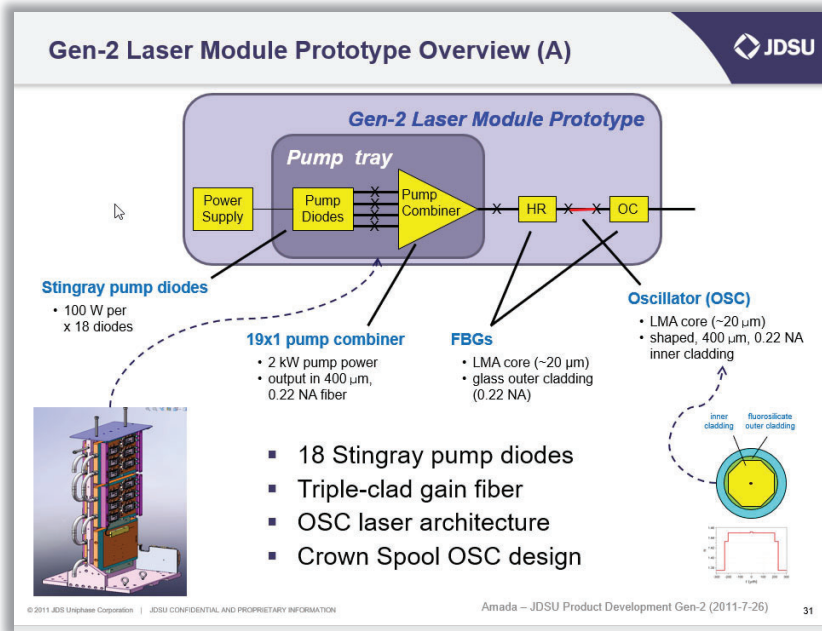
4 75. Muendel had first conceived of an optical fiber employing three cladding
 5 layers back in 1997. In or about January 2010, he further developed this concept,
 6 including by conceiving of a “crown spool” that could enable a triple-clad fiber as
 7 conceived by the JDSU team to output a single-mode beam, which provided certain
 8 advantages over a multi-mode beam and was an important aspect of the JDSU Triple-
 9 Clad Fiber Innovations.

10 76. After further development among the team, in September 2010, Kliner
 11 and Gries drafted and presented a formal proposal for moving from double-clad fiber
 12 to triple-clad fiber. This proposal included employing an extra low-index
 13 fluorosilicate (glass) cladding layer in addition to the inner cladding layer (also glass)
 14 and the polymer third cladding layer (outermost ring below):



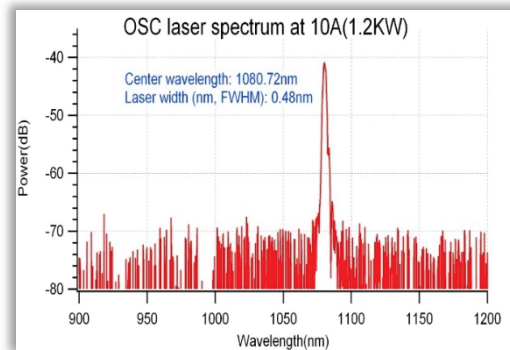
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25 77. In this way, most or all of the pump light would be guided by the glass
 26 layer, while only at most a fraction of the pump light would be guided by the polymer
 27 layer, thereby preventing the potential for failure existent in current laser fiber.

78. After further development among the team, in July 2011, the team presented one embodiment of the JDSU Triple-Clad Fiber Innovations. For example, as shown in the below excerpts from presentation slides from that meeting, this included (1) a source of pump light; (2) a gain fiber including an actively doped core situated to produce an output beam, wherein the output beam is a single-mode beam and the output beam power is greater or equal to 1 kW; (3) an inner cladding surrounding the core; (4) an outer cladding surrounding the inner cladding layer; (5) a polymer third cladding surrounding the outer cladding; (6) the gain fiber optically coupled to the pump source; and (7) out-of-band nonlinear optical power that is 20% or less than the output beam power:



- **1.2 kW core power**
 - $F_{core} = 92\% - 93\%$ for $P_{core} > 300$ W
 - Core signal efficiency is 61%

1.2 kW M² Measurement



1 79. The team further conceived and developed the concept of partitioning
2 the pump light received from the pump source so that one portion of the pump light is
3 guided by the glass outer cladding layer and a second portion is guided by the polymer
4 third cladding layer. For example, in September 2011, the team internally presented
5 the concept of increasing the diameter of the inner cladding layer from 400um (as in
6 the current laser fiber) to 480um, thereby enabling more pump power to be coupled
7 into the Gen 2 fiber while still partitioning the same amount of pump light to be guided
8 by the polymer third cladding layer as in the current fiber laser, including by
9 partitioning greater pump power into the outer glass cladding layer, which was much
10 more robust against optical damage.

11 80. Throughout this time from 2010 to 2013, Farrow participated in
12 discussions regarding the JDSU Triple-Clad Fiber Innovations with Muendel, Kliner,
13 and Gries, and jointly developed various aspects of the JDSU Triple-Clad Fiber
14 Innovations.

15 **F. Kliner’s and Farrow’s Departure from JDSU to Develop Fiber Laser**
16 **Systems for nLIGHT**

17 81. On September 10, 2012, Kliner submitted a resignation letter to Jeremy
18 Weston, who had succeeded Gries as Senior Director of Engineering in the Laser
19 Products Group. Kliner’s letter stated, “I am resigning from JDSU to pursue another
20 job opportunity.... I've enjoyed working with you, with the JDSU team, and with our
21 external partners on the kW fiber laser program, and I wish all of you continued
22 success.”

23 82. Kliner’s last day of employment at JDSU was on or about September 21,
24 2012. On that day, Kliner signed a Termination Certificate, which was part of the
25 Kliner EPIIA. (Ex. A, § 12 and Ex. C.) Among other things, the Termination
26 Certificate stated as follows:
27

1 *I understand that my Employee Proprietary Information*
2 *and Inventions Agreement requires that I continue to be*
3 *obligated to protect the secrecy and confidentiality of all*
4 *Proprietary Information in perpetuity ... including, for*
5 *example and without limitation, all concepts; techniques;*
6 *processes; methods; systems; designs; computer programs;*
7 *source documentation; trade secrets; formulas; development*
8 *or experimental work, work in progress; forecasts; proposed*
9 *and future products; marketing plans; business plans;*
10 *customers and suppliers; and any other nonpublic*
11 *information that has commercial value.*

12 *I will not use the Proprietary Information for my benefit*
13 *or for the benefit of any person or company other than*
14 *JDS Uniphase Corporation. I will not disclose or provide*
15 *tile Proprietary Information to any other person other*
16 *than JDS Uniphase Corporation, including, without*
17 *limitation, my new employer.*

18 (emphasis added).

19 83. On information and belief, within weeks of resigning from JDSU, Kliner
20 assumed the position of Director of Fiber Laser Product Development at nLIGHT.

21 84. On information and belief, after Kliner began working at nLIGHT, he
22 solicited and/or encouraged Farrow to terminate his employment with JDSU and to
23 apply for a position at nLIGHT.

24 85. On March 14, 2013, Farrow sent a message to Muendel, informing him
25 that he was resigning his position at JDSU. Farrow stated that the purpose of his
26 resignation was “to pursue other opportunities.”
27

1 86. Farrow's last day of employment at JDSU was on or about March 29,
2 2013. On March 21, 2013, Farrow signed a Termination Certificate. Among other
3 things, the Termination Certificate stated as follows:

4 *I understand that my Employee Proprietary Information*
5 *and Inventions Agreement requires that I continue to be*
6 *obligated to protect the secrecy and confidentiality of all*
7 *Proprietary Information in perpetuity ... including, for*
8 *example and without limitation, all concepts; techniques;*
9 *processes; methods; systems; designs; computer programs;*
10 *source documentation; trade secrets; formulas; development*
11 *or experimental work, work in progress; forecasts; proposed*
12 *and future products; marketing plans; business plans;*
13 *customers and suppliers; and any other nonpublic*
14 *information that has commercial value.*

15 *I will not use the Proprietary Information for my benefit*
16 *or for the benefit of any person or company other than*
17 *JDS Uniphase Corporation. I will not disclose or provide*
18 *tile Proprietary Information to any other person other*
19 *than JDS Uniphase Corporation, including, without*
20 *limitation, my new employer.*

21 (emphasis added).

22 87. On information and belief, within weeks of resigning from JDSU,
23 Farrow began working for nLIGHT. On information and belief, Farrow initially began
24 work for nLIGHT as a consultant, and ultimately assumed the position of Senior Fiber
25 Laser Engineer. On information and belief, this arrangement was intentionally done in
26 a purported attempt to evade the non-solicitation provisions of the Kliner EPIIA.
27

1 **G. Kliner’s and Farrow’s Improper Use and Disclosure of JDSU Proprietary**
2 **Information at nLIGHT**

3 88. On information and belief, after starting work at nLIGHT, Kliner and
4 Farrow used and disclosed JDSU Proprietary Information in violation of their EPIAs.

5 89. For example, on information and belief, Kliner and Farrow used JDSU
6 Proprietary Information to assist nLIGHT in developing fiber laser products that
7 nLIGHT now makes, uses, offers for sale, sells, and/or imports into the United States.
8 These fiber lasers include a series of products that nLIGHT refers to as “Corona,”
9 “CFX,” and/or “AFX,” including without limitation the nLIGHT® Corona™ CFX-
10 3000, CFX-4000, CFX-5000, CFX-6000, CFX-8000, CFX-10000, CFX-12000, and
11 AFX-1000 fiber lasers.

12 90. Kliner and Farrow also used JDSU Proprietary Information to pursue,
13 and/or assist nLIGHT in pursuing, numerous patent applications disclosing and
14 claiming JDSU Proprietary Information, as described further below.

15 **H. Kliner’s and Farrow’s Improper Patenting of JDSU Adjustable Beam**
16 **Innovations at nLIGHT**

17 91. Kliner and Farrow pursued, and/or assisted nLIGHT in pursuing,
18 numerous patent applications disclosing and claiming Company Innovations, including
19 the JDSU Adjustable Beam Innovations, as described below.

20 **1. U.S. Patent No. 10,295,845**

21 92. On May 26, 2017, nLIGHT filed U.S. Patent Application No.
22 15/607,411 (“the ’411 Application”), listing Kliner and Farrow as inventors. The ’411
23 Application issued on May 21, 2019 as U.S. Patent No. 10,295,845 (“the ’845
24 Patent”), listing nLIGHT as the Assignee.

25 93. The ’845 Patent is based on JDSU Adjustable Beam Innovations. For
26 example, the ’845 Patent generally discloses in-fiber beam shaping using at least two
27

1 different lengths of fiber. The first length of fiber is perturbed to affect how light in
2 the second length of fiber is distributed within its various confinement regions.

3 94. The '845 Patent contains at least one claim reciting one or more JDSU
4 Adjustable Beam Innovations. For example, claim 1 of the '845 Patent recites a
5 system with a first length of fiber comprising a first RIP formed to enable, at least in
6 part, modification of one or more beam characteristics of an optical beam by a
7 perturbation assembly, and a second length of fiber coupled to the first length of fiber
8 and having a second RIP formed to preserve at least a portion of the one or more beam
9 characteristics of the optical beam modified by the perturbation assembly within two
10 or more cores, wherein the first RIP and the second RIP are different. As another
11 example, claim 7 of the '845 Patent recites a system with a first length of fiber
12 comprising a first RIP formed to enable modification of one or more beam
13 characteristics of an optical beam by a perturbation assembly and a second length of
14 fiber coupled to the first length of fiber and having a second RIP formed to preserve at
15 least a portion of the one or more beam characteristics within one or more first
16 confinement regions, wherein the first RIP and the second RIP are different.

17 95. As set forth above, before the filing of the '411 Application or any
18 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
19 and interest in any contribution by him to the conception, development, and/or
20 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
21 length of fiber comprising a first RIP formed to enable, at least in part, modification of
22 one or more beam characteristics of an optical beam by a perturbation assembly, and a
23 second length of fiber coupled to the first length of fiber and having a second RIP
24 formed to preserve at least a portion of the one or more beam characteristics of the
25 optical beam modified by the perturbation assembly within two or more cores, wherein
26 the first RIP and the second RIP are different, as claimed in the '845 Patent.

1 96. Accordingly, Lumentum is entitled to a declaration that any right, title,
2 and interest of Kliner in and to the '845 Patent is owned by Lumentum.

3 97. By purporting not to assign his right, title, and interest in the '411
4 Application and the '845 Patent to JDSU, and instead purporting to assign such right,
5 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

6 98. As set forth above, before the filing of the '411 Application or any
7 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
8 and interest in any contribution by him to the conception, development, and/or
9 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
10 length of fiber comprising a first RIP formed to enable, at least in part, modification of
11 one or more beam characteristics of an optical beam by a perturbation assembly, and a
12 second length of fiber coupled to the first length of fiber and having a second RIP
13 formed to preserve at least a portion of the one or more beam characteristics of the
14 optical beam modified by the perturbation assembly within two or more cores, wherein
15 the first RIP and the second RIP are different, as claimed in the '845 Patent.

16 99. Accordingly, Lumentum is entitled to a declaration that any right, title,
17 and interest of Farrow in and to the '845 Patent is owned by Lumentum.

18 100. By purporting not to assign his right, title, and interest in the '411
19 Application and the '845 Patent to JDSU, and instead purporting to assign such right,
20 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

21 101. As set forth above, Muendel contributed in a significant manner to the
22 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
23 including a first length of fiber comprising a first RIP formed to enable, at least in part,
24 modification of one or more beam characteristics of an optical beam by a perturbation
25 assembly, and a second length of fiber coupled to the first length of fiber and having a
26 second RIP formed to preserve at least a portion of the one or more beam
27 characteristics of the optical beam modified by the perturbation assembly within two

1 or more cores, wherein the first RIP and the second RIP are different, as claimed in the
2 '845 Patent.

3 102. As set forth above, Muendel made contributions to the JDSU Adjustable
4 Beam Innovations as claimed in the '845 Patent that are not insignificant in quality,
5 when those contributions are measured against the dimension of the full invention.

6 103. As set forth above, Muendel did more than merely explain to Kliner,
7 Farrow, or others well-known concepts and/or the current state of the art.

8 104. Accordingly, Lumentum is entitled to correction of the inventorship of
9 the '845 Patent to add Muendel as an inventor.

10 105. Lumentum is further entitled to a declaratory relief that nLIGHT must
11 take all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '845 Patent.

13 **2. U.S. Patent No. 10,423,015**

14 106. On May 26, 2017, nLIGHT filed U.S. Patent Application No.
15 15/607,399 (“the '399 Application”), listing Kliner and Farrow as inventors. The '399
16 Application issued on September 24, 2019 as U.S. Patent No. 10,423,015 (“the '015
17 Patent”), listing nLIGHT as the Assignee.

18 107. The '015 Patent is based on JDSU Adjustable Beam Innovations. For
19 example, the '015 Patent generally discloses in-fiber beam shaping using at least two
20 different lengths of fiber. The first length of fiber is perturbed to affect how light in
21 the second length of fiber is distributed within its various confinement regions.

22 108. The '015 Patent contains at least one claim reciting one or more JDSU
23 Adjustable Beam Innovations. For example, claim 1 of the '015 Patent recites a
24 method including perturbing an optical beam propagating within a first length of fiber
25 to adjust one or more beam characteristics of the optical beam and maintaining at least
26 a portion of one or more adjusted beam characteristics within a second length of fiber
27 having two or more confinement regions, wherein the first length of fiber and the

1 second length of fiber form at least a portion of a continuous length of fiber. As
2 another example, claim 16 of the '015 Patent recites a method of perturbing an optical
3 beam propagating within a first length of fiber to adjust one or more beam
4 characteristics of the optical beam, with a second length of fiber having two or more
5 confinement regions and the first length of fiber and the second length of fiber having
6 different RIPs and forming at least a portion of a continuous length of fiber.

7 109. As set forth above, before the filing of the '399 Application or any
8 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
9 and interest in any contribution by him to the conception, development, and/or
10 reduction to practice of the JDSU Adjustable Beam Innovations, including perturbing
11 an optical beam propagating within a first length of fiber to adjust one or more beam
12 characteristics of the optical beam and maintaining at least a portion of one or more
13 adjusted beam characteristics within a second length of fiber having two or more
14 confinement regions, wherein the first length of fiber and the second length of fiber
15 form at least a portion of a continuous length of fiber, as claimed in the '015 Patent.

16 110. Accordingly, Lumentum is entitled to a declaration that any right, title,
17 and interest of Kliner in and to the '015 Patent is owned by Lumentum.

18 111. By purporting not to assign his right, title, and interest in the '399
19 Application and the '015 Patent to JDSU, and instead purporting to assign such right,
20 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

21 112. As set forth above, Farrow assigned to JDSU all of his right, title, and
22 interest in any contribution by him to the conception, development, and/or reduction to
23 practice of the JDSU Adjustable Beam Innovations, including perturbing an optical
24 beam propagating within a first length of fiber to adjust one or more beam
25 characteristics of the optical beam and maintaining at least a portion of one or more
26 adjusted beam characteristics within a second length of fiber having two or more
27 confinement regions, wherein the first length of fiber and the second length of fiber

1 form at least a portion of a continuous length of fiber, as claimed in the '015 Patent,
2 before the filing of the '399 Application or any application to which it claims priority.

3 113. Accordingly, Lumentum is entitled to a declaration that any right, title,
4 and interest of Farrow in and to the '015 Patent is owned by Lumentum.

5 114. By purporting not to assign his right, title, and interest in the '399
6 Application and the '015 Patent to JDSU, and instead purporting to assign such right,
7 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

8 115. As set forth above, Muendel contributed in a significant manner to the
9 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
10 including perturbing an optical beam propagating within a first length of fiber to adjust
11 one or more beam characteristics of the optical beam and maintaining at least a portion
12 of one or more adjusted beam characteristics within a second length of fiber having
13 two or more confinement regions, wherein the first length of fiber and the second
14 length of fiber form at least a portion of a continuous length of fiber, as claimed in the
15 '015 Patent.

16 116. As set forth above, Muendel made contributions to the JDSU Adjustable
17 Beam Innovations as claimed in the '015 Patent that are not insignificant in quality,
18 when those contributions are measured against the dimension of the full invention.

19 117. As set forth above, Muendel did more than merely explain to Kliner,
20 Farrow, or others well-known concepts and/or the current state of the art.

21 118. Accordingly, Lumentum is entitled to correction of the inventorship of
22 the '015 Patent to add Muendel as an inventor.

23 119. Lumentum is further entitled to a declaratory relief that nLIGHT must
24 take all necessary actions to change the inventorship designation to add Muendel as an
25 inventor on any foreign patent applications corresponding to the '015 Patent.

1 **3. U.S. Patent No. 10,663,767**

2 120. On May 26, 2017, nLIGHT filed U.S. Patent Application No.
3 15/607,410 (“the ’410 Application”), listing Kliner and Farrow as inventors. The ’410
4 Application issued on May 26, 2020 as U.S. Patent No. 10,663,767 (“the ’767
5 Patent”), listing nLIGHT as the Assignee.

6 121. The ’767 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’767 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 122. The ’767 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’767 Patent recites a
12 device with a first length of fiber comprising a RIP and a second length of fiber having
13 a second RIP coupled to the first length of fiber, the second RIP formed to confine at
14 least a portion of the modified beam characteristics received from the first length of
15 fiber within two or more confinement regions, wherein the first RIP and the second
16 RIP are different and the first length of fiber and the second length of fiber form at
17 least a portion of a continuous fiber length. As another example, claim 19 of the ’767
18 Patent recites a device with a first length of fiber comprising a RIP formed to enable
19 modification of two or more beam characteristics of an optical beam by a perturbation
20 device, and a second length of fiber having a second RIP defining at least two
21 confinement regions and coupled to the first length of fiber, the second RIP formed to
22 confine at least a portion of the modified beam characteristics of the optical beam
23 within the at least two confinement regions.

24 123. As set forth above, before the filing of the ’410 Application or any
25 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
26 and interest in any contribution by him to the conception, development, and/or
27 reduction to practice of the JDSU Adjustable Beam Innovations, including a device

1 with a first length of fiber comprising a RIP and a second length of fiber having a
2 second RIP coupled to the first length of fiber, the second RIP formed to confine at
3 least a portion of the modified beam characteristics received from the first length of
4 fiber within two or more confinement regions, wherein the first RIP and the second
5 RIP are different and the first length of fiber and the second length of fiber form at
6 least a portion of a continuous fiber length, as claimed in the '767 Patent.

7 124. Accordingly, Lumentum is entitled to a declaration that any right, title,
8 and interest of Klinier in and to the '767 Patent is owned by Lumentum.

9 125. By purporting not to assign his right, title, and interest in the '410
10 Application and the '767 Patent to JDSU, and instead purporting to assign such right,
11 title, and interest to nLIGHT, Klinier breached the Klinier EPIIA.

12 126. As set forth above, before the filing of the '410 Application or any
13 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
14 and interest in any contribution by him to the conception, development, and/or
15 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
16 with a first length of fiber comprising a RIP and a second length of fiber having a
17 second RIP coupled to the first length of fiber, the second RIP formed to confine at
18 least a portion of the modified beam characteristics received from the first length of
19 fiber within two or more confinement regions, wherein the first RIP and the second
20 RIP are different and the first length of fiber and the second length of fiber form at
21 least a portion of a continuous fiber length, as claimed in the '767 Patent.

22 127. Accordingly, Lumentum is entitled to a declaration that any right, title,
23 and interest of Farrow in and to the '767 Patent is owned by Lumentum.

24 128. By purporting not to assign his right, title, and interest in the '410
25 Application and the '767 Patent to JDSU, and instead purporting to assign such right,
26 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

1 129. As set forth above, Muendel contributed in a significant manner to the
2 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
3 including a device with a first length of fiber comprising a RIP and a second length of
4 fiber having a second RIP coupled to the first length of fiber, the second RIP formed to
5 confine at least a portion of the modified beam characteristics received from the first
6 length of fiber within two or more confinement regions, wherein the first RIP and the
7 second RIP are different and the first length of fiber and the second length of fiber
8 form at least a portion of a continuous fiber length, as claimed in the '767 Patent.

9 130. As set forth above, Muendel made contributions to the JDSU Adjustable
10 Beam Innovations as claimed in the '767 Patent that are not insignificant in quality,
11 when those contributions are measured against the dimension of the full invention.

12 131. As set forth above, Muendel did more than merely explain to Kliner,
13 Farrow, or others well-known concepts and/or the current state of the art.

14 132. Accordingly, Lumentum is entitled to correction of the inventorship of
15 the '767 Patent to add Muendel as an inventor.

16 133. Lumentum is further entitled to a declaratory relief that nLIGHT must
17 take all necessary actions to change the inventorship designation to add Muendel as an
18 inventor on any foreign patent applications corresponding to the '767 Patent.

19 **4. U.S. Patent No. 10,661,391**

20 134. On January 29, 2018, nLIGHT filed U.S. Patent Application No.
21 15/882,292 (“the '292 Application”), listing Kliner, Farrow, and others as inventors.
22 The '292 Application issued on May 26, 2020 as U.S. Patent No. 10,661,391 (“the
23 '391 Patent”), listing nLIGHT as the Assignee.

24 135. The '391 Patent is based on JDSU Adjustable Beam Innovations. For
25 example, the '391 Patent generally discloses in-fiber beam shaping using at least two
26 different lengths of fiber. The first length of fiber is perturbed to affect how light in
27 the second length of fiber is distributed within its various confinement regions.

1 136. The '391 Patent contains at least one claim reciting one or more JDSU
2 Adjustable Beam Innovations. For example, claim 1 of the '391 Patent recites a
3 method including adjusting one or more beam characteristics, which includes
4 perturbing an optical beam propagating within a first section of fiber to adjust one or
5 more of the beam characteristics of the laser beam and coupling the perturbed optical
6 beam into a second section of fiber having two or more confinement regions, wherein
7 the first section of fiber and the second section of fiber form at least a portion of a
8 continuous length of fiber. As another example, claim 21 of the '391 Patent recites a
9 method including adjusting one or more beam characteristics, which includes
10 perturbing an optical beam propagating within a first section of fiber to adjust one or
11 more of the beam characteristics of the laser beam and coupling the perturbed optical
12 beam into a second section of fiber having two or more confinement regions, wherein
13 the first section of fiber and the second section of fiber form at least a portion of a
14 continuous length of fiber. As yet another example, claim 21 of the '391 Patent recites
15 a method including perturbing a laser beam propagating within a first section of fiber
16 to adjust one or more beam characteristics of the laser beam and coupling the
17 perturbed laser beam into a second section of fiber, the second section of fiber having
18 two or more confinement regions, wherein the first section of fiber and the second
19 section of fiber form at least a portion of a continuous length of fiber.

20 137. As set forth above, before the filing of the '292 Application or any
21 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
22 and interest in any contribution by him to the conception, development, and/or
23 reduction to practice of the JDSU Adjustable Beam Innovations, including adjusting
24 one or more beam characteristics by, for example, perturbing an optical beam
25 propagating within a first section of fiber to adjust one or more of the beam
26 characteristics of the laser beam and coupling the perturbed optical beam into a second
27 section of fiber having two or more confinement regions, wherein the first section of

1 fiber and the second section of fiber form at least a portion of a continuous length of
2 fiber, as claimed in the '391 Patent.

3 138. Accordingly, Lumentum is entitled to a declaration that any right, title,
4 and interest of Kliner in and to the '391 Patent is owned by Lumentum.

5 139. By purporting not to assign his right, title, and interest in the '292
6 Application and the '391 Patent to JDSU, and instead purporting to assign such right,
7 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

8 140. As set forth above, before the filing of the '292 Application or any
9 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
10 and interest in any contribution by him to the conception, development, and/or
11 reduction to practice of the JDSU Adjustable Beam Innovations, including adjusting
12 one or more beam characteristics by, for example, perturbing an optical beam
13 propagating within a first section of fiber to adjust one or more of the beam
14 characteristics of the laser beam and coupling the perturbed optical beam into a second
15 section of fiber having two or more confinement regions, wherein the first section of
16 fiber and the second section of fiber form at least a portion of a continuous length of
17 fiber, as claimed in the '391 Patent.

18 141. Accordingly, Lumentum is entitled to a declaration that any right, title,
19 and interest of Farrow in and to the '391 Patent is owned by Lumentum.

20 142. By purporting not to assign his right, title, and interest in the '292
21 Application and the '391 Patent to JDSU, and instead purporting to assign such right,
22 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

23 143. As set forth above, Muendel contributed in a significant manner to the
24 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
25 including adjusting one or more beam characteristics by, for example, perturbing an
26 optical beam propagating within a first section of fiber to adjust one or more of the
27 beam characteristics of the laser beam and coupling the perturbed optical beam into a

1 second section of fiber having two or more confinement regions, wherein the first
2 section of fiber and the second section of fiber form at least a portion of a continuous
3 length of fiber, as claimed in the '391 Patent.

4 144. As set forth above, Muendel made contributions to the JDSU Adjustable
5 Beam Innovations as claimed in the '391 Patent that are not insignificant in quality,
6 when those contributions are measured against the dimension of the full invention.

7 145. As set forth above, Muendel did more than merely explain to Kliner,
8 Farrow, or others well-known concepts and/or the current state of the art.

9 146. Accordingly, Lumentum is entitled to correction of the inventorship of
10 the '391 Patent to add Muendel as an inventor.

11 147. Lumentum is further entitled to a declaratory relief that nLIGHT must
12 take all necessary actions to change the inventorship designation to add Muendel as an
13 inventor on any foreign patent applications corresponding to the '391 Patent.

14 **5. U.S. Patent No. 10,668,535**

15 148. On January 29, 2018, nLIGHT filed U.S. Patent Application No.
16 15/882,870 (“the '870 Application”), listing Kliner, Farrow, and others as inventors.
17 The '870 Application issued on June 2, 2020 as U.S. Patent No. 10,668,535 (“the '535
18 Patent”), listing nLIGHT as the Assignee.

19 149. The '535 Patent is based on JDSU Adjustable Beam Innovations. For
20 example, the '535 Patent generally discloses in-fiber beam shaping using at least two
21 different lengths of fiber. The first length of fiber is perturbed to affect how light in
22 the second length of fiber is distributed within its various confinement regions.

23 150. The '535 Patent contains at least one claim reciting one or more JDSU
24 Adjustable Beam Innovations. For example, claim 1 of the '535 Patent recites a
25 method including using a laser with a first length of fiber and a second length of fiber,
26 the second length of fiber having two or more confinement regions. As another
27 example, claim 18 of the '535 Patent recites a method including perturbing a first laser

1 beam propagating within a first length of fiber, guiding the perturbed second laser
2 beam into a second length of fiber, and emitting the perturbed second laser beam from
3 the second length of fiber, wherein the first laser beam and the second laser beam are
4 emitted from a same laser, the laser comprises the first length of fiber and the second
5 length of fiber, and the second length of fiber has two or more confinement regions.
6 As yet another example, claim 24 of the '535 Patent recites an article of manufacture
7 formed by a method including using a laser having a first length of fiber and a second
8 length of fiber, the second length of fiber having two or more confinement regions.

9 151. As set forth above, before the filing of the '870 Application or any
10 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
11 and interest in any contribution by him to the conception, development, and/or
12 reduction to practice of the JDSU Adjustable Beam Innovations, including perturbing
13 a first laser beam propagating within a first length of fiber, guiding the perturbed
14 second laser beam into a second length of fiber, and emitting the perturbed second
15 laser beam from the second length of fiber, wherein the first laser beam and the second
16 laser beam are emitted from a same laser, the laser comprises the first length of fiber
17 and the second length of fiber, the second length of fiber has two or more confinement
18 regions, as claimed in the '535 Patent.

19 152. Accordingly, Lumentum is entitled to a declaration that any right, title,
20 and interest of Kliner in and to the '535 Patent is owned by Lumentum.

21 153. By purporting not to assign his right, title, and interest in the '870
22 Application and the '535 Patent to JDSU, and instead purporting to assign such right,
23 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

24 154. As set forth above, before the filing of the '870 Application or any
25 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
26 and interest in any contribution by him to the conception, development, and/or
27 reduction to practice of the JDSU Adjustable Beam Innovations, including perturbing

1 a first laser beam propagating within a first length of fiber, guiding the perturbed
2 second laser beam into a second length of fiber, and emitting the perturbed second
3 laser beam from the second length of fiber, wherein the first laser beam and the second
4 laser beam are emitted from a same laser, the laser comprises the first length of fiber
5 and the second length of fiber, the second length of fiber has two or more confinement
6 regions, as claimed in the '535 Patent.

7 155. Accordingly, Lumentum is entitled to a declaration that any right, title,
8 and interest of Farrow in and to the '535 Patent is owned by Lumentum.

9 156. By purporting not to assign his right, title, and interest in the '870
10 Application and the '535 Patent to JDSU, and instead purporting to assign such right,
11 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

12 157. As set forth above, Muendel contributed in a significant manner to the
13 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
14 including perturbing a first laser beam propagating within a first length of fiber,
15 guiding the perturbed second laser beam into a second length of fiber, and emitting the
16 perturbed second laser beam from the second length of fiber, wherein the first laser
17 beam and the second laser beam are emitted from a same laser, the laser comprises the
18 first length of fiber and the second length of fiber, the second length of fiber has two or
19 more confinement regions, as claimed in the '535 Patent.

20 158. As set forth above, Muendel made contributions to the JDSU Adjustable
21 Beam Innovations as claimed in the '535 Patent that are not insignificant in quality,
22 when those contributions are measured against the dimension of the full invention.

23 159. As set forth above, Muendel did more than merely explain to Kliner,
24 Farrow, or others well-known concepts and/or the current state of the art.

25 160. Accordingly, Lumentum is entitled to correction of the inventorship of
26 the '535 Patent to add Muendel as an inventor.

1 161. Lumentum is further entitled to a declaratory relief that nLIGHT must
2 take all necessary actions to change the inventorship designation to add Muendel as an
3 inventor on any foreign patent applications corresponding to the '535 Patent.

4 **6. U.S. Patent No. 10,877,220**

5 162. On January 30, 2018, nLIGHT filed U.S. Patent Application No.
6 15/883,480 (“the '480 Application”), listing Kliner, Farrow, and others as inventors.
7 The '480 Application issued on December 29, 2020 as U.S. Patent No. 10,877,220
8 (“the '220 Patent”), listing nLIGHT as the Assignee.

9 163. The '220 Patent is based on JDSU Adjustable Beam Innovations. For
10 example, the '220 Patent generally discloses in-fiber beam shaping using at least two
11 different lengths of fiber. The first length of fiber is perturbed to affect how light in
12 the second length of fiber is distributed within its various confinement regions.

13 164. The '220 Patent contains at least one claim reciting one or more JDSU
14 Adjustable Beam Innovations. For example, claim 1 of the '220 Patent recites a
15 method including perturbing an optical beam propagating within a first section of fiber
16 to adjust one or more beam characteristics and maintaining at least a portion of one or
17 more adjusted beam characteristics within a second section of fiber having two or
18 more confinement regions, wherein the first section of fiber and the second section of
19 fiber form at least a portion of a continuous length of fiber.

20 165. As set forth above, before the filing of the '480 Application or any
21 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
22 and interest in any contribution by him to the conception, development, and/or
23 reduction to practice of the JDSU Adjustable Beam Innovations, including perturbing
24 an optical beam propagating within a first section of fiber to adjust one or more beam
25 characteristics and maintaining at least a portion of one or more adjusted beam
26 characteristics within a second section of fiber having two or more confinement
27

1 regions, wherein the first section of fiber and the second section of fiber form at least a
2 portion of a continuous length of fiber, as claimed in the '220 Patent.

3 166. Accordingly, Lumentum is entitled to a declaration that any right, title,
4 and interest of Klinier in and to the '220 Patent is owned by Lumentum.

5 167. By purporting not to assign his right, title, and interest in the '480
6 Application and the '220 Patent to JDSU, and instead purporting to assign such right,
7 title, and interest to nLIGHT, Klinier breached the Klinier EPIIA.

8 168. As set forth above, before the filing of the '480 Application or any
9 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
10 and interest in any contribution by him to the conception, development, and/or
11 reduction to practice of the JDSU Adjustable Beam Innovations, including perturbing
12 an optical beam propagating within a first section of fiber to adjust one or more beam
13 characteristics and maintaining at least a portion of one or more adjusted beam
14 characteristics within a second section of fiber having two or more confinement
15 regions, wherein the first section of fiber and the second section of fiber form at least a
16 portion of a continuous length of fiber, as claimed in the '220 Patent.

17 169. Accordingly, Lumentum is entitled to a declaration that any right, title,
18 and interest of Farrow in and to the '220 Patent is owned by Lumentum.

19 170. By purporting not to assign his right, title, and interest in the '480
20 Application and the '220 Patent to JDSU, and instead purporting to assign such right,
21 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

22 171. As set forth above, Muendel contributed in a significant manner to the
23 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
24 including perturbing an optical beam propagating within a first section of fiber to
25 adjust one or more beam characteristics and maintaining at least a portion of one or
26 more adjusted beam characteristics within a second section of fiber having two or
27 more confinement regions, wherein the first section of fiber and the second section of

1 fiber form at least a portion of a continuous length of fiber, as claimed in the '220
2 Patent.

3 172. As set forth above, Muendel made contributions to the JDSU Adjustable
4 Beam Innovations as claimed in the '220 Patent that are not insignificant in quality,
5 when those contributions are measured against the dimension of the full invention.

6 173. As set forth above, Muendel did more than merely explain to Kliner,
7 Farrow, or others well-known concepts and/or the current state of the art.

8 174. Accordingly, Lumentum is entitled to correction of the inventorship of
9 the '220 Patent to add Muendel as an inventor.

10 175. Lumentum is further entitled to a declaratory relief that nLIGHT must
11 take all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '220 Patent.

13 **7. U.S. Patent No. 10,646,963**

14 176. On January 31, 2018, nLIGHT filed U.S. Patent Application No.
15 15/885,633 (“the '633 Application”), listing Kliner, Farrow, and others as inventors.
16 The '633 Application issued on May 12, 2020 as U.S. Patent No. 10,646,963 (“the
17 '963 Patent”), listing nLIGHT as the Assignee.

18 177. The '963 Patent is based on JDSU Adjustable Beam Innovations. For
19 example, the '963 Patent generally discloses in-fiber beam shaping using at least two
20 different lengths of fiber. The first length of fiber is perturbed to affect how light in
21 the second length of fiber is distributed within its various confinement regions.

22 178. The '963 Patent contains at least one claim reciting one or more JDSU
23 Adjustable Beam Innovations. For example, claim 1 of the '963 Patent recites a
24 method including modifying at least one beam characteristic and generating the optical
25 beam in an optical beam delivery device including an optical fiber having a first length
26 and a second length, the second length having two or more confinement regions, the
27 optical beam delivery device further including a perturbation device configured to alter

1 a bend radius of the first length, wherein the modifying the at least one beam
2 characteristic comprises activating the perturbation device to modify one or more
3 beam characteristics of the optical beam in one or more of the first length and the
4 second length. As another example, claim 26 of the '963 Patent recites a method
5 including modifying at least one beam characteristic and generating the optical beam
6 in an optical beam delivery device including an optical fiber having a first length and a
7 second length, the second length having two or more confinement regions, the optical
8 beam delivery device further including a perturbation device configured to alter a bend
9 radius of the first length, launching the optical beam into the first length, and guiding
10 the optical beam into the second length, wherein the modifying the at least one beam
11 characteristic includes activating the perturbation device to modify one or more beam
12 characteristics of the optical beam in one or more of the first length and the second
13 length, and confining at least a portion of the modified one or more beam
14 characteristics of the optical beam within the two or more confinement regions of the
15 second length.

16 179. As set forth above, before the filing of the '633 Application or any
17 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
18 and interest in any contribution by him to the conception, development, and/or
19 reduction to practice of the JDSU Adjustable Beam Innovations, including modifying
20 at least one beam characteristic and generating the optical beam in an optical beam
21 delivery device including an optical fiber having a first length and a second length, the
22 second length having two or more confinement regions, the optical beam delivery
23 device further including a perturbation device configured to alter a bend radius of the
24 first length, wherein the modifying the at least one beam characteristic comprises
25 activating the perturbation device to modify one or more beam characteristics of the
26 optical beam in one or more of the first length and the second length, as claimed in the
27 '963 Patent.

1 180. Accordingly, Lumentum is entitled to a declaration that any right, title,
2 and interest of Kliner in and to the '963 Patent is owned by Lumentum.

3 181. By purporting not to assign his right, title, and interest in the '633
4 Application and the '963 Patent to JDSU, and instead purporting to assign such right,
5 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

6 182. As set forth above, before the filing of the '633 Application or any
7 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
8 and interest in any contribution by him to the conception, development, and/or
9 reduction to practice of the JDSU Adjustable Beam Innovations, including modifying
10 at least one beam characteristic and generating the optical beam in an optical beam
11 delivery device including an optical fiber having a first length and a second length, the
12 second length having two or more confinement regions, the optical beam delivery
13 device further including a perturbation device configured to alter a bend radius of the
14 first length, wherein the modifying the at least one beam characteristic comprises
15 activating the perturbation device to modify one or more beam characteristics of the
16 optical beam in one or more of the first length and the second length, as claimed in the
17 '963 Patent.

18 183. Accordingly, Lumentum is entitled to a declaration that any right, title,
19 and interest of Farrow in and to the '963 Patent is owned by Lumentum.

20 184. By purporting not to assign his right, title, and interest in the '633
21 Application and the '963 Patent to JDSU, and instead purporting to assign such right,
22 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

23 185. As set forth above, Muendel contributed in a significant manner to the
24 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
25 including modifying at least one beam characteristic and generating the optical beam
26 in an optical beam delivery device including an optical fiber having a first length and a
27 second length, the second length having two or more confinement regions, the optical

1 beam delivery device further including a perturbation device configured to alter a bend
2 radius of the first length, wherein the modifying the at least one beam characteristic
3 comprises activating the perturbation device to modify one or more beam
4 characteristics of the optical beam in one or more of the first length and the second
5 length, as claimed in the '963 Patent.

6 186. As set forth above, Muendel made contributions to the JDSU Adjustable
7 Beam Innovations as claimed in the '963 Patent that are not insignificant in quality,
8 when those contributions are measured against the dimension of the full invention.

9 187. As set forth above, Muendel did more than merely explain to Kliner,
10 Farrow, or others well-known concepts and/or the current state of the art.

11 188. Accordingly, Lumentum is entitled to correction of the inventorship of
12 the '963 Patent to add Muendel as an inventor.

13 189. Lumentum is further entitled to a declaratory relief that nLIGHT must
14 take all necessary actions to change the inventorship designation to add Muendel as an
15 inventor on any foreign patent applications corresponding to the '963 Patent.

16 **8. U.S. Patent No. 10,656,330**

17 190. On January 31, 2018, nLIGHT filed U.S. Patent Application No.
18 15/885,563 (“the '563 Application”), listing Kliner, Farrow, and others as inventors.
19 The '563 Application issued on May 19, 2020 as U.S. Patent No. 10,656,330 (“the
20 '330 Patent”), listing nLIGHT as the Assignee.

21 191. The '330 Patent is based on JDSU Adjustable Beam Innovations. For
22 example, the '330 Patent generally discloses in-fiber beam shaping using at least two
23 different lengths of fiber. The first length of fiber is perturbed to affect how light in
24 the second length of fiber is distributed within its various confinement regions.

25 192. The '330 Patent contains at least one claim reciting one or more JDSU
26 Adjustable Beam Innovations. For example, claim 1 of the '330 Patent recites a
27 method including modifying at least one beam characteristic, which includes

1 perturbing an optical beam propagating within a first section of fiber to adjust the at
2 least one characteristic of the laser beam in the first section of fiber or a second section
3 of fiber or a combination thereof, coupling the perturbed optical beam into the second
4 section of fiber, and maintaining at least a portion of one or more adjusted beam
5 characteristics within the second section of fiber having two or more confinement
6 regions, wherein the first section of fiber and the second section of fiber form at least a
7 portion of a continuous length of fiber. As another example, claim 23 of the '330
8 Patent recites a system with a perturbation device configured to modify one or more
9 beam characteristics of a generated one or more optical beams in a first section of
10 fiber, in a second section of fiber, or combinations thereof, the second section of fiber
11 having two or more confinement regions, and wherein the first section of fiber and the
12 second section of fiber form at least a portion of a continuous length of fiber.

13 193. As set forth above, before the filing of the '563 Application or any
14 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
15 and interest in any contribution by him to the conception, development, and/or
16 reduction to practice of the JDSU Adjustable Beam Innovations, including modifying
17 at least one beam characteristic by, for example, perturbing an optical beam
18 propagating within a first section of fiber to adjust the at least one characteristic of the
19 laser beam in the first section of fiber or a second section of fiber or a combination
20 thereof, coupling the perturbed optical beam into the second section of fiber, and
21 maintaining at least a portion of one or more adjusted beam characteristics within the
22 second section of fiber having two or more confinement regions, wherein the first
23 section of fiber and the second section of fiber form at least a portion of a continuous
24 length of fiber, as claimed in the '330 Patent.

25 194. Accordingly, Lumentum is entitled to a declaration that any right, title,
26 and interest of Kliner in and to the '330 Patent is owned by Lumentum.

1 195. By purporting not to assign his right, title, and interest in the '563
2 Application and the '330 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

4 196. As set forth above, before the filing of the '563 Application or any
5 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Adjustable Beam Innovations, including modifying
8 at least one beam characteristic by, for example, perturbing an optical beam
9 propagating within a first section of fiber to adjust the at least one characteristic of the
10 laser beam in the first section of fiber or a second section of fiber or a combination
11 thereof, coupling the perturbed optical beam into the second section of fiber, and
12 maintaining at least a portion of one or more adjusted beam characteristics within the
13 second section of fiber having two or more confinement regions, wherein the first
14 section of fiber and the second section of fiber form at least a portion of a continuous
15 length of fiber, as claimed in the '330 Patent.

16 197. Accordingly, Lumentum is entitled to a declaration that any right, title,
17 and interest of Farrow in and to the '330 Patent is owned by Lumentum.

18 198. By purporting not to assign his right, title, and interest in the '563
19 Application and the '330 Patent to JDSU, and instead purporting to assign such right,
20 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

21 199. As set forth above, Muendel contributed in a significant manner to the
22 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
23 including modifying at least one beam characteristic by, for example, perturbing an
24 optical beam propagating within a first section of fiber to adjust the at least one
25 characteristic of the laser beam in the first section of fiber or a second section of fiber
26 or a combination thereof, coupling the perturbed optical beam into the second section
27 of fiber, and maintaining at least a portion of one or more adjusted beam

1 characteristics within the second section of fiber having two or more confinement
2 regions, wherein the first section of fiber and the second section of fiber form at least a
3 portion of a continuous length of fiber, as claimed in the '330 Patent.

4 200. As set forth above, Muendel made contributions to the JDSU Adjustable
5 Beam Innovations as claimed in the '330 Patent that are not insignificant in quality,
6 when those contributions are measured against the dimension of the full invention.

7 201. As set forth above, Muendel did more than merely explain to Kliner,
8 Farrow, or others well-known concepts and/or the current state of the art.

9 202. Accordingly, Lumentum is entitled to correction of the inventorship of
10 the '330 Patent to add Muendel as an inventor.

11 203. Lumentum is further entitled to a declaratory relief that nLIGHT must
12 take all necessary actions to change the inventorship designation to add Muendel as an
13 inventor on any foreign patent applications corresponding to the '330 Patent.

14 **9. U.S. Patent No. 10,690,928**

15 204. On February 26, 2018, nLIGHT filed U.S. Patent Application No.
16 15/904,861 (“the '861 Application”), listing Kliner, Farrow, and others as inventors.
17 The '861 Application issued on June 23, 2020 as U.S. Patent No. 10,690,928 (“the
18 '928 Patent”), listing nLIGHT as the Assignee.

19 205. The '928 Patent is based on JDSU Adjustable Beam Innovations. For
20 example, the '928 Patent generally discloses in-fiber beam shaping using at least two
21 different lengths of fiber. The first length of fiber is perturbed to affect how light in
22 the second length of fiber is distributed within its various confinement regions.

23 206. The '928 Patent contains at least one claim reciting one or more JDSU
24 Adjustable Beam Innovations. For example, claim 1 of the '928 Patent recites an
25 apparatus with an optical fiber having a first length and a second length, the second
26 length having two or more confinement regions and a perturbation device configured
27 to modify one or more beam characteristics of the first optical beam, wherein the

1 second length is configured to confine the modified one or more beam characteristics
2 of the first optical beam within the two or more confinement regions of the second
3 length. As another example, claim 11 of the '928 Patent recites an apparatus with an
4 optical system, including an optical fiber having a first length and a second length
5 having two or more confinement regions and a perturbation device configured to
6 modify one or more beam characteristics of the first optical beam.

7 207. As set forth above, before the filing of the '861 Application or any
8 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
9 and interest in any contribution by him to the conception, development, and/or
10 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
11 fiber having a first length and a second length, the second length having two or more
12 confinement regions and a perturbation device configured to modify one or more beam
13 characteristics of the first optical beam, wherein the second length is configured to
14 confine the modified one or more beam characteristics of the first optical beam within
15 the two or more confinement regions of the second length, as claimed in the '928
16 Patent.

17 208. Accordingly, Lumentum is entitled to a declaration that any right, title,
18 and interest of Kliner in and to the '928 Patent is owned by Lumentum.

19 209. By purporting not to assign his right, title, and interest in the '861
20 Application and the '928 Patent to JDSU, and instead purporting to assign such right,
21 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

22 210. As set forth above, before the filing of the '861 Application or any
23 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
24 and interest in any contribution by him to the conception, development, and/or
25 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
26 fiber having a first length and a second length, the second length having two or more
27 confinement regions and a perturbation device configured to modify one or more beam

1 characteristics of the first optical beam, wherein the second length is configured to
2 confine the modified one or more beam characteristics of the first optical beam within
3 the two or more confinement regions of the second length, as claimed in the '928
4 Patent.

5 211. Accordingly, Lumentum is entitled to a declaration that any right, title,
6 and interest of Farrow in and to the '928 Patent is owned by Lumentum.

7 212. By purporting not to assign his right, title, and interest in the '861
8 Application and the '928 Patent to JDSU, and instead purporting to assign such right,
9 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

10 213. As set forth above, Muendel contributed in a significant manner to the
11 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
12 including an optical fiber having a first length and a second length, the second length
13 having two or more confinement regions and a perturbation device configured to
14 modify one or more beam characteristics of the first optical beam, wherein the second
15 length is configured to confine the modified one or more beam characteristics of the
16 first optical beam within the two or more confinement regions of the second length, as
17 claimed in the '928 Patent.

18 214. As set forth above, Muendel made contributions to the JDSU Adjustable
19 Beam Innovations as claimed in the '928 Patent that are not insignificant in quality,
20 when those contributions are measured against the dimension of the full invention.

21 215. As set forth above, Muendel did more than merely explain to Kliner,
22 Farrow, or others well-known concepts and/or the current state of the art.

23 216. Accordingly, Lumentum is entitled to correction of the inventorship of
24 the '928 Patent to add Muendel as an inventor.

25 217. Lumentum is further entitled to a declaratory relief that nLIGHT must
26 take all necessary actions to change the inventorship designation to add Muendel as an
27 inventor on any foreign patent applications corresponding to the '928 Patent.

1 **10. U.S. Patent No. 10,663,742**

2 218. On February 27, 2018, nLIGHT filed U.S. Patent Application No.
3 15/906,728 (“the ’728 Application”), listing Kliner, Farrow, and others as inventors.
4 The ’728 Application issued on May 26, 2020 as U.S. Patent No. 10,663,742 (“the
5 ’742 Patent”), listing nLIGHT as the Assignee.

6 219. The ’742 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’742 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 220. The ’742 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’742 Patent recites a
12 method including providing a laser beam propagating within a first length of fiber to
13 adjust one or more beam characteristics of the laser beam in the first section of fiber or
14 a second section of fiber or a combination thereof, and maintaining at least a portion of
15 one or more adjusted beam characteristics within the second section of fiber having
16 two or more confinement regions, wherein the first section of fiber and the second
17 section of fiber form at least a portion of a continuous length of fiber. As another
18 example, claim 9 of the ’742 Patent recites a device with one or more optical beam
19 sources configured to generate one or more optical beams, a perturbation device
20 configured to modify one or more beam characteristics, and a second section of fiber
21 having two or more confinement regions and configured to confine one or more
22 portions of the modified one or more beam characteristics within the two or more
23 confinement regions, and wherein the first section of fiber and the second section of
24 fiber form at least a portion of a continuous length of fiber.

25 221. As set forth above, before the filing of the ’728 Application or any
26 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
27 and interest in any contribution by him to the conception, development, and/or

1 reduction to practice of the JDSU Adjustable Beam Innovations, including providing a
2 laser beam propagating within a first length of fiber to adjust one or more beam
3 characteristics of the laser beam in the first section of fiber or a second section of fiber
4 or a combination thereof, and maintaining at least a portion of one or more adjusted
5 beam characteristics within the second section of fiber having two or more
6 confinement regions, wherein the first section of fiber and the second section of fiber
7 form at least a portion of a continuous length of fiber, as claimed in the '742 Patent.

8 222. Accordingly, Lumentum is entitled to a declaration that any right, title,
9 and interest of Klinier in and to the '742 Patent is owned by Lumentum.

10 223. By purporting not to assign his right, title, and interest in the '728
11 Application and the '742 Patent to JDSU, and instead purporting to assign such right,
12 title, and interest to nLIGHT, Klinier breached the Klinier EPIIA.

13 224. As set forth above, before the filing of the '728 Application or any
14 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
15 and interest in any contribution by him to the conception, development, and/or
16 reduction to practice of the JDSU Adjustable Beam Innovations, including providing a
17 laser beam propagating within a first length of fiber to adjust one or more beam
18 characteristics of the laser beam in the first section of fiber or a second section of fiber
19 or a combination thereof, and maintaining at least a portion of one or more adjusted
20 beam characteristics within the second section of fiber having two or more
21 confinement regions, wherein the first section of fiber and the second section of fiber
22 form at least a portion of a continuous length of fiber, as claimed in the '742 Patent.

23 225. Accordingly, Lumentum is entitled to a declaration that any right, title,
24 and interest of Farrow in and to the '742 Patent is owned by Lumentum.

25 226. By purporting not to assign his right, title, and interest in the '728
26 Application and the '742 Patent to JDSU, and instead purporting to assign such right,
27 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

1 227. As set forth above, Muendel contributed in a significant manner to the
2 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
3 including providing a laser beam propagating within a first length of fiber to adjust one
4 or more beam characteristics of the laser beam in the first section of fiber or a second
5 section of fiber or a combination thereof, and maintaining at least a portion of one or
6 more adjusted beam characteristics within the second section of fiber having two or
7 more confinement regions, wherein the first section of fiber and the second section of
8 fiber form at least a portion of a continuous length of fiber, as claimed in the '742
9 Patent.

10 228. As set forth above, Muendel made contributions to the JDSU Adjustable
11 Beam Innovations as claimed in the '742 Patent that are not insignificant in quality,
12 when those contributions are measured against the dimension of the full invention.

13 229. As set forth above, Muendel did more than merely explain to Kliner,
14 Farrow, or others well-known concepts and/or the current state of the art.

15 230. Accordingly, Lumentum is entitled to correction of the inventorship of
16 the '742 Patent to add Muendel as an inventor.

17 231. Lumentum is further entitled to a declaratory relief that nLIGHT must
18 take all necessary actions to change the inventorship designation to add Muendel as an
19 inventor on any foreign patent applications corresponding to the '742 Patent.

20 **11. U.S. Patent No. 10,673,197**

21 232. On March 16, 2018, nLIGHT filed U.S. Patent Application No.
22 15/924,096 (“the '096 Application”), listing Kliner and Farrow as inventors. The '096
23 Application issued on June 2, 2020 as U.S. Patent No. 10,673,197 (“the '197 Patent”),
24 listing nLIGHT as the Assignee.

25 233. The '197 Patent is based on JDSU Adjustable Beam Innovations. For
26 example, the '197 Patent generally discloses in-fiber beam shaping using at least two
27

1 different lengths of fiber. The first length of fiber is perturbed to affect how light in
2 the second length of fiber is distributed within its various confinement regions.

3 234. The '197 Patent contains at least one claim reciting one or more JDSU
4 Adjustable Beam Innovations. For example, claim 1 of the '197 Patent recites a
5 device with one or more lengths of fiber between the optical input and an optical
6 output, wherein the one or more lengths of fiber further comprise a first length of fiber
7 directly end-coupled to a second length of fiber, and wherein the first length of fiber
8 has a first RIP and the second length of fiber has a second RIP, wherein second RIP
9 comprises a first confinement region and a second confinement region; and a
10 perturbation device to modulate, through action upon the one or more lengths of fiber,
11 a transmittance of the beam through the first and second confinement regions.

12 235. As set forth above, before the filing of the '096 Application or any
13 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
14 and interest in any contribution by him to the conception, development, and/or
15 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
16 with one or more lengths of fiber between an optical input and an optical output,
17 wherein the one or more lengths of fiber further comprise a first length of fiber directly
18 end-coupled to a second length of fiber, and wherein the first length of fiber has a first
19 RIP and the second length of fiber has a second RIP, wherein second RIP comprises a
20 first confinement region and a second confinement region; and a perturbation device to
21 modulate, through action upon the one or more lengths of fiber, a transmittance of the
22 beam through the first and second confinement regions, as claimed in the '197 Patent.

23 236. Accordingly, Lumentum is entitled to a declaration that any right, title,
24 and interest of Kliner in and to the '197 Patent is owned by Lumentum.

25 237. By purporting not to assign his right, title, and interest in the '096
26 Application and the '197 Patent to JDSU, and instead purporting to assign such right,
27 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

1 238. As set forth above, before the filing of the '096 Application or any
2 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
5 with one or more lengths of fiber between the optical input and an optical output,
6 wherein the one or more lengths of fiber further comprise a first length of fiber directly
7 end-coupled to a second length of fiber, and wherein the first length of fiber has a first
8 RIP and the second length of fiber has a second RIP, wherein second RIP comprises a
9 first confinement region and a second confinement region; and a perturbation device to
10 modulate, through action upon the one or more lengths of fiber, a transmittance of the
11 beam through the first and second confinement regions, as claimed in the '197 Patent.

12 239. Accordingly, Lumentum is entitled to a declaration that any right, title,
13 and interest of Farrow in and to the '197 Patent is owned by Lumentum.

14 240. By purporting not to assign his right, title, and interest in the '096
15 Application and the '197 Patent to JDSU, and instead purporting to assign such right,
16 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

17 241. As set forth above, Muendel contributed in a significant manner to the
18 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
19 including a device with one or more lengths of fiber between the optical input and an
20 optical output, wherein the one or more lengths of fiber further comprise a first length
21 of fiber directly end-coupled to a second length of fiber, and wherein the first length of
22 fiber has a first RIP and the second length of fiber has a second RIP, wherein second
23 RIP comprises a first confinement region and a second confinement region; and a
24 perturbation device to modulate, through action upon the one or more lengths of fiber,
25 a transmittance of the beam through the first and second confinement regions, as
26 claimed in the '197 Patent.

1 242. As set forth above, Muendel made contributions to the JDSU Adjustable
2 Beam Innovations as claimed in the '197 Patent that are not insignificant in quality,
3 when those contributions are measured against the dimension of the full invention.

4 243. As set forth above, Muendel did more than merely explain to Kliner,
5 Farrow, or others well-known concepts and/or the current state of the art.

6 244. Accordingly, Lumentum is entitled to correction of the inventorship of
7 the '197 Patent to add Muendel as an inventor.

8 245. Lumentum is further entitled to a declaratory relief that nLIGHT must
9 take all necessary actions to change the inventorship designation to add Muendel as an
10 inventor on any foreign patent applications corresponding to the '197 Patent.

11 **12. U.S. Patent No. 10,673,199**

12 246. On March 16, 2018, nLIGHT filed U.S. Patent Application No.
13 15/924,090 (“the '090 Application”), listing Kliner as the sole inventor. The '090
14 Application issued on June 2, 2020 as U.S. Patent No. 10,673,199 (“the '199 Patent”),
15 listing nLIGHT as the Assignee.

16 247. The '199 Patent is based on JDSU Adjustable Beam Innovations. For
17 example, the '199 Patent generally discloses in-fiber beam shaping using at least two
18 different lengths of fiber. The first length of fiber is perturbed to affect how light in
19 the second length of fiber is distributed within its various confinement regions.

20 248. The '199 Patent contains at least one claim reciting one or more JDSU
21 Adjustable Beam Innovations. For example, claim 1 of the '199 Patent recites a
22 device with an optical input to receive an optical beam; one or more lengths of fiber,
23 wherein at least one of the lengths of fiber comprises a confinement region that is
24 optically coupled to the output; and a perturbation device coupled to the controller,
25 wherein the perturbation device is to modulate, through action upon the one or more
26 lengths of fiber that is based on the control signal, a transmittance level of the beam
27 through the confinement region to the output.

1 249. As set forth above, before the filing of the '090 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
5 with an optical input to receive an optical beam; one or more lengths of fiber, wherein
6 at least one of the lengths of fiber comprises a confinement region that is optically
7 coupled to the output; and a perturbation device coupled to the controller, wherein the
8 perturbation device is to modulate, through action upon the one or more lengths of
9 fiber that is based on the control signal, a transmittance level of the beam through the
10 confinement region to the output, as claimed in the '199 Patent.

11 250. Accordingly, Lumentum is entitled to a declaration that any right, title,
12 and interest of Kliner in and to the '199 Patent is owned by Lumentum.

13 251. By purporting not to assign his right, title, and interest in the '090
14 Application and the '199 Patent to JDSU, and instead purporting to assign such right,
15 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

16 252. As set forth above, Muendel contributed in a significant manner to the
17 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
18 including a device with an optical input to receive an optical beam; one or more
19 lengths of fiber, wherein at least one of the lengths of fiber comprises a confinement
20 region that is optically coupled to the output; and a perturbation device coupled to the
21 controller, wherein the perturbation device is to modulate, through action upon the one
22 or more lengths of fiber that is based on the control signal, a transmittance level of the
23 beam through the confinement region to the output, as claimed in the '199 Patent.

24 253. As set forth above, Muendel made contributions to the JDSU Adjustable
25 Beam Innovations as claimed in the '199 Patent that are not insignificant in quality,
26 when those contributions are measured against the dimension of the full invention.
27

1 254. As set forth above, Muendel did more than merely explain to Kliner,
2 Farrow, or others well-known concepts and/or the current state of the art.

3 255. Accordingly, Lumentum is entitled to correction of the inventorship of
4 the '199 Patent to add Muendel as an inventor.

5 256. Lumentum is further entitled to a declaratory relief that nLIGHT must
6 take all necessary actions to change the inventorship designation to add Muendel as an
7 inventor on any foreign patent applications corresponding to the '199 Patent.

8 **13. U.S. Patent No. 10,656,427**

9 257. On March 22, 2018, nLIGHT filed U.S. Patent Application No.
10 15/933,183 (“the '183 Application”), listing Farrow and another as inventors. The
11 '183 Application issued on May 19, 2020 as U.S. Patent No. 10,656,427 (“the '427
12 Patent”), listing nLIGHT as the Assignee.

13 258. The '427 Patent is based on JDSU Adjustable Beam Innovations. For
14 example, the '427 Patent generally discloses in-fiber beam shaping using at least two
15 different lengths of fiber. The first length of fiber is perturbed to affect how light in
16 the second length of fiber is distributed within its various confinement regions.

17 259. The '427 Patent contains at least one claim reciting one or more JDSU
18 Adjustable Beam Innovations. For example, claim 1 of the '427 Patent recites a first
19 length of fiber having a first RIP enabling, in response to an applied perturbation,
20 modification of the propagation path to form an adjusted optical beam, and a second
21 length of fiber functionally directly coupled through a fiber-coupling interface with the
22 first length of fiber and having multiple confinement cores defining a second RIP.

23 260. As set forth above, before the filing of the '183 Application or any
24 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
25 and interest in any contribution by him to the conception, development, and/or
26 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
27 length of fiber having a first RIP enabling, in response to an applied perturbation,

1 modification of the propagation path to form an adjusted optical beam, and a second
2 length of fiber functionally directly coupled through a fiber-coupling interface with the
3 first length of fiber and having multiple confinement cores defining a second RIP, as
4 claimed in the '427 Patent.

5 261. Accordingly, Lumentum is entitled to a declaration that any right, title,
6 and interest of Farrow in and to the '427 Patent is owned by Lumentum.

7 262. By purporting not to assign his right, title, and interest in the '183
8 Application and the '427 Patent to JDSU, and instead purporting to assign such right,
9 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

10 263. As set forth above, Muendel contributed in a significant manner to the
11 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
12 including a first length of fiber having a first RIP enabling, in response to an applied
13 perturbation, modification of the propagation path to form an adjusted optical beam,
14 and a second length of fiber functionally directly coupled through a fiber-coupling
15 interface with the first length of fiber and having multiple confinement cores defining
16 a second RIP, as claimed in the '427 Patent.

17 264. As set forth above, Muendel made contributions to the JDSU Adjustable
18 Beam Innovations as claimed in the '427 Patent that are not insignificant in quality,
19 when those contributions are measured against the dimension of the full invention.

20 265. As set forth above, Muendel did more than merely explain to Kliner,
21 Farrow, or others well-known concepts and/or the current state of the art.

22 266. Accordingly, Lumentum is entitled to correction of the inventorship of
23 the '427 Patent to add Muendel as an inventor.

24 267. Lumentum is further entitled to a declaratory relief that nLIGHT must
25 take all necessary actions to change the inventorship designation to add Muendel as an
26 inventor on any foreign patent applications corresponding to the '427 Patent.

1 **14. U.S. Patent No. 10,668,567**

2 268. On March 22, 2018, nLIGHT filed U.S. Patent Application No.
3 15/933,160 (“the ’160 Application”), listing Kliner and others as inventors. The ’160
4 Application issued on June 2, 2020 as U.S. Patent No. 10,668,567 (“the ’567 Patent”),
5 listing nLIGHT as the Assignee.

6 269. The ’567 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’567 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 270. The ’567 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’567 Patent recites a
12 device with first and second lengths of fiber having, respectively, first and second
13 RIPs, the first RIP enabling, in response to an applied perturbation, modification of the
14 beam characteristics to form an adjusted optical beam having modified beam
15 characteristics, and the second RIP defined by multiple confinement regions formed to
16 confine, and situated to receive through a fiber-coupling interface functionally directly
17 coupling the first and second lengths of fiber, at least a portion of the adjusted optical
18 beam within at least one of the multiple confinement regions.

19 271. As set forth above, before the filing of the ’160 Application or any
20 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
21 and interest in any contribution by him to the conception, development, and/or
22 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
23 with first and second lengths of fiber having, respectively, first and second RIPs, the
24 first RIP enabling, in response to an applied perturbation, modification of the beam
25 characteristics to form an adjusted optical beam having modified beam characteristics,
26 and the second RIP defined by multiple confinement regions formed to confine, and
27 situated to receive through a fiber-coupling interface functionally directly coupling the

1 first and second lengths of fiber, at least a portion of the adjusted optical beam within
2 at least one of the multiple confinement regions, as claimed in the '567 Patent.

3 272. Accordingly, Lumentum is entitled to a declaration that any right, title,
4 and interest of Kliner in and to the '567 Patent is owned by Lumentum.

5 273. By purporting not to assign his right, title, and interest in the '160
6 Application and the '567 Patent to JDSU, and instead purporting to assign such right,
7 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

8 274. As set forth above, Muendel contributed in a significant manner to the
9 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
10 including a device with first and second lengths of fiber having, respectively, first and
11 second RIPs, the first RIP enabling, in response to an applied perturbation,
12 modification of the beam characteristics to form an adjusted optical beam having
13 modified beam characteristics, and the second RIP defined by multiple confinement
14 regions formed to confine, and situated to receive through a fiber-coupling interface
15 functionally directly coupling the first and second lengths of fiber, at least a portion of
16 the adjusted optical beam within at least one of the multiple confinement regions, as
17 claimed in the '567 Patent.

18 275. As set forth above, Muendel made contributions to the JDSU Adjustable
19 Beam Innovations as claimed in the '567 Patent that are not insignificant in quality,
20 when those contributions are measured against the dimension of the full invention.

21 276. As set forth above, Muendel did more than merely explain to Kliner,
22 Farrow, or others well-known concepts and/or the current state of the art.

23 277. Accordingly, Lumentum is entitled to correction of the inventorship of
24 the '567 Patent to add Muendel as an inventor.

25 278. Lumentum is further entitled to a declaratory relief that nLIGHT must
26 take all necessary actions to change the inventorship designation to add Muendel as an
27 inventor on any foreign patent applications corresponding to the '567 Patent.

1 **15. U.S. Patent No. 10,649,241**

2 279. On March 23, 2018, nLIGHT filed U.S. Patent Application No.
3 15/934,714 (“the ’714 Application”), listing Kliner, Farrow, and others as inventors.
4 The ’714 Application issued on May 12, 2020 as U.S. Patent No. 10,649,241 (“the
5 ’241 Patent”), listing nLIGHT as the Assignee.

6 280. The ’241 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’241 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 281. The ’241 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’241 Patent recites a
12 method including adjusting one or more characteristics of a laser beam by perturbing
13 the laser beam propagating within a first length of fiber or a second length of fiber or a
14 combination thereof, with the second length of fiber having two or more confinement
15 regions.

16 282. As set forth above, before the filing of the ’714 Application or any
17 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
18 and interest in any contribution by him to the conception, development, and/or
19 reduction to practice of the JDSU Adjustable Beam Innovations, including adjusting
20 one or more characteristics of a laser beam by perturbing the laser beam propagating
21 within a first length of fiber or a second length of fiber or a combination thereof, with
22 the second length of fiber having two or more confinement regions, as claimed in the
23 ’241 Patent.

24 283. Accordingly, Lumentum is entitled to a declaration that any right, title,
25 and interest of Kliner in and to the ’241 Patent is owned by Lumentum.

1 284. By purporting not to assign his right, title, and interest in the '714
2 Application and the '241 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

4 285. As set forth above, before the filing of the '714 Application or any
5 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Adjustable Beam Innovations, including adjusting
8 one or more characteristics of a laser beam by perturbing the laser beam propagating
9 within a first length of fiber or a second length of fiber or a combination thereof, with
10 the second length of fiber having two or more confinement regions, as claimed in the
11 '241 Patent.

12 286. Accordingly, Lumentum is entitled to a declaration that any right, title,
13 and interest of Farrow in and to the '241 Patent is owned by Lumentum.

14 287. By purporting not to assign his right, title, and interest in the '714
15 Application and the '241 Patent to JDSU, and instead purporting to assign such right,
16 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

17 288. As set forth above, Muendel contributed in a significant manner to the
18 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
19 including adjusting one or more characteristics of a laser beam by perturbing the laser
20 beam propagating within a first length of fiber or a second length of fiber or a
21 combination thereof, with the second length of fiber having two or more confinement
22 regions, as claimed in the '241 Patent.

23 289. As set forth above, Muendel made contributions to the JDSU Adjustable
24 Beam Innovations as claimed in the '241 Patent that are not insignificant in quality,
25 when those contributions are measured against the dimension of the full invention.

26 290. As set forth above, Muendel did more than merely explain to Kliner,
27 Farrow, or others well-known concepts and/or the current state of the art.

1 291. Accordingly, Lumentum is entitled to correction of the inventorship of
2 the '241 Patent to add Muendel as an inventor.

3 292. Lumentum is further entitled to a declaratory relief that nLIGHT must
4 take all necessary actions to change the inventorship designation to add Muendel as an
5 inventor on any foreign patent applications corresponding to the '241 Patent.

6 **16. U.S. Patent No. 10,670,872**

7 293. On March 24, 2018, nLIGHT filed U.S. Patent Application No.
8 15/934,959 (“the '959 Application”), listing Farrow and others as inventors. The '959
9 Application issued on June 2, 2020 as U.S. Patent No. 10,670,872 (“the '872 Patent”),
10 listing nLIGHT as the Assignee.

11 294. The '872 Patent is based on JDSU Adjustable Beam Innovations. For
12 example, the '872 Patent generally discloses in-fiber beam shaping using at least two
13 different lengths of fiber. The first length of fiber is perturbed to affect how light in
14 the second length of fiber is distributed within its various confinement regions.

15 295. The '872 Patent contains at least one claim reciting one or more JDSU
16 Adjustable Beam Innovations. For example, claim 1 of the '872 Patent recites a
17 device with a first length of fiber which has a first RIP, the first RIP enabling, in
18 response to an applied perturbation, modification of the optical beam, and a second
19 length of fiber functionally directly coupled with the first length of fiber, the second
20 length of fiber formed with multiple confinement cores defining a second RIP that is
21 different from the first RIP.

22 296. As set forth above, before the filing of the '959 Application or any
23 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
24 and interest in any contribution by him to the conception, development, and/or
25 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
26 length of fiber which has a first RIP, the first RIP enabling, in response to an applied
27 perturbation, modification of the optical beam, and a second length of fiber

1 functionally directly coupled with the first length of fiber, the second length of fiber
2 formed with multiple confinement cores defining a second RIP that is different from
3 the first RIP, as claimed in the '872 Patent.

4 297. Accordingly, Lumentum is entitled to a declaration that any right, title,
5 and interest of Farrow in and to the '872 Patent is owned by Lumentum.

6 298. By purporting not to assign his right, title, and interest in the '959
7 Application and the '872 Patent to JDSU, and instead purporting to assign such right,
8 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

9 299. As set forth above, Muendel contributed in a significant manner to the
10 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
11 including a first length of fiber which has a first RIP, the first RIP enabling, in
12 response to an applied perturbation, modification of the optical beam, and a second
13 length of fiber functionally directly coupled with the first length of fiber, the second
14 length of fiber formed with multiple confinement cores defining a second RIP that is
15 different from the first RIP, as claimed in the '872 Patent.

16 300. As set forth above, Muendel made contributions to the JDSU Adjustable
17 Beam Innovations as claimed in the '872 Patent that are not insignificant in quality,
18 when those contributions are measured against the dimension of the full invention.

19 301. As set forth above, Muendel did more than merely explain to Kliner,
20 Farrow, or others well-known concepts and/or the current state of the art.

21 302. Accordingly, Lumentum is entitled to correction of the inventorship of
22 the '872 Patent to add Muendel as an inventor.

23 303. Lumentum is further entitled to a declaratory relief that nLIGHT must
24 take all necessary actions to change the inventorship designation to add Muendel as an
25 inventor on any foreign patent applications corresponding to the '872 Patent.

1 **17. U.S. Patent No. 10,656,440**

2 304. On March 27, 2018, nLIGHT filed U.S. Patent Application No.
3 15/937,652 (“the ’652 Application”), listing Kliner and Farrow as inventors. The ’652
4 Application issued on May 19, 2020 as U.S. Patent No. 10,656,440 (“the ’6,440
5 Patent”), listing nLIGHT as the Assignee.

6 305. The ’6,440 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’6,440 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 306. The ’6,440 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’6,440 Patent recites a
12 device with a first length of fiber through which an incident optical beam having beam
13 characteristics propagates and which has a first RIP, the first RIP enabling, in response
14 to an applied perturbation, modification of the beam characteristics of the optical
15 beam, and a second length of fiber functionally directly coupled with the first length of
16 fiber, the second length of fiber formed with multiple confinement regions defining a
17 second RIP.

18 307. As set forth above, before the filing of the ’652 Application or any
19 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
20 and interest in any contribution by him to the conception, development, and/or
21 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
22 with a first length of fiber through which an incident optical beam having beam
23 characteristics propagates and which has a first RIP, the first RIP enabling, in response
24 to an applied perturbation, modification of the beam characteristics of the optical
25 beam, and a second length of fiber functionally directly coupled with the first length of
26 fiber, the second length of fiber formed with multiple confinement regions defining a
27 second RIP, as claimed in the ’6,440 Patent.

1 308. Accordingly, Lumentum is entitled to a declaration that any right, title,
2 and interest of Kliner in and to the '6,440 Patent is owned by Lumentum.

3 309. By purporting not to assign his right, title, and interest in the '652
4 Application and the '6,440 Patent to JDSU, and instead purporting to assign such right,
5 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

6 310. As set forth above, before the filing of the '652 Application or any
7 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
8 and interest in any contribution by him to the conception, development, and/or
9 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
10 with a first length of fiber through which an incident optical beam having beam
11 characteristics propagates and which has a first RIP, the first RIP enabling, in response
12 to an applied perturbation, modification of the beam characteristics of the optical
13 beam, and a second length of fiber functionally directly coupled with the first length of
14 fiber, the second length of fiber formed with multiple confinement regions defining a
15 second RIP, as claimed in the '6,440 Patent.

16 311. Accordingly, Lumentum is entitled to a declaration that any right, title,
17 and interest of Farrow in and to the '6,440 Patent is owned by Lumentum.

18 312. By purporting not to assign his right, title, and interest in the '652
19 Application and the '6,440 Patent to JDSU, and instead purporting to assign such right,
20 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

21 313. As set forth above, Muendel contributed in a significant manner to the
22 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
23 including a device with a first length of fiber through which an incident optical beam
24 having beam characteristics propagates and which has a first RIP, the first RIP
25 enabling, in response to an applied perturbation, modification of the beam
26 characteristics of the optical beam, and a second length of fiber functionally directly
27

1 coupled with the first length of fiber, the second length of fiber formed with multiple
2 confinement regions defining a second RIP, as claimed in the '6,440 Patent.

3 314. As set forth above, Muendel made contributions to the JDSU Adjustable
4 Beam Innovations as claimed in the '6,440 Patent that are not insignificant in quality,
5 when those contributions are measured against the dimension of the full invention.

6 315. As set forth above, Muendel did more than merely explain to Kliner,
7 Farrow, or others well-known concepts and/or the current state of the art.

8 316. Accordingly, Lumentum is entitled to correction of the inventorship of
9 the '6,440 Patent to add Muendel as an inventor.

10 317. Lumentum is further entitled to a declaratory relief that nLIGHT must
11 take all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '6,440 Patent.

13 **18. U.S. Patent No. 10,668,537**

14 318. On March 27, 2018, nLIGHT filed U.S. Patent Application No.
15 15/936,780 (“the '780 Application”), listing Kliner, Farrow, and another as inventors.
16 The '780 Application issued on June 2, 2020 as U.S. Patent No. 10,668,537 (“the '537
17 Patent”), listing nLIGHT as the Assignee.

18 319. The '537 Patent is based on JDSU Adjustable Beam Innovations. For
19 example, the '537 Patent generally discloses in-fiber beam shaping using at least two
20 different lengths of fiber. The first length of fiber is perturbed to affect how light in
21 the second length of fiber is distributed within its various confinement regions.

22 320. The '537 Patent contains at least one claim reciting one or more JDSU
23 Adjustable Beam Innovations. For example, claim 1 of the '537 Patent recites an
24 apparatus with one or more optical beam sources configured to generate one or more
25 optical beams, a perturbation device configured to modify one or more beam
26 characteristics of the generated one or more optical beams, and a second section of
27 fiber having two or more confinement regions, wherein the first section of fiber and

1 the second section of fiber form at least a portion of a continuous length of fiber. As
2 another example, claim 10 of the '537 Patent recites a perturbation device configured
3 to modify one or more beam characteristics of generated one or more optical beams in
4 a first section of fiber, in a second section of fiber, or combinations thereof, the second
5 section of fiber having two or more confinement regions, wherein the first section of
6 fiber and the second section of fiber form at least a portion of a continuous length of
7 fiber.

8 321. As set forth above, before the filing of the '780 Application or any
9 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
10 and interest in any contribution by him to the conception, development, and/or
11 reduction to practice of the JDSU Adjustable Beam Innovations, including an
12 apparatus with one or more optical beam sources configured to generate one or more
13 optical beams, a perturbation device configured to modify one or more beam
14 characteristics of the generated one or more optical beams, and a second section of
15 fiber having two or more confinement regions, wherein the first section of fiber and
16 the second section of fiber form at least a portion of a continuous length of fiber, as
17 claimed in the '537 Patent.

18 322. Accordingly, Lumentum is entitled to a declaration that any right, title,
19 and interest of Kliner in and to the '537 Patent is owned by Lumentum.

20 323. By purporting not to assign his right, title, and interest in the '780
21 Application and the '537 Patent to JDSU, and instead purporting to assign such right,
22 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

23 324. As set forth above, before the filing of the '780 Application or any
24 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
25 and interest in any contribution by him to the conception, development, and/or
26 reduction to practice of the JDSU Adjustable Beam Innovations, including an
27 apparatus with one or more optical beam sources configured to generate one or more

1 optical beams, a perturbation device configured to modify one or more beam
2 characteristics of the generated one or more optical beams, and a second section of
3 fiber having two or more confinement regions, wherein the first section of fiber and
4 the second section of fiber form at least a portion of a continuous length of fiber, as
5 claimed in the '537 Patent.

6 325. Accordingly, Lumentum is entitled to a declaration that any right, title,
7 and interest of Farrow in and to the '537 Patent is owned by Lumentum.

8 326. By purporting not to assign his right, title, and interest in the '780
9 Application and the '537 Patent to JDSU, and instead purporting to assign such right,
10 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

11 327. As set forth above, Muendel contributed in a significant manner to the
12 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
13 including an apparatus with one or more optical beam sources configured to generate
14 one or more optical beams, a perturbation device configured to modify one or more
15 beam characteristics of the generated one or more optical beams, and a second section
16 of fiber having two or more confinement regions, wherein the first section of fiber and
17 the second section of fiber form at least a portion of a continuous length of fiber, as
18 claimed in the '537 Patent.

19 328. As set forth above, Muendel made contributions to the JDSU Adjustable
20 Beam Innovations as claimed in the '537 Patent that are not insignificant in quality,
21 when those contributions are measured against the dimension of the full invention.

22 329. As set forth above, Muendel did more than merely explain to Kliner,
23 Farrow, or others well-known concepts and/or the current state of the art.

24 330. Accordingly, Lumentum is entitled to correction of the inventorship of
25 the '537 Patent to add Muendel as an inventor.

1 331. Lumentum is further entitled to a declaratory relief that nLIGHT must
2 take all necessary actions to change the inventorship designation to add Muendel as an
3 inventor on any foreign patent applications corresponding to the '537 Patent.

4 **19. U.S. Patent No. 10,661,342**

5 332. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
6 15/939,090 (“the '090 Application”), listing Kliner, Farrow, and another as inventors.
7 The '090 Application issued on May 26, 2020 as U.S. Patent No. 10,661,342 (“the
8 '342 Patent”), listing nLIGHT as the Assignee.

9 333. The '342 Patent is based on JDSU Adjustable Beam Innovations. For
10 example, the '342 Patent generally discloses in-fiber beam shaping using at least two
11 different lengths of fiber. The first length of fiber is perturbed to affect how light in
12 the second length of fiber is distributed within its various confinement regions.

13 334. The '342 Patent contains at least one claim reciting one or more JDSU
14 Adjustable Beam Innovations. For example, claim 1 of the '342 Patent recites a
15 device with a variable-beam-characteristics (“VBC”) fiber including first and second
16 lengths of fiber having, respectively, first and second RIPs that are different from each
17 other, the first RIP enabling, in response to an applied perturbation, modification of the
18 one or more beam characteristics to form a modified optical beam having modified
19 beam characteristics, and the second RIP defined by multiple confinement regions.

20 335. As set forth above, before the filing of the '090 Application or any
21 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
22 and interest in any contribution by him to the conception, development, and/or
23 reduction to practice of the JDSU Adjustable Beam Innovations, including a VBC
24 fiber including first and second lengths of fiber having, respectively, first and second
25 RIPs that are different from each other, the first RIP enabling, in response to an
26 applied perturbation, modification of the one or more beam characteristics to form a
27

1 modified optical beam having modified beam characteristics, and the second RIP
2 defined by multiple confinement regions, as claimed in the '342 Patent.

3 336. Accordingly, Lumentum is entitled to a declaration that any right, title,
4 and interest of Kliner in and to the '342 Patent is owned by Lumentum.

5 337. By purporting not to assign his right, title, and interest in the '090
6 Application and the '342 Patent to JDSU, and instead purporting to assign such right,
7 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

8 338. As set forth above, before the filing of the '090 Application or any
9 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
10 and interest in any contribution by him to the conception, development, and/or
11 reduction to practice of the JDSU Adjustable Beam Innovations, including a VBC
12 fiber including first and second lengths of fiber having, respectively, first and second
13 RIPs that are different from each other, the first RIP enabling, in response to an
14 applied perturbation, modification of the one or more beam characteristics to form a
15 modified optical beam having modified beam characteristics, and the second RIP
16 defined by multiple confinement regions, as claimed in the '342 Patent.

17 339. Accordingly, Lumentum is entitled to a declaration that any right, title,
18 and interest of Farrow in and to the '342 Patent is owned by Lumentum.

19 340. By purporting not to assign his right, title, and interest in the '090
20 Application and the '342 Patent to JDSU, and instead purporting to assign such right,
21 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

22 341. As set forth above, Muendel contributed in a significant manner to the
23 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
24 including a VBC fiber including first and second lengths of fiber having, respectively,
25 first and second RIPs that are different from each other, the first RIP enabling, in
26 response to an applied perturbation, modification of the one or more beam
27 characteristics to form a modified optical beam having modified beam characteristics,

1 and the second RIP defined by multiple confinement regions, as claimed in the '342
2 Patent.

3 342. As set forth above, Muendel made contributions to the JDSU Adjustable
4 Beam Innovations as claimed in the '342 Patent that are not insignificant in quality,
5 when those contributions are measured against the dimension of the full invention.

6 343. As set forth above, Muendel did more than merely explain to Kliner,
7 Farrow, or others well-known concepts and/or the current state of the art.

8 344. Accordingly, Lumentum is entitled to correction of the inventorship of
9 the '342 Patent to add Muendel as an inventor.

10 345. Lumentum is further entitled to a declaratory relief that nLIGHT must
11 take all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '342 Patent.

13 **20. U.S. Patent No. 10,663,768**

14 346. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
15 15/939,138 (“the '138 Application”), listing Kliner, Farrow, and another as inventors.
16 The '138 Application issued on May 26, 2020 as U.S. Patent No. 10,663,768 (“the
17 '768 Patent”), listing nLIGHT as the Assignee.

18 347. The '768 Patent is based on JDSU Adjustable Beam Innovations. For
19 example, the '768 Patent generally discloses in-fiber beam shaping using at least two
20 different lengths of fiber. The first length of fiber is perturbed to affect how light in
21 the second length of fiber is distributed within its various confinement regions.

22 348. The '768 Patent contains at least one claim reciting one or more JDSU
23 Adjustable Beam Innovations. For example, claim 1 of the '768 Patent recites a
24 device with a first length of fiber having a RIP, the first RIP enabling, in response to
25 an applied perturbation, modification of the optical beam to form an adjusted optical
26 beam, and a second length of fiber having an input end coupled to the output end of
27 the first length of fiber, the second length of fiber formed with coaxial confinement

1 regions defining a second RIP that is different from the first RIP. As another example,
2 claim 12 of the '768 Patent recites a system with a VBC fiber including first and
3 second lengths of fiber coupled to each other and having, respectively, first and second
4 RIPs that are different from each other, the first RIP enabling, in response to
5 perturbation applied to the VBC fiber, modification of the optical beam and the second
6 RIP defined by coaxial confinement regions. As yet another example, claim 17 of the
7 '768 Patent recites a method including receiving the optical beam at a VBC fiber
8 including first and second lengths of fiber coupled to each other and having,
9 respectively, first and second RIPs that are different from each other, the first RIP
10 enabling, in response to a selected state of perturbation applied to the VBC fiber,
11 modification of the optical beam, and the second RIP defined by coaxial confinement
12 regions arranged to confine at least a portion of the adjusted optical beam.

13 349. As set forth above, before the filing of the '138 Application or any
14 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
15 and interest in any contribution by him to the conception, development, and/or
16 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
17 length of fiber having a RIP, the first RIP enabling, in response to an applied
18 perturbation, modification of the optical beam to form an adjusted optical beam, and a
19 second length of fiber having an input end coupled to the output end of the first length
20 of fiber, the second length of fiber formed with coaxial confinement regions defining a
21 second RIP that is different from the first RIP, as claimed in the '768 Patent.

22 350. Accordingly, Lumentum is entitled to a declaration that any right, title,
23 and interest of Kliner in and to the '768 Patent is owned by Lumentum.

24 351. By purporting not to assign his right, title, and interest in the '138
25 Application and the '768 Patent to JDSU, and instead purporting to assign such right,
26 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

1 352. As set forth above, before the filing of the '138 Application or any
2 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
5 length of fiber having a RIP, the first RIP enabling, in response to an applied
6 perturbation, modification of the optical beam to form an adjusted optical beam, and a
7 second length of fiber having an input end coupled to the output end of the first length
8 of fiber, the second length of fiber formed with coaxial confinement regions defining a
9 second RIP that is different from the first RIP, as claimed in the '768 Patent.

10 353. Accordingly, Lumentum is entitled to a declaration that any right, title,
11 and interest of Farrow in and to the '768 Patent is owned by Lumentum.

12 354. By purporting not to assign his right, title, and interest in the '138
13 Application and the '768 Patent to JDSU, and instead purporting to assign such right,
14 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

15 355. As set forth above, Muendel contributed in a significant manner to the
16 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
17 including a first length of fiber having a RIP, the first RIP enabling, in response to an
18 applied perturbation, modification of the optical beam to form an adjusted optical
19 beam, and a second length of fiber having an input end coupled to the output end of
20 the first length of fiber, the second length of fiber formed with coaxial confinement
21 regions defining a second RIP that is different from the first RIP, as claimed in the
22 '768 Patent.

23 356. As set forth above, Muendel made contributions to the JDSU Adjustable
24 Beam Innovations as claimed in the '768 Patent that are not insignificant in quality,
25 when those contributions are measured against the dimension of the full invention.

26 357. As set forth above, Muendel did more than merely explain to Kliner,
27 Farrow, or others well-known concepts and/or the current state of the art.

1 358. Accordingly, Lumentum is entitled to correction of the inventorship of
2 the '768 Patent to add Muendel as an inventor.

3 359. Lumentum is further entitled to a declaratory relief that nLIGHT must
4 take all necessary actions to change the inventorship designation to add Muendel as an
5 inventor on any foreign patent applications corresponding to the '768 Patent.

6 **21. U.S. Patent No. 10,663,769**

7 360. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
8 15/939,141 (“the '141 Application”), listing Kliner, Farrow, and others as inventors.
9 The '141 Application issued on May 26, 2020 as U.S. Patent No. 10,663,769 (“the
10 '769 Patent”), listing nLIGHT as the Assignee.

11 361. The '769 Patent is based on JDSU Adjustable Beam Innovations. For
12 example, the '769 Patent generally discloses in-fiber beam shaping using at least two
13 different lengths of fiber. The first length of fiber is perturbed to affect how light in
14 the second length of fiber is distributed within its various confinement regions.

15 362. The '769 Patent contains at least one claim reciting one or more JDSU
16 Adjustable Beam Innovations. For example, claim 1 of the '769 Patent recites a
17 system with a first length of fiber, a perturbation device operably coupled with the first
18 length of fiber and configured to modify the optical beam traversing through the first
19 length of fiber, and a second length of fiber operably coupled with the first length of
20 fiber and configured to receive the modified optical beam therefrom. As another
21 example, claim 19 of the '769 Patent recites a method including receiving an optical
22 beam in a first length of fiber operably coupled with an optical beam source,
23 modifying the optical beam traversing through the first length of fiber with a
24 perturbation device operably coupled with the first length of fiber to produce a
25 modified optical beam and receiving the modified optical beam in a second length of
26 fiber operably coupled with the first length of fiber.

1 363. As set forth above, before the filing of the '141 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a system
5 with a first length of fiber, a perturbation device operably coupled with the first length
6 of fiber and configured to modify the optical beam traversing through the first length
7 of fiber, and a second length of fiber operably coupled with the first length of fiber and
8 configured to receive the modified optical beam therefrom, as claimed in the '769
9 Patent.

10 364. Accordingly, Lumentum is entitled to a declaration that any right, title,
11 and interest of Kliner in and to the '769 Patent is owned by Lumentum.

12 365. By purporting not to assign his right, title, and interest in the '141
13 Application and the '769 Patent to JDSU, and instead purporting to assign such right,
14 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

15 366. As set forth above, before the filing of the '141 Application or any
16 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
17 and interest in any contribution by him to the conception, development, and/or
18 reduction to practice of the JDSU Adjustable Beam Innovations, including a system
19 with a first length of fiber, a perturbation device operably coupled with the first length
20 of fiber and configured to modify the optical beam traversing through the first length
21 of fiber, and a second length of fiber operably coupled with the first length of fiber and
22 configured to receive the modified optical beam therefrom, as claimed in the '769
23 Patent.

24 367. Accordingly, Lumentum is entitled to a declaration that any right, title,
25 and interest of Farrow in and to the '769 Patent is owned by Lumentum.

1 368. By purporting not to assign his right, title, and interest in the '141
2 Application and the '769 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

4 369. As set forth above, Muendel contributed in a significant manner to the
5 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
6 including a system with a first length of fiber, a perturbation device operably coupled
7 with the first length of fiber and configured to modify the optical beam traversing
8 through the first length of fiber, and a second length of fiber operably coupled with the
9 first length of fiber and configured to receive the modified optical beam therefrom, as
10 claimed in the '769 Patent.

11 370. As set forth above, Muendel made contributions to the JDSU Adjustable
12 Beam Innovations as claimed in the '769 Patent that are not insignificant in quality,
13 when those contributions are measured against the dimension of the full invention.

14 371. As set forth above, Muendel did more than merely explain to Kliner,
15 Farrow, or others well-known concepts and/or the current state of the art.

16 372. Accordingly, Lumentum is entitled to correction of the inventorship of
17 the '769 Patent to add Muendel as an inventor.

18 373. Lumentum is further entitled to a declaratory relief that nLIGHT must
19 take all necessary actions to change the inventorship designation to add Muendel as an
20 inventor on any foreign patent applications corresponding to the '769 Patent.

21 **22. U.S. Patent No. 10,673,198**

22 374. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
23 15/939,136 (“the '136 Application”), listing Kliner and others as inventors. The '136
24 Application issued on June 2, 2020 as U.S. Patent No. 10,673,198 (“the '198 Patent”),
25 listing nLIGHT as the Assignee.

26 375. The '198 Patent is based on JDSU Adjustable Beam Innovations. For
27 example, the '198 Patent generally discloses in-fiber beam shaping using at least two

1 different lengths of fiber. The first length of fiber is perturbed to affect how light in
2 the second length of fiber is distributed within its various confinement regions.

3 376. The '198 Patent contains at least one claim reciting one or more JDSU
4 Adjustable Beam Innovations. For example, claim 1 of the '198 Patent recites a
5 system with one or more lengths of fiber, wherein at least one of the lengths of fiber
6 comprises a confinement region and a perturbation device to modify, through action
7 upon at least one of the one or more lengths of fiber, one or more beam characteristics.

8 377. As set forth above, before the filing of the '136 Application or any
9 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
10 and interest in any contribution by him to the conception, development, and/or
11 reduction to practice of the JDSU Adjustable Beam Innovations, including one or
12 more lengths of fiber, wherein at least one of the lengths of fiber comprises a
13 confinement region and a perturbation device to modify, through action upon at least
14 one of the one or more lengths of fiber, one or more beam characteristics, as claimed
15 in the '198 Patent.

16 378. Accordingly, Lumentum is entitled to a declaration that any right, title,
17 and interest of Kliner in and to the '198 Patent is owned by Lumentum.

18 379. By purporting not to assign his right, title, and interest in the '136
19 Application and the '198 Patent to JDSU, and instead purporting to assign such right,
20 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

21 380. As set forth above, Muendel contributed in a significant manner to the
22 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
23 including one or more lengths of fiber, wherein at least one of the lengths of fiber
24 comprises a confinement region and a perturbation device to modify, through action
25 upon at least one of the one or more lengths of fiber, one or more beam characteristics,
26 as claimed in the '198 Patent.

1 381. As set forth above, Muendel made contributions to the JDSU Adjustable
2 Beam Innovations as claimed in the '198 Patent that are not insignificant in quality,
3 when those contributions are measured against the dimension of the full invention.

4 382. As set forth above, Muendel did more than merely explain to Klinier,
5 Farrow, or others well-known concepts and/or the current state of the art.

6 383. Accordingly, Lumentum is entitled to correction of the inventorship of
7 the '198 Patent to add Muendel as an inventor.

8 384. Lumentum is further entitled to a declaratory relief that nLIGHT must
9 take all necessary actions to change the inventorship designation to add Muendel as an
10 inventor on any foreign patent applications corresponding to the '198 Patent.

11 **23. U.S. Patent No. 10,677,984**

12 385. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
13 15/939,148 (“the '148 Application”), listing Klinier, Farrow, and another as inventors.
14 The '148 Application issued on June 9, 2020 as U.S. Patent No. 10,677,984 (“the '984
15 Patent”), listing nLIGHT as the Assignee.

16 386. The '984 Patent is based on JDSU Adjustable Beam Innovations. For
17 example, the '984 Patent generally discloses in-fiber beam shaping using at least two
18 different lengths of fiber. The first length of fiber is perturbed to affect how light in
19 the second length of fiber is distributed within its various confinement regions.

20 387. The '984 Patent contains at least one claim reciting one or more JDSU
21 Adjustable Beam Innovations. For example, claim 1 of the '984 Patent recites a
22 device with a first length of fiber having a RIP for propagation of an optical beam, the
23 first RIP enabling, in response to an applied perturbation, modification of the optical
24 beam to form an adjusted optical beam that is movable to propagate along different
25 propagation paths in response to different states of the applied perturbation, and a
26 second length of fiber coupled to the first length of fiber and having a second RIP,
27 different from the first RIP, defining the set of confinement regions. As another

1 example, claim 8 of the '984 Patent recites a device with a VBC fiber including first
2 and second lengths of fiber coupled to each other and having, respectively, first and
3 second RIPs that are different from each other, the first RIP enabling, in response to
4 perturbation applied to the VBC fiber, modification of the optical beam to form an
5 adjusted optical beam and the second RIP defined by multiple confinement regions.
6 As yet another example, claim 14 of the '984 Patent recites a method including
7 receiving an optical beam at a VBC fiber including first and second lengths of fiber
8 having, respectively, first and second RIPs that are different from each other, the first
9 RIP enabling, in response to perturbation applied to the VBC fiber, modification of the
10 optical beam to form an adjusted optical beam, and the second RIP defined by the set
11 of confinement regions arranged to confine at least a portion of the adjusted optical
12 beam corresponding to a state of the perturbation applied to the VBC fiber.

13 388. As set forth above, before the filing of the '148 Application or any
14 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
15 and interest in any contribution by him to the conception, development, and/or
16 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
17 length of fiber having a RIP for propagation of an optical beam, the first RIP enabling,
18 in response to an applied perturbation, modification of the optical beam to form an
19 adjusted optical beam that is movable to propagate along different propagation paths in
20 response to different states of the applied perturbation, and a second length of fiber
21 coupled to the first length of fiber and having a second RIP, different from the first
22 RIP, defining the set of confinement regions, as claimed in the '984 Patent.

23 389. Accordingly, Lumentum is entitled to a declaration that any right, title,
24 and interest of Kliner in and to the '984 Patent is owned by Lumentum.

25 390. By purporting not to assign his right, title, and interest in the '148
26 Application and the '984 Patent to JDSU, and instead purporting to assign such right,
27 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

1 391. As set forth above, before the filing of the '148 Application or any
2 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
5 length of fiber having a RIP for propagation of an optical beam, the first RIP enabling,
6 in response to an applied perturbation, modification of the optical beam to form an
7 adjusted optical beam that is movable to propagate along different propagation paths in
8 response to different states of the applied perturbation, and a second length of fiber
9 coupled to the first length of fiber and having a second RIP, different from the first
10 RIP, defining the set of confinement regions, as claimed in the '984 Patent.

11 392. Accordingly, Lumentum is entitled to a declaration that any right, title,
12 and interest of Farrow in and to the '984 Patent is owned by Lumentum.

13 393. By purporting not to assign his right, title, and interest in the '148
14 Application and the '984 Patent to JDSU, and instead purporting to assign such right,
15 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

16 394. As set forth above, Muendel contributed in a significant manner to the
17 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
18 including a first length of fiber having a RIP for propagation of an optical beam, the
19 first RIP enabling, in response to an applied perturbation, modification of the optical
20 beam to form an adjusted optical beam that is movable to propagate along different
21 propagation paths in response to different states of the applied perturbation, and a
22 second length of fiber coupled to the first length of fiber and having a second RIP,
23 different from the first RIP, defining the set of confinement regions, as claimed in the
24 '984 Patent.

25 395. As set forth above, Muendel made contributions to the JDSU Adjustable
26 Beam Innovations as claimed in the '984 Patent that are not insignificant in quality,
27 when those contributions are measured against the dimension of the full invention.

1 396. As set forth above, Muendel did more than merely explain to Kliner,
2 Farrow, or others well-known concepts and/or the current state of the art.

3 397. Accordingly, Lumentum is entitled to correction of the inventorship of
4 the '984 Patent to add Muendel as an inventor.

5 398. Lumentum is further entitled to a declaratory relief that nLIGHT must
6 take all necessary actions to change the inventorship designation to add Muendel as an
7 inventor on any foreign patent applications corresponding to the '984 Patent.

8 **24. U.S. Patent No. 10,682,726**

9 399. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
10 15/938,925 (“the '925 Application”), listing Kliner, Farrow, and another as inventors.
11 The '925 Application issued on June 16, 2020 as U.S. Patent No. 10,682,726 (“the
12 '726 Patent”), listing nLIGHT as the Assignee.

13 400. The '726 Patent is based on JDSU Adjustable Beam Innovations. For
14 example, the '726 Patent generally discloses in-fiber beam shaping using at least two
15 different lengths of fiber. The first length of fiber is perturbed to affect how light in
16 the second length of fiber is distributed within its various confinement regions.

17 401. The '726 Patent contains at least one claim reciting one or more JDSU
18 Adjustable Beam Innovations. For example, claim 1 of the '726 Patent recites a
19 device with a first length of fiber comprising a first RIP formed to enable the adjusting
20 of one or more beam characteristics of an optical beam by a perturbation device, and a
21 second length of fiber comprising a second RIP defined by multiple confinement
22 regions formed to confine at least a portion of the optical beam within at least one of
23 the multiple confinement regions. As another example, claim 19 of the '726 Patent
24 recites a method including perturbing an optical beam propagating within a first length
25 of fiber to adjust one or more beam characteristics of the optical beam in the first
26 length of fiber or a second length of fiber or a combination thereof, the second length
27 of fiber having two or more confinement regions.

1 402. As set forth above, before the filing of the '925 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
5 length of fiber comprising a first RIP formed to enable the adjusting of one or more
6 beam characteristics of an optical beam by a perturbation device, and a second length
7 of fiber comprising a second RIP defined by multiple confinement regions formed to
8 confine at least a portion of the optical beam within at least one of the multiple
9 confinement regions, as claimed in the '726 Patent.

10 403. Accordingly, Lumentum is entitled to a declaration that any right, title,
11 and interest of Kliner in and to the '726 Patent is owned by Lumentum.

12 404. By purporting not to assign his right, title, and interest in the '925
13 Application and the '726 Patent to JDSU, and instead purporting to assign such right,
14 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

15 405. As set forth above, before the filing of the '925 Application or any
16 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
17 and interest in any contribution by him to the conception, development, and/or
18 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
19 length of fiber comprising a first RIP formed to enable the adjusting of one or more
20 beam characteristics of an optical beam by a perturbation device, and a second length
21 of fiber comprising a second RIP defined by multiple confinement regions formed to
22 confine at least a portion of the optical beam within at least one of the multiple
23 confinement regions, as claimed in the '726 Patent.

24 406. Accordingly, Lumentum is entitled to a declaration that any right, title,
25 and interest of Farrow in and to the '726 Patent is owned by Lumentum.

1 407. By purporting not to assign his right, title, and interest in the '925
2 Application and the '726 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

4 408. As set forth above, Muendel contributed in a significant manner to the
5 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
6 including a first length of fiber comprising a first RIP formed to enable the adjusting
7 of one or more beam characteristics of an optical beam by a perturbation device, and a
8 second length of fiber comprising a second RIP defined by multiple confinement
9 regions formed to confine at least a portion of the optical beam within at least one of
10 the multiple confinement regions, as claimed in the '726 Patent.

11 409. As set forth above, Muendel made contributions to the JDSU Adjustable
12 Beam Innovations as claimed in the '726 Patent that are not insignificant in quality,
13 when those contributions are measured against the dimension of the full invention.

14 410. As set forth above, Muendel did more than merely explain to Kliner,
15 Farrow, or others well-known concepts and/or the current state of the art.

16 411. Accordingly, Lumentum is entitled to correction of the inventorship of
17 the '726 Patent to add Muendel as an inventor.

18 412. Lumentum is further entitled to a declaratory relief that nLIGHT must
19 take all necessary actions to change the inventorship designation to add Muendel as an
20 inventor on any foreign patent applications corresponding to the '726 Patent.

21 **25. U.S. Patent No. 10,684,487**

22 413. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
23 15/939,223 (“the '223 Application”), listing Kliner, Farrow, and others as inventors.
24 The '223 Application issued on June 16, 2020 as U.S. Patent No. 10,684,487 (“the
25 '487 Patent”), listing nLIGHT as the Assignee.

26 414. The '487 Patent is based on JDSU Adjustable Beam Innovations. For
27 example, the '487 Patent generally discloses in-fiber beam shaping using at least two

1 different lengths of fiber. The first length of fiber is perturbed to affect how light in
2 the second length of fiber is distributed within its various confinement regions.

3 415. The '487 Patent contains at least one claim reciting one or more JDSU
4 Adjustable Beam Innovations. For example, claim 1 of the '487 Patent recites system
5 with a first length of fiber comprising a first RIP formed to enable modification of one
6 or more beam characteristics of an optical beam by a perturbation device, and a second
7 length of fiber functionally directly coupled with the first length of fiber, the second
8 length of fiber having a second RIP defined by multiple confinement regions, wherein
9 the first RIP and the second RIP are different.

10 416. As set forth above, before the filing of the '223 Application or any
11 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
12 and interest in any contribution by him to the conception, development, and/or
13 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
14 length of fiber comprising a first RIP formed to enable modification of one or more
15 beam characteristics of an optical beam by a perturbation device, and a second length
16 of fiber functionally directly coupled with the first length of fiber, the second length of
17 fiber having a second RIP defined by multiple confinement regions, wherein the first
18 RIP and the second RIP are different, as claimed in the '487 Patent.

19 417. Accordingly, Lumentum is entitled to a declaration that any right, title,
20 and interest of Kliner in and to the '487 Patent is owned by Lumentum.

21 418. By purporting not to assign his right, title, and interest in the '223
22 Application and the '487 Patent to JDSU, and instead purporting to assign such right,
23 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

24 419. As set forth above, before the filing of the '223 Application or any
25 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
26 and interest in any contribution by him to the conception, development, and/or
27 reduction to practice of the JDSU Adjustable Beam Innovations, including a first

1 length of fiber comprising a first RIP formed to enable modification of one or more
2 beam characteristics of an optical beam by a perturbation device, and a second length
3 of fiber functionally directly coupled with the first length of fiber, the second length of
4 fiber having a second RIP defined by multiple confinement regions, wherein the first
5 RIP and the second RIP are different, as claimed in the '487 Patent.

6 420. Accordingly, Lumentum is entitled to a declaration that any right, title,
7 and interest of Farrow in and to the '487 Patent is owned by Lumentum.

8 421. By purporting not to assign his right, title, and interest in the '223
9 Application and the '487 Patent to JDSU, and instead purporting to assign such right,
10 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

11 422. As set forth above, Muendel contributed in a significant manner to the
12 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
13 including a first length of fiber comprising a first RIP formed to enable modification of
14 one or more beam characteristics of an optical beam by a perturbation device, and a
15 second length of fiber functionally directly coupled with the first length of fiber, the
16 second length of fiber having a second RIP defined by multiple confinement regions,
17 wherein the first RIP and the second RIP are different, as claimed in the '487 Patent.

18 423. As set forth above, Muendel made contributions to the JDSU Adjustable
19 Beam Innovations as claimed in the '487 Patent that are not insignificant in quality,
20 when those contributions are measured against the dimension of the full invention.

21 424. As set forth above, Muendel did more than merely explain to Kliner,
22 Farrow, or others well-known concepts and/or the current state of the art.

23 425. Accordingly, Lumentum is entitled to correction of the inventorship of
24 the '487 Patent to add Muendel as an inventor.

25 426. Lumentum is further entitled to a declaratory relief that nLIGHT must
26 take all necessary actions to change the inventorship designation to add Muendel as an
27 inventor on any foreign patent applications corresponding to the '487 Patent.

1 **26. U.S. Patent No. 10,705,348**

2 427. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
3 15/939,111 (“the ’111 Application”), listing Kliner, Farrow, and others as inventors.
4 The ’111 Application issued on July 7, 2020 as U.S. Patent No. 10,705,348 (“the ’348
5 Patent”), listing nLIGHT as the Assignee.

6 428. The ’348 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’348 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 429. The ’348 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’348 Patent recites a
12 device with a first length of fiber having a RIP, the first RIP enabling, in response to
13 an applied perturbation, modification of the optical beam, and a second length of fiber
14 having an input end coupled to the output end of the first length of fiber, the second
15 length of fiber formed with multiple confinement regions defining a second RIP that is
16 different from the first RIP. As another example, claim 8 of the ’348 Patent recites a
17 system with a VBC fiber including first and second lengths of fiber coupled to each
18 other and having, respectively, first and second RIPs that are different from each other,
19 the first RIP enabling, in response to perturbation applied to the VBC fiber,
20 modification of the optical beam, and the second RIP defined by multiple confinement
21 regions arranged to confine at least a portion of the adjusted optical beam. As yet
22 another example, claim 16 of the ’348 Patent recites a method including receiving an
23 optical beam at a VBC fiber including first and second lengths of fiber having,
24 respectively, first and second RIPs that are different from each other, the first RIP
25 enabling, in response to a controlled state of perturbation applied to the VBC fiber,
26 modification of the optical beam, and the second RIP defined by multiple confinement
27 regions.

1 430. As set forth above, before the filing of the '111 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
5 length of fiber having a RIP, the first RIP enabling, in response to an applied
6 perturbation, modification of the optical beam, and a second length of fiber having an
7 input end coupled to the output end of the first length of fiber, the second length of
8 fiber formed with multiple confinement regions defining a second RIP that is different
9 from the first RIP, as claimed in the '348 Patent.

10 431. Accordingly, Lumentum is entitled to a declaration that any right, title,
11 and interest of Kliner in and to the '348 Patent is owned by Lumentum.

12 432. By purporting not to assign his right, title, and interest in the '111
13 Application and the '348 Patent to JDSU, and instead purporting to assign such right,
14 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

15 433. As set forth above, before the filing of the '111 Application or any
16 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
17 and interest in any contribution by him to the conception, development, and/or
18 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
19 length of fiber having a RIP, the first RIP enabling, in response to an applied
20 perturbation, modification of the optical beam, and a second length of fiber having an
21 input end coupled to the output end of the first length of fiber, the second length of
22 fiber formed with multiple confinement regions defining a second RIP that is different
23 from the first RIP, as claimed in the '348 Patent.

24 434. Accordingly, Lumentum is entitled to a declaration that any right, title,
25 and interest of Farrow in and to the '348 Patent is owned by Lumentum.

1 435. By purporting not to assign his right, title, and interest in the '111
2 Application and the '348 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

4 436. As set forth above, Muendel contributed in a significant manner to the
5 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
6 including a first length of fiber having a RIP, the first RIP enabling, in response to an
7 applied perturbation, modification of the optical beam, and a second length of fiber
8 having an input end coupled to the output end of the first length of fiber, the second
9 length of fiber formed with multiple confinement regions defining a second RIP that is
10 different from the first RIP, as claimed in the '348 Patent.

11 437. As set forth above, Muendel made contributions to the JDSU Adjustable
12 Beam Innovations as claimed in the '348 Patent that are not insignificant in quality,
13 when those contributions are measured against the dimension of the full invention.

14 438. As set forth above, Muendel did more than merely explain to Kliner,
15 Farrow, or others well-known concepts and/or the current state of the art.

16 439. Accordingly, Lumentum is entitled to correction of the inventorship of
17 the '348 Patent to add Muendel as an inventor.

18 440. Lumentum is further entitled to a declaratory relief that nLIGHT must
19 take all necessary actions to change the inventorship designation to add Muendel as an
20 inventor on any foreign patent applications corresponding to the '348 Patent.

21 **27. U.S. Patent No. 10,730,785**

22 441. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
23 15/938,959 (“the '959 Application”), listing Kliner and others as inventors. The '959
24 Application issued on August 4, 2020 as U.S. Patent No. 10,730,785 (“the '785
25 Patent”), listing nLIGHT as the Assignee.

26 442. The '785 Patent is based on JDSU Adjustable Beam Innovations. For
27 example, the '785 Patent generally discloses in-fiber beam shaping using at least two

1 different lengths of fiber. The first length of fiber is perturbed to affect how light in
2 the second length of fiber is distributed within its various confinement regions.

3 443. The '785 Patent contains at least one claim reciting one or more JDSU
4 Adjustable Beam Innovations. For example, claim 1 of the '785 Patent recites an
5 apparatus with a first fiber having a first RIP, a bend controller, and a second fiber
6 coupled to the first fiber and situated to receive the modified optical beam, the second
7 fiber having a second RIP defining at least two cores in the second fiber.

8 444. As set forth above, before the filing of the '959 Application or any
9 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
10 and interest in any contribution by him to the conception, development, and/or
11 reduction to practice of the JDSU Adjustable Beam Innovations, including an
12 apparatus with a first fiber having a first RIP, a bend controller, and a second fiber
13 coupled to the first fiber and situated to receive the modified optical beam, the second
14 fiber having a second RIP defining at least two cores in the second fiber, as claimed in
15 the '785 Patent.

16 445. Accordingly, Lumentum is entitled to a declaration that any right, title,
17 and interest of Kliner in and to the '785 Patent is owned by Lumentum.

18 446. By purporting not to assign his right, title, and interest in the '959
19 Application and the '785 Patent to JDSU, and instead purporting to assign such right,
20 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

21 447. As set forth above, Muendel contributed in a significant manner to the
22 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
23 including an apparatus with a first fiber having a first RIP, a bend controller, and a
24 second fiber coupled to the first fiber and situated to receive the modified optical
25 beam, the second fiber having a second RIP defining at least two cores in the second
26 fiber, as claimed in the '785 Patent.

1 448. As set forth above, Muendel made contributions to the JDSU Adjustable
2 Beam Innovations as claimed in the '785 Patent that are not insignificant in quality,
3 when those contributions are measured against the dimension of the full invention.

4 449. As set forth above, Muendel did more than merely explain to Kliner,
5 Farrow, or others well-known concepts and/or the current state of the art.

6 450. Accordingly, Lumentum is entitled to correction of the inventorship of
7 the '785 Patent to add Muendel as an inventor.

8 451. Lumentum is further entitled to a declaratory relief that nLIGHT must
9 take all necessary actions to change the inventorship designation to add Muendel as an
10 inventor on any foreign patent applications corresponding to the '785 Patent.

11 **28. U.S. Patent No. 10,732,439**

12 452. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
13 15/939,064 (“the '064 Application”), listing Kliner and Farrow as inventors. The '064
14 Application issued on August 4, 2020 as U.S. Patent No. 10,732,439 (“the '439
15 Patent”), listing nLIGHT as the Assignee.

16 453. The '439 Patent is based on JDSU Adjustable Beam Innovations. For
17 example, the '439 Patent generally discloses in-fiber beam shaping using at least two
18 different lengths of fiber. The first length of fiber is perturbed to affect how light in
19 the second length of fiber is distributed within its various confinement regions.

20 454. The '439 Patent contains at least one claim reciting one or more JDSU
21 Adjustable Beam Innovations. For example, claim 1 of the '439 Patent recites an
22 apparatus with an input fiber, a perturbation assembly, and an output fiber having at
23 least two confinement regions, the input fiber optically coupled to the output fiber, the
24 input fiber and the output fiber forming at least a portion of a continuous length of
25 fiber, wherein the perturbation assembly is coupled to at least one of the input fiber
26 and the output fiber to modify two or more beam characteristics of the output beam.
27 As another example, claim 15 of the '439 Patent recites an apparatus with an input

1 fiber, an output fiber optically coupled to the input fiber, wherein the input fiber and
2 the output fiber form at least a portion of a continuous length of fiber, and a
3 perturbation assembly coupled to at least one of the input fiber and the output fiber to
4 modify one or more beam characteristics of the laser beam, the input fiber and the
5 output fiber having different RIPs, wherein the output fiber has a RIP that defines at
6 least two confinement regions.

7 455. As set forth above, before the filing of the '064 Application or any
8 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
9 and interest in any contribution by him to the conception, development, and/or
10 reduction to practice of the JDSU Adjustable Beam Innovations, including an
11 apparatus with an input fiber, a perturbation assembly, and an output fiber having at
12 least two confinement regions, the input fiber optically coupled to the output fiber, the
13 input fiber and the output fiber forming at least a portion of a continuous length of
14 fiber, wherein the perturbation assembly is coupled to at least one of the input fiber
15 and the output fiber to modify two or more beam characteristics of the output beam, as
16 claimed in the '439 Patent.

17 456. Accordingly, Lumentum is entitled to a declaration that any right, title,
18 and interest of Kliner in and to the '439 Patent is owned by Lumentum.

19 457. By purporting not to assign his right, title, and interest in the '064
20 Application and the '439 Patent to JDSU, and instead purporting to assign such right,
21 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

22 458. As set forth above, before the filing of the '064 Application or any
23 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
24 and interest in any contribution by him to the conception, development, and/or
25 reduction to practice of the JDSU Adjustable Beam Innovations, including an
26 apparatus with an input fiber, a perturbation assembly, and an output fiber having at
27 least two confinement regions, the input fiber optically coupled to the output fiber, the

1 input fiber and the output fiber forming at least a portion of a continuous length of
2 fiber, wherein the perturbation assembly is coupled to at least one of the input fiber
3 and the output fiber to modify two or more beam characteristics of the output beam, as
4 claimed in the '439 Patent.

5 459. Accordingly, Lumentum is entitled to a declaration that any right, title,
6 and interest of Farrow in and to the '439 Patent is owned by Lumentum.

7 460. By purporting not to assign his right, title, and interest in the '064
8 Application and the '439 Patent to JDSU, and instead purporting to assign such right,
9 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

10 461. As set forth above, Muendel contributed in a significant manner to the
11 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
12 including an input fiber, a perturbation assembly, and an apparatus with an output fiber
13 having at least two confinement regions, the input fiber optically coupled to the output
14 fiber, the input fiber and the output fiber forming at least a portion of a continuous
15 length of fiber, wherein the perturbation assembly is coupled to at least one of the
16 input fiber and the output fiber to modify two or more beam characteristics of the
17 output beam, as claimed in the '439 Patent.

18 462. As set forth above, Muendel made contributions to the JDSU Adjustable
19 Beam Innovations as claimed in the '439 Patent that are not insignificant in quality,
20 when those contributions are measured against the dimension of the full invention.

21 463. As set forth above, Muendel did more than merely explain to Kliner,
22 Farrow, or others well-known concepts and/or the current state of the art.

23 464. Accordingly, Lumentum is entitled to correction of the inventorship of
24 the '439 Patent to add Muendel as an inventor.

25 465. Lumentum is further entitled to a declaratory relief that nLIGHT must
26 take all necessary actions to change the inventorship designation to add Muendel as an
27 inventor on any foreign patent applications corresponding to the '439 Patent.

1 **29. U.S. Patent No. 10,739,621**

2 466. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
3 15/938,790 (“the ’790 Application”), listing Kliner, Farrow, and others as inventors.
4 The ’790 Application issued on August 11, 2020 as U.S. Patent No. 10,739,621 (“the
5 ’621 Patent”), listing nLIGHT as the Assignee.

6 467. The ’621 Patent is based on JDSU Adjustable Beam Innovations. For
7 example, the ’621 Patent generally discloses in-fiber beam shaping using at least two
8 different lengths of fiber. The first length of fiber is perturbed to affect how light in
9 the second length of fiber is distributed within its various confinement regions.

10 468. The ’621 Patent contains at least one claim reciting one or more JDSU
11 Adjustable Beam Innovations. For example, claim 1 of the ’621 Patent recites a
12 method including using a fiber with lengths having first and second RIPs that are
13 different from each other, launching the optical beam into the first length of fiber
14 having the first refractive-index profile (RIP), modifying one or more beam
15 characteristics, and coupling the optical beam from the first length of fiber into the
16 second length of fiber having the second RIP defined by multiple confinement regions.

17 469. As set forth above, before the filing of the ’790 Application or any
18 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
19 and interest in any contribution by him to the conception, development, and/or
20 reduction to practice of the JDSU Adjustable Beam Innovations, including using a
21 fiber with lengths having first and second RIPs that are different from each other,
22 launching the optical beam into the first length of fiber having the first refractive-index
23 profile (RIP), modifying one or more beam characteristics, and coupling the optical
24 beam from the first length of fiber into the second length of fiber having the second
25 RIP defined by multiple confinement regions, as claimed in the ’621 Patent.

26 470. Accordingly, Lumentum is entitled to a declaration that any right, title,
27 and interest of Kliner in and to the ’621 Patent is owned by Lumentum.

1 471. By purporting not to assign his right, title, and interest in the '790
2 Application and the '621 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

4 472. As set forth above, before the filing of the '790 Application or any
5 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Adjustable Beam Innovations, including using a
8 fiber with lengths having first and second RIPs that are different from each other,
9 launching the optical beam into the first length of fiber having the first refractive-index
10 profile (RIP), modifying one or more beam characteristics, and coupling the optical
11 beam from the first length of fiber into the second length of fiber having the second
12 RIP defined by multiple confinement regions, as claimed in the '621 Patent.

13 473. Accordingly, Lumentum is entitled to a declaration that any right, title,
14 and interest of Farrow in and to the '621 Patent is owned by Lumentum.

15 474. By purporting not to assign his right, title, and interest in the '790
16 Application and the '621 Patent to JDSU, and instead purporting to assign such right,
17 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

18 475. As set forth above, Muendel contributed in a significant manner to the
19 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
20 including using a fiber with lengths having first and second RIPs that are different
21 from each other, launching the optical beam into the first length of fiber having the
22 first refractive-index profile (RIP), modifying one or more beam characteristics, and
23 coupling the optical beam from the first length of fiber into the second length of fiber
24 having the second RIP defined by multiple confinement regions, as claimed in the '621
25 Patent.

1 476. As set forth above, Muendel made contributions to the JDSU Adjustable
2 Beam Innovations as claimed in the '621 Patent that are not insignificant in quality,
3 when those contributions are measured against the dimension of the full invention.

4 477. As set forth above, Muendel did more than merely explain to Kliner,
5 Farrow, or others well-known concepts and/or the current state of the art.

6 478. Accordingly, Lumentum is entitled to correction of the inventorship of
7 the '621 Patent to add Muendel as an inventor.

8 479. Lumentum is further entitled to a declaratory relief that nLIGHT must
9 take all necessary actions to change the inventorship designation to add Muendel as an
10 inventor on any foreign patent applications corresponding to the '621 Patent.

11 **30. U.S. Patent No. 10,751,834**

12 480. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
13 15/938,854 (“the '854 Application”), listing Kliner, Farrow, and another as inventors.
14 The '854 Application issued on August 25, 2020 as U.S. Patent No. 10,751,834 (“the
15 '834 Patent”), listing nLIGHT as the Assignee.

16 481. The '834 Patent is based on JDSU Adjustable Beam Innovations. For
17 example, the '834 Patent generally discloses in-fiber beam shaping using at least two
18 different lengths of fiber. The first length of fiber is perturbed to affect how light in
19 the second length of fiber is distributed within its various confinement regions.

20 482. The '834 Patent contains at least one claim reciting one or more JDSU
21 Adjustable Beam Innovations. For example, claim 1 of the '834 Patent recites a
22 device with a first length of fiber with a first RIP, the first RIP enabling, in response to
23 an applied perturbation, modification of the beam characteristics, and a second length
24 of fiber functionally directly joined at a light-guiding interface with the first length of
25 fiber and formed with a set of multiple confinement regions defining a second RIP and
26 arranged to confine at least a portion of the adjusted optical beam.

1 483. As set forth above, before the filing of the '854 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
5 with a first length of fiber with a first RIP, the first RIP enabling, in response to an
6 applied perturbation, modification of the beam characteristics, and a second length of
7 fiber functionally directly joined at a light-guiding interface with the first length of
8 fiber and formed with a set of multiple confinement regions defining a second RIP and
9 arranged to confine at least a portion of the adjusted optical beam, as claimed in the
10 '834 Patent.

11 484. Accordingly, Lumentum is entitled to a declaration that any right, title,
12 and interest of Kliner in and to the '834 Patent is owned by Lumentum.

13 485. By purporting not to assign his right, title, and interest in the '854
14 Application and the '834 Patent to JDSU, and instead purporting to assign such right,
15 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

16 486. As set forth above, before the filing of the '854 Application or any
17 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
18 and interest in any contribution by him to the conception, development, and/or
19 reduction to practice of the JDSU Adjustable Beam Innovations, including a device
20 with a first length of fiber with a first RIP, the first RIP enabling, in response to an
21 applied perturbation, modification of the beam characteristics, and a second length of
22 fiber functionally directly joined at a light-guiding interface with the first length of
23 fiber and formed with a set of multiple confinement regions defining a second RIP and
24 arranged to confine at least a portion of the adjusted optical beam, as claimed in the
25 '834 Patent.

26 487. Accordingly, Lumentum is entitled to a declaration that any right, title,
27 and interest of Farrow in and to the '834 Patent is owned by Lumentum.

1 488. By purporting not to assign his right, title, and interest in the '854
2 Application and the '834 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

4 489. As set forth above, Muendel contributed in a significant manner to the
5 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
6 including a device with a first length of fiber with a first RIP, the first RIP enabling, in
7 response to an applied perturbation, modification of the beam characteristics, and a
8 second length of fiber functionally directly joined at a light-guiding interface with the
9 first length of fiber and formed with a set of multiple confinement regions defining a
10 second RIP and arranged to confine at least a portion of the adjusted optical beam, as
11 claimed in the '834 Patent.

12 490. As set forth above, Muendel made contributions to the JDSU Adjustable
13 Beam Innovations as claimed in the '834 Patent that are not insignificant in quality,
14 when those contributions are measured against the dimension of the full invention.

15 491. As set forth above, Muendel did more than merely explain to Kliner,
16 Farrow, or others well-known concepts and/or the current state of the art.

17 492. Accordingly, Lumentum is entitled to correction of the inventorship of
18 the '834 Patent to add Muendel as an inventor.

19 493. Lumentum is further entitled to a declaratory relief that nLIGHT must
20 take all necessary actions to change the inventorship designation to add Muendel as an
21 inventor on any foreign patent applications corresponding to the '834 Patent.

22 **31. U.S. Patent No. 10,732,440**

23 494. On May 2, 2019, nLIGHT filed U.S. Patent Application No. 16/402,147
24 ("the '147 Application"), listing Kliner and Farrow as inventors. The '147 Application
25 issued on August 4, 2020 as U.S. Patent No. 10,732,440 ("the '2,440 Patent"), listing
26 nLIGHT as the Assignee.

1 495. The '2,440 Patent is based on JDSU Adjustable Beam Innovations. For
2 example, the '2,440 Patent generally discloses in-fiber beam shaping using at least two
3 different lengths of fiber. The first length of fiber is perturbed to affect how light in
4 the second length of fiber is distributed within its various confinement regions.

5 496. The '2,440 Patent contains at least one claim reciting one or more JDSU
6 Adjustable Beam Innovations. For example, claim 1 of the '2,440 Patent recites a
7 system with an optical fiber including a first length comprising a first RIP formed to
8 enable, at least in part, modification of one or more beam characteristics of an optical
9 beam by a perturbation assembly arranged to modify the one or more beam
10 characteristics, and a second length of fiber coupled to the first length of optical fiber
11 and having a second RIP formed to preserve at least a portion of the one or more beam
12 characteristics of the optical beam modified by the perturbation assembly within two
13 or more cores, wherein the first RIP and the second RIP are different.

14 497. As set forth above, before the filing of the '147 Application or any
15 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
16 and interest in any contribution by him to the conception, development, and/or
17 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
18 fiber including a first length comprising a first RIP formed to enable, at least in part,
19 modification of one or more beam characteristics of an optical beam by a perturbation
20 assembly arranged to modify the one or more beam characteristics, and a second
21 length of fiber coupled to the first length of optical fiber and having a second RIP
22 formed to preserve at least a portion of the one or more beam characteristics of the
23 optical beam modified by the perturbation assembly within two or more cores, wherein
24 the first RIP and the second RIP are different, as claimed in the '2,440 Patent.

25 498. Accordingly, Lumentum is entitled to a declaration that any right, title,
26 and interest of Kliner in and to the '2,440 Patent is owned by Lumentum.

1 499. By purporting not to assign his right, title, and interest in the '147
2 Application and the '2,440 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

4 500. As set forth above, before the filing of the '147 Application or any
5 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
8 fiber including a first length comprising a first RIP formed to enable, at least in part,
9 modification of one or more beam characteristics of an optical beam by a perturbation
10 assembly arranged to modify the one or more beam characteristics, and a second
11 length of fiber coupled to the first length of optical fiber and having a second RIP
12 formed to preserve at least a portion of the one or more beam characteristics of the
13 optical beam modified by the perturbation assembly within two or more cores, wherein
14 the first RIP and the second RIP are different, as claimed in the '2,440 Patent.

15 501. Accordingly, Lumentum is entitled to a declaration that any right, title,
16 and interest of Farrow in and to the '2,440 Patent is owned by Lumentum.

17 502. By purporting not to assign his right, title, and interest in the '147
18 Application and the '2,440 Patent to JDSU, and instead purporting to assign such right,
19 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

20 503. As set forth above, Muendel contributed in a significant manner to the
21 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
22 including an optical fiber including a first length comprising a first RIP formed to
23 enable, at least in part, modification of one or more beam characteristics of an optical
24 beam by a perturbation assembly arranged to modify the one or more beam
25 characteristics, and a second length of fiber coupled to the first length of optical fiber
26 and having a second RIP formed to preserve at least a portion of the one or more beam
27 characteristics of the optical beam modified by the perturbation assembly within two

1 or more cores, wherein the first RIP and the second RIP are different, as claimed in the
2 '2,440 Patent.

3 504. As set forth above, Muendel made contributions to the JDSU Adjustable
4 Beam Innovations as claimed in the '2,440 Patent that are not insignificant in quality,
5 when those contributions are measured against the dimension of the full invention.

6 505. As set forth above, Muendel did more than merely explain to Kliner,
7 Farrow, or others well-known concepts and/or the current state of the art.

8 506. Accordingly, Lumentum is entitled to correction of the inventorship of
9 the '2,440 Patent to add Muendel as an inventor.

10 507. Lumentum is further entitled to a declaratory relief that nLIGHT must
11 take all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '2,440 Patent.

13 **32. U.S. Publication No. 2018/0217412**

14 508. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
15 15/939,197 (“the '197 Application”), listing Kliner, Farrow, and others as inventors.
16 The '197 Application Published on August 2, 2018 as U.S. Publication No.
17 2018/0217412 (“the '412 Publication”), listing nLIGHT as the Assignee.

18 509. The '412 Publication is based on JDSU Adjustable Beam Innovations.
19 For example, the '412 Publication generally discloses in-fiber beam shaping using at
20 least two different lengths of fiber. The first length of fiber is perturbed to affect how
21 light in the second length of fiber is distributed within its various confinement regions.

22 510. The '412 Publication contains at least one claim reciting one or more
23 JDSU Adjustable Beam Innovations. For example, claim 1 of the '412 Publication
24 recites a device with a first length of fiber comprising a first RIP to enable
25 modification of one or more beam characteristics of an optical beam having a first
26 wavelength, and a second length of fiber comprising at least one wavelength-
27 modifying confinement region and situated to receive the optical beam from the first

1 length of fiber. As another example, claim 20 of the '412 Publication recites a system
2 with an optical fiber assembly configured to be in optical communication with an
3 optical beam source and including a first length of fiber comprising a first RIP to
4 enable modification of one or more beam characteristics of an optical beam generated
5 by the optical beam source and having a first wavelength, and a second length of fiber
6 comprising at least one wavelength-modifying confinement region and situated to
7 receive the optical beam from the first length of fiber, and a perturbation device
8 configured to perturb one or both of the first length of fiber and the optical beam. As
9 yet another example, claim 23 of the '412 Publication recites a method including
10 coupling an optical beam to propagate within a first length of fiber, coupling the
11 optical beam from the first length of fiber into a second length of fiber (the second
12 length of fiber comprising at least one wavelength-modifying confinement region),
13 modifying the optical beam in the second length of fiber from a first wavelength to a
14 second wavelength, and emitting, from the second length of fiber, the optical beam
15 comprising the second wavelength.

16 511. As set forth above, before the filing of the '197 Application or any
17 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
18 and interest in any contribution by him to the conception, development, and/or
19 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
20 length of fiber comprising a first RIP to enable modification of one or more beam
21 characteristics of an optical beam having a first wavelength, and a second length of
22 fiber comprising at least one wavelength-modifying confinement region and situated to
23 receive the optical beam from the first length of fiber, as claimed in the '412
24 Publication.

25 512. Accordingly, Lumentum is entitled to a declaration that any right, title,
26 and interest of Kliner in and to the '197 Application and the '412 Publication is owned
27 by Lumentum.

1 513. By purporting not to assign his right, title, and interest in the '197
2 Application and the '412 Publication to JDSU, and instead purporting to assign such
3 right, title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

4 514. As set forth above, before the filing of the '197 Application or any
5 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
8 fiber including a first length of optical fiber comprising a first RIP formed to enable, at
9 least in part, modification of one or more beam characteristics of a first length of fiber
10 comprising a first RIP to enable modification of one or more beam characteristics of
11 an optical beam having a first wavelength, and a second length of fiber comprising at
12 least one wavelength-modifying confinement region and situated to receive the optical
13 beam from the first length of fiber, as claimed in the '412 Publication.

14 515. Accordingly, Lumentum is entitled to a declaration that any right, title,
15 and interest of Farrow in and to the '197 Application and the '412 Publication is
16 owned by Lumentum.

17 516. By purporting not to assign his right, title, and interest in the '197
18 Application and the '412 Publication to JDSU, and instead purporting to assign such
19 right, title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

20 517. As set forth above, Muendel contributed in a significant manner to the
21 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
22 including a first length of fiber comprising a first RIP to enable modification of one or
23 more beam characteristics of an optical beam having a first wavelength, and a second
24 length of fiber comprising at least one wavelength-modifying confinement region and
25 situated to receive the optical beam from the first length of fiber, as claimed in the
26 '412 Publication.

1 518. As set forth above, Muendel made contributions to the JDSU Adjustable
2 Beam Innovations as claimed in the '412 Publication that are not insignificant in
3 quality, when those contributions are measured against the dimension of the full
4 invention.

5 519. As set forth above, Muendel did more than merely explain to Kliner,
6 Farrow, or others well-known concepts and/or the current state of the art.

7 520. Accordingly, Lumentum is entitled to declaratory relief correcting the
8 inventorship of the '197 Application and the '412 Publication to add Muendel as an
9 inventor.

10 521. Lumentum is further entitled to declaratory relief that nLIGHT must take
11 all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '197 Application or
13 the '412 Publication.

14 **33. U.S. Publication No. 2018/0281108**

15 522. On March 28, 2018, nLIGHT filed U.S. Patent Application No.
16 15/939,234 (“the '234 Application”), listing Kliner, Farrow, and others as inventors.
17 The '234 Application Published on October 4, 2018 as U.S. Publication No.
18 2018/081108 (“the '108 Publication”), listing nLIGHT as the Assignee.

19 523. The '108 Publication is based on JDSU Adjustable Beam Innovations.
20 For example, the '108 Publication generally discloses in-fiber beam shaping using at
21 least two different lengths of fiber. The first length of fiber is perturbed to affect how
22 light in the second length of fiber is distributed within its various confinement regions.

23 524. The '108 Publication contains at least one claim reciting one or more
24 JDSU Adjustable Beam Innovations. For example, claim 1 of the '108 Publication
25 recites a device with a first length of fiber comprising a first RIP to enable
26 modification of one or more beam characteristics of an optical beam having a first
27 beam shape, and a second length of fiber comprising at least one beam-shaping

1 confinement region and situated to receive the optical beam from the first length of
2 fiber. As another example, claim 13 of the '108 Publication recites a system with an
3 optical fiber assembly configured to be in optical communication with the optical
4 beam source and including a first length of fiber comprising a first RIP to enable
5 modification of one or more beam characteristics of an optical beam having a first
6 beam shape, and a second length of fiber comprising at least one beam shape-
7 modifying confinement region and situated to receive the optical beam from the first
8 length of fiber, and a perturbation device configured to perturb one or both of the first
9 length of fiber and the optical beam. As yet another example, claim 16 of the '108
10 Publication recites a method including generating an optical beam in an optical beam
11 delivery device and launching the optical beam as an input beam into a fiber assembly,
12 wherein the fiber assembly comprises at least one beam shape-modifying confinement
13 region.

14 525. As set forth above, before the filing of the '234 Application or any
15 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
16 and interest in any contribution by him to the conception, development, and/or
17 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
18 length of fiber comprising a first RIP to enable modification of one or more beam
19 characteristics of an optical beam having a first beam shape, and a second length of
20 fiber comprising at least one beam-shaping confinement region and situated to receive
21 the optical beam from the first length of fiber, as claimed in the '108 Publication.

22 526. Accordingly, Lumentum is entitled to a declaration that any right, title,
23 and interest of Kliner in and to the '234 Application and the '108 Publication is owned
24 by Lumentum.

25 527. By purporting not to assign his right, title, and interest in the '234
26 Application and the '108 Publication to JDSU, and instead purporting to assign such
27 right, title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

1 528. As set forth above, before the filing of the '234 Application or any
2 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including a first
5 length of fiber comprising a first RIP to enable modification of one or more beam
6 characteristics of an optical beam having a first beam shape, and a second length of
7 fiber comprising at least one beam-shaping confinement region and situated to receive
8 the optical beam from the first length of fiber, as claimed in the '108 Publication.

9 529. Accordingly, Lumentum is entitled to a declaration that any right, title,
10 and interest of Farrow in and to the '234 Application and the '108 Publication is
11 owned by Lumentum.

12 530. By purporting not to assign his right, title, and interest in the '234
13 Application and the '108 Publication to JDSU, and instead purporting to assign such
14 right, title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

15 531. As set forth above, Muendel contributed in a significant manner to the
16 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
17 including a first length of fiber comprising a first RIP to enable modification of one or
18 more beam characteristics of an optical beam having a first beam shape, and a second
19 length of fiber comprising at least one beam-shaping confinement region and situated
20 to receive the optical beam from the first length of fiber, as claimed in the '108
21 Publication.

22 532. As set forth above, Muendel made contributions to the JDSU Adjustable
23 Beam Innovations as claimed in the '108 Publication that are not insignificant in
24 quality, when those contributions are measured against the dimension of the full
25 invention.

26 533. As set forth above, Muendel did more than merely explain to Kliner,
27 Farrow, or others well-known concepts and/or the current state of the art.

1 534. Accordingly, Lumentum is entitled to correction of the inventorship of
2 the '108 Publication to add Muendel as an inventor.

3 535. Accordingly, Lumentum is entitled to declaratory relief correcting the
4 inventorship of the '234 Application and the '108 Publication to add Muendel as an
5 inventor.

6 536. Lumentum is further entitled to declaratory relief that nLIGHT must take
7 all necessary actions to change the inventorship designation to add Muendel as an
8 inventor on any foreign patent applications corresponding to the '234 Application or
9 the '108 Publication.

10 **34. U.S. Publication No. 2020/0354261**

11 537. On May 20, 2020, nLIGHT filed U.S. Patent Application No.
12 16/879,533 (“the '533 Application”), listing Kliner and others as inventors. The '533
13 Application Published on November 12, 2020 as U.S. Publication No. 2020/0354261
14 (“the '261 Publication”), listing nLIGHT as the Assignee.

15 538. The '261 Publication is based on JDSU Adjustable Beam Innovations.
16 For example, the '261 Publication generally discloses in-fiber beam shaping using at
17 least two different lengths of fiber. The first length of fiber is perturbed to affect how
18 light in the second length of fiber is distributed within its various confinement regions.

19 539. The '261 Publication contains at least one claim reciting one or more
20 JDSU Adjustable Beam Innovations. For example, claim 1 of the '261 Publication
21 recites an apparatus with a first fiber situated to receive an input optical beam, the first
22 fiber having a first RIP, a bend controller situated to select a bend of at least a section
23 of the first fiber to perturb the input optical beam and produce a modified optical
24 beam, and a second fiber coupled to the first fiber and situated to receive the modified
25 optical beam, the second fiber having a second refractive index profile selected to
26 maintain at least one beam characteristic of the modified optical beam.

1 540. As set forth above, before the filing of the '533 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including an
5 apparatus with a first fiber situated to receive an input optical beam, the first fiber
6 having a first RIP, a bend controller situated to select a bend of at least a section of the
7 first fiber to perturb the input optical beam and produce a modified optical beam, and a
8 second fiber coupled to the first fiber and situated to receive the modified optical
9 beam, the second fiber having a second refractive index profile selected to maintain at
10 least one beam characteristic of the modified optical beam, as claimed in the '261
11 Publication.

12 541. Accordingly, Lumentum is entitled to a declaration that any right, title,
13 and interest of Kliner in and to the '533 Application and the '261 Publication is owned
14 by Lumentum.

15 542. By purporting not to assign his right, title, and interest in the '533
16 Application and the '261 Publication to JDSU, and instead purporting to assign such
17 right, title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

18 543. As set forth above, Muendel contributed in a significant manner to the
19 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
20 including an apparatus with a first fiber situated to receive an input optical beam, the
21 first fiber having a first RIP, a bend controller situated to select a bend of at least a
22 section of the first fiber to perturb the input optical beam and produce a modified
23 optical beam, and a second fiber coupled to the first fiber and situated to receive the
24 modified optical beam, the second fiber having a second refractive index profile
25 selected to maintain at least one beam characteristic of the modified optical beam, as
26 claimed in the '261 Publication.

1 544. As set forth above, Muendel made contributions to the JDSU Adjustable
2 Beam Innovations as claimed in the '261 Publication that are not insignificant in
3 quality, when those contributions are measured against the dimension of the full
4 invention.

5 545. As set forth above, Muendel did more than merely explain to Kliner,
6 Farrow, or others well-known concepts and/or the current state of the art.

7 546. Accordingly, Lumentum is entitled to declaratory relief correcting the
8 inventorship of the '533 Application and the '261 Publication to add Muendel as an
9 inventor.

10 547. Lumentum is further entitled to declaratory relief that nLIGHT must take
11 all necessary actions to change the inventorship designation to add Muendel as an
12 inventor on any foreign patent applications corresponding to the '533 Application or
13 the '261 Publication.

14 **35. U.S. Publication No. 2020/0333640**

15 548. On July 6, 2020, nLIGHT filed U.S. Patent Application No. 16/921,531
16 (“the '531 Application”), listing Kliner and Farrow as inventors. The '531 Application
17 Published on October 22, 2020 as U.S. Publication No. 2020/0333640 (“the '640
18 Publication”), listing nLIGHT as the Assignee.

19 549. The '640 Publication is based on JDSU Adjustable Beam Innovations.
20 For example, the '640 Publication generally discloses in-fiber beam shaping using at
21 least two different lengths of fiber. The first length of fiber is perturbed to affect how
22 light in the second length of fiber is distributed within its various confinement regions.

23 550. The '640 Publication contains at least one claim reciting one or more
24 JDSU Adjustable Beam Innovations. For example, claim 1 of the '640 Publication
25 recites a system with an optical fiber including a first length of optical fiber
26 comprising a first RIP formed to enable, at least in part, modification of one or more
27 beam characteristics of an optical beam by a perturbation assembly arranged to modify

1 the one or more beam characteristics, and a second length of fiber coupled to the first
2 length of optical fiber and having a second RIP formed to preserve at least a portion of
3 the one or more beam characteristics of the optical beam modified by the perturbation
4 assembly within two or more cores, wherein the first RIP and the second RIP are
5 different.

6 551. As set forth above, before the filing of the '531 Application or any
7 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
8 and interest in any contribution by him to the conception, development, and/or
9 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
10 fiber including a first length of optical fiber comprising a first RIP formed to enable, at
11 least in part, modification of one or more beam characteristics of an optical beam by a
12 perturbation assembly arranged to modify the one or more beam characteristics, and a
13 second length of fiber coupled to the first length of optical fiber and having a second
14 RIP formed to preserve at least a portion of the one or more beam characteristics of the
15 optical beam modified by the perturbation assembly within two or more cores, wherein
16 the first RIP and the second RIP are different, as claimed in the '640 Publication.

17 552. Accordingly, Lumentum is entitled to a declaration that any right, title,
18 and interest of Kliner in and to the '531 Application and the '640 Publication is owned
19 by Lumentum.

20 553. By purporting not to assign his right, title, and interest in the '531
21 Application and the '640 Publication to JDSU, and instead purporting to assign such
22 right, title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

23 554. As set forth above, before the filing of the '531 Application or any
24 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
25 and interest in any contribution by him to the conception, development, and/or
26 reduction to practice of the JDSU Adjustable Beam Innovations, including an optical
27 fiber including a first length of optical fiber comprising a first RIP formed to enable, at

1 least in part, modification of one or more beam characteristics of an optical beam by a
2 perturbation assembly arranged to modify the one or more beam characteristics, and a
3 second length of fiber coupled to the first length of optical fiber and having a second
4 RIP formed to preserve at least a portion of the one or more beam characteristics of the
5 optical beam modified by the perturbation assembly within two or more cores, wherein
6 the first RIP and the second RIP are different, as claimed in the '640 Publication.

7 555. Accordingly, Lumentum is entitled to a declaration that any right, title,
8 and interest of Farrow in and to the '531 Application and the '640 Publication is
9 owned by Lumentum.

10 556. By purporting not to assign his right, title, and interest in the '531
11 Application and the '640 Publication to JDSU, and instead purporting to assign such
12 right, title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

13 557. As set forth above, Muendel contributed in a significant manner to the
14 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
15 including an optical fiber including a first length of optical fiber comprising a first RIP
16 formed to enable, at least in part, modification of one or more beam characteristics of
17 an optical beam by a perturbation assembly arranged to modify the one or more beam
18 characteristics, and a second length of fiber coupled to the first length of optical fiber
19 and having a second RIP formed to preserve at least a portion of the one or more beam
20 characteristics of the optical beam modified by the perturbation assembly within two
21 or more cores, wherein the first RIP and the second RIP are different, as claimed in the
22 '640 Publication.

23 558. As set forth above, Muendel made contributions to the JDSU Adjustable
24 Beam Innovations as claimed in the '640 Publication that are not insignificant in
25 quality, when those contributions are measured against the dimension of the full
26 invention.

1 559. As set forth above, Muendel did more than merely explain to Klinier,
2 Farrow, or others well-known concepts and/or the current state of the art.

3 560. Accordingly, Lumentum is entitled to declaratory relief correcting the
4 inventorship of the '531 Application and the '640 Publication to add Muendel as an
5 inventor.

6 561. Lumentum is further entitled to declaratory relief that nLIGHT must take
7 all necessary actions to change the inventorship designation to add Muendel as an
8 inventor on any foreign patent applications corresponding to the '531 Application or
9 the '640 Publication.

10 **36. U.S. Publication No. 2021/0286200**

11 562. On December 18, 2020, nLIGHT filed U.S. Patent Application No.
12 17/127,746 (“the '746 Application”), listing Klinier, Farrow, and others as inventors.
13 The '746 Application Published on September 16, 2021 as U.S. Publication No.
14 2021/0286200 (“the '200 Publication”), listing nLIGHT as the Assignee.

15 563. The '200 Publication is based on JDSU Adjustable Beam Innovations.
16 For example, the '200 Publication generally discloses in-fiber beam shaping using at
17 least two different lengths of fiber. The first length of fiber is perturbed to affect how
18 light in the second length of fiber is distributed within its various confinement regions.

19 564. The '200 Publication contains at least one claim reciting one or more
20 JDSU Adjustable Beam Innovations. For example, claim 21 of the '200 Publication
21 recites a method including modifying one or more beam characteristics of an optical
22 beam launched into an optical fiber to generate a second output beam. As another
23 example, claim 31 of the '200 Publication recites an apparatus with a laser system and
24 a VBC fiber assembly to carry out the beam characteristics variations in-fiber, the
25 VBC fiber assembly to generate, from an optical beam provided thereto, an adjusted
26 beam having variable beam characteristics.

1 565. As set forth above, before the filing of the '746 Application or any
2 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
3 and interest in any contribution by him to the conception, development, and/or
4 reduction to practice of the JDSU Adjustable Beam Innovations, including modifying
5 one or more beam characteristics of an optical beam launched into an optical fiber to
6 generate a second output beam, as claimed in the '200 Publication.

7 566. Accordingly, Lumentum is entitled to a declaration that any right, title,
8 and interest of Kliner in and to the '746 Application and the '200 Publication is owned
9 by Lumentum.

10 567. By purporting not to assign his right, title, and interest in the '746
11 Application and the '200 Publication to JDSU, and instead purporting to assign such
12 right, title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

13 568. As set forth above, before the filing of the '746 Application or any
14 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
15 and interest in any contribution by him to the conception, development, and/or
16 reduction to practice of the JDSU Adjustable Beam Innovations, including modifying
17 one or more beam characteristics of an optical beam launched into an optical fiber to
18 generate a second output beam, as claimed in the '200 Publication.

19 569. Accordingly, Lumentum is entitled to a declaration that any right, title,
20 and interest of Farrow in and to the '746 Application and the '200 Publication is
21 owned by Lumentum.

22 570. By purporting not to assign his right, title, and interest in the '746
23 Application and the '200 Publication to JDSU, and instead purporting to assign such
24 right, title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

25 571. As set forth above, Muendel contributed in a significant manner to the
26 conception and reduction to practice of the JDSU Adjustable Beam Innovations,
27 including modifying one or more beam characteristics of an optical beam launched

1 into an optical fiber to generate a second output beam, as claimed in the '200
2 Publication.

3 572. As set forth above, Muendel made contributions to the JDSU Adjustable
4 Beam Innovations as claimed in the '200 Publication that are not insignificant in
5 quality, when those contributions are measured against the dimension of the full
6 invention.

7 573. As set forth above, Muendel did more than merely explain to Kliner,
8 Farrow, or others well-known concepts and/or the current state of the art.

9 574. Accordingly, Lumentum is entitled to declaratory relief correcting the
10 inventorship of the '746 Application and the '200 Publication to add Muendel as an
11 inventor.

12 575. Lumentum is further entitled to declaratory relief that nLIGHT must take
13 all necessary actions to change the inventorship designation to add Muendel as an
14 inventor on any foreign patent applications corresponding to the '746 Application or
15 the '200 Publication.

16 576. The '845, '015, '767, '391, '535, '220, '963, '330, '928, '742, '197,
17 '199, '427, '567, '241, '872, '6,440, '537, '342, '768, '769, '198, '984, '726, '487,
18 '348, '785, '439, '621, '834, and '2,440 Patents, and the '412, '108, '261, '640, and
19 '200 Publications, are collectively referred to herein as the “**nLIGHT Adjustable**
20 **Beam Patents.**”

21 577. The nLIGHT Adjustable Beam Patents all claim priority to provisional
22 application 62/401,650 (“the '650 Application”), filed on September 29, 2016.

23 578. In addition to the JDSU Adjustable Beam Innovations described above,
24 on information and belief, the nLIGHT Adjustable Beam Patents disclose and recite
25 other JDSU Company Innovations.

26 579. On information and belief, Kliner failed to disclose and describe to
27 JDSU all such Company Innovations, in violation of the Kliner EPIIA.

1 580. On information and belief, Farrow failed to disclose and describe to
2 JDSU all such Company Innovations, in violation of the Farrow EPIIA.

3 581. In addition to the JDSU Adjustable Beam Innovations described above,
4 on information and belief, the nLIGHT Adjustable Beam Patents disclose and recite
5 other JDSU Proprietary Information.

6 582. On information and belief, Kliner used and disclosed such Proprietary
7 Information during his employment with nLIGHT, in violation of the Kliner EPIIA.

8 583. On information and belief, Farrow used and disclosed such Proprietary
9 Information during his employment with nLIGHT, in violation of the Farrow EPIIA.

10 584. In addition to the JDSU Adjustable Beam Innovations described above,
11 on information and belief, the nLIGHT Adjustable Beam Patents disclose and recite
12 other Innovations conceived, reduced to practice, created, derived, developed, or made
13 by Kliner in whole or in part during the term of his employment and/or for three (3)
14 months thereafter.

15 585. On information and belief, Kliner failed to disclose promptly in writing
16 to JDSU all such Innovations, in violation of the Kliner EPIIA.

17 586. In addition to the JDSU Adjustable Beam Innovations described above,
18 on information and belief, the nLIGHT Adjustable Beam Patents disclose and recite
19 other Innovations conceived, reduced to practice, created, derived, developed, or made
20 by Farrow in whole or in part during the term of his employment and/or for three (3)
21 months thereafter.

22 587. On information and belief, Farrow failed to disclose promptly in writing
23 to JDSU all such Innovations, in violation of the Farrow EPIIA.

1 **I. Kliner’s and Farrow’s Improper Patenting of JDSU Triple-Clad Fiber**
2 **Innovations at nLIGHT**

3 588. Kliner and Farrow pursued, and/or assisted nLIGHT in pursuing,
4 numerous patent applications disclosing and claiming other Company Innovations,
5 including the JDSU Triple-Clad Fiber Innovations, as described below.

6 **1. U.S. Patent No. 9,837,783**

7 589. On January 22, 2016, nLIGHT filed U.S. Patent Application No.
8 15/004,680 (“the ’680 Application”), listing Kliner and Farrow as inventors. The ’680
9 Application issued on December 5, 2017 as U.S. Patent No. 9,837,783 (“the ’783
10 Patent”), listing nLIGHT as the Assignee.

11 590. The ’783 Patent is based on JDSU Triple-Clad Fiber Innovations. For
12 example, the ’783 Patent generally discloses a pump light source and a laser fiber
13 optically coupled to the pump source, the laser fiber having a core situated to produce
14 a single-mode output beam with power greater than 1kW, a polymer inner cladding
15 layer surrounding the core, an outer glass cladding layer surrounding the inner
16 cladding layer, a third cladding layer surrounding the outer cladding, and a way of
17 partitioning light from the pump light source within the separate cladding layers.

18 591. The ’783 Patent contains at least one claim reciting one or more JDSU
19 Triple-Clad Fiber Innovations. For example, claim 1 of the ’783 Patent recites an
20 apparatus with a gain fiber including an actively doped core, an inner cladding
21 surrounding the actively doped core, an outer cladding surrounding the inner cladding,
22 and a polymer cladding surrounding the outer cladding, wherein the gain fiber is
23 optically coupled to the one or more pump sources with a selected partitioning and
24 wherein the output beam is a single mode beam having an output beam power that is
25 greater than or equal to 1 kW. As another example, claim 16 of the ’783 Patent recites
26 a method including coupling pump light into a gain fiber of the high-power fiber
27 source having an active core, an inner cladding surrounding the active core, an outer

1 cladding surrounding the inner cladding, and a polymer cladding surrounding the outer
2 cladding, so as to selectively partition the pump light and wherein the output beam has
3 a power of 1 kW or greater and is single-mode.

4 592. As set forth above, before the filing of the '680 Application or any
5 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Triple-Clad Fiber Innovations, including an
8 apparatus with a gain fiber including an actively doped core, an inner cladding
9 surrounding the actively doped core, an outer cladding surrounding the inner cladding,
10 and a polymer cladding surrounding the outer cladding, wherein the gain fiber is
11 optically coupled to the one or more pump sources with a selected partitioning and
12 wherein the output beam is a single mode beam having an output beam power that is
13 greater than or equal to 1 kW, as claimed in the '783 Patent.

14 593. Accordingly, Lumentum is entitled to a declaration that any right, title,
15 and interest of Kliner in and to the '783 Patent is owned by Lumentum.

16 594. By purporting not to assign his right, title, and interest in the '680
17 Application and the '783 Patent to JDSU, and instead purporting to assign such right,
18 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

19 595. As set forth above, before the filing of the '680 Application or any
20 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
21 and interest in any contribution by him to the conception, development, and/or
22 reduction to practice of the JDSU Triple-Clad Fiber Innovations, including an
23 apparatus with a gain fiber including an actively doped core, an inner cladding
24 surrounding the actively doped core, an outer cladding surrounding the inner cladding,
25 and a polymer cladding surrounding the outer cladding, wherein the gain fiber is
26 optically coupled to the one or more pump sources with a selected partitioning and
27

1 wherein the output beam is a single mode beam having an output beam power that is
2 greater than or equal to 1 kW, as claimed in the '783 Patent.

3 596. Accordingly, Lumentum is entitled to a declaration that any right, title,
4 and interest of Farrow in and to the '783 Patent is owned by Lumentum.

5 597. By purporting not to assign his right, title, and interest in the '680
6 Application and the '783 Patent to JDSU, and instead purporting to assign such right,
7 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

8 598. As set forth above, Muendel contributed in a significant manner to the
9 conception and reduction to practice of the JDSU Triple-Clad Fiber Innovations,
10 including an apparatus with a gain fiber including an actively doped core, an inner
11 cladding surrounding the actively doped core, an outer cladding surrounding the inner
12 cladding, and a polymer cladding surrounding the outer cladding, wherein the gain
13 fiber is optically coupled to the one or more pump sources with a selected partitioning
14 and wherein the output beam is a single mode beam having an output beam power that
15 is greater than or equal to 1 kW, as claimed in the '783 Patent.

16 599. As set forth above, Muendel made contributions to the JDSU Triple-
17 Clad Fiber Innovations as claimed in the '783 Patent that are not insignificant in
18 quality, when those contributions are measured against the dimension of the full
19 invention.

20 600. As set forth above, Muendel did more than merely explain to Kliner,
21 Farrow, or others well-known concepts and/or the current state of the art.

22 601. As set forth above, Gries contributed in a significant manner to the
23 conception and reduction to practice of the JDSU Triple-Clad Fiber Innovations,
24 including an apparatus with a gain fiber including an actively doped core, an inner
25 cladding surrounding the actively doped core, an outer cladding surrounding the inner
26 cladding, and a polymer cladding surrounding the outer cladding, wherein the gain
27 fiber is optically coupled to the one or more pump sources with a selected partitioning

1 and wherein the output beam is a single mode beam having an output beam power that
2 is greater than or equal to 1 kW, as claimed in the '783 Patent.

3 602. As set forth above, Gries made contributions to the JDSU Triple-Clad
4 Fiber Innovations as claimed in the '783 Patent that are not insignificant in quality,
5 when those contributions are measured against the dimension of the full invention.

6 603. As set forth above, Gries did more than merely explain to Kliner,
7 Farrow, or others well-known concepts and/or the current state of the art.

8 604. Accordingly, Lumentum is entitled to correction of the inventorship of
9 the '783 Patent to add Muendel and Gries as inventors.

10 605. Lumentum is further entitled to a declaratory relief that nLIGHT must
11 take all necessary actions to change the inventorship designation to add Muendel and
12 Gries as inventors on any foreign patent applications corresponding to the '783 Patent.

13 **2. U.S. Patent No. 10,535,973**

14 606. On November 13, 2017, nLIGHT filed U.S. Patent Application No.
15 15/810,506 (“the '506 Application”), listing Kliner and Farrow as inventors. The '506
16 Application issued on January 14, 2020 as U.S. Patent No. 10,535,973 (“the '973
17 Patent”), listing nLIGHT as the Assignee.

18 607. The '973 Patent is based on JDSU Triple-Clad Fiber Innovations. For
19 example, the '973 Patent generally discloses a pump light source and a laser fiber
20 optically coupled to the pump source, the laser fiber having a core situated to produce
21 a single-mode output beam with power greater than 1kW, a polymer inner cladding
22 layer surrounding the core, an outer glass cladding layer surrounding the inner
23 cladding layer, a third cladding layer surrounding the outer cladding, and a way of
24 partitioning light from the pump light source within the separate cladding layers.

25 608. The '973 Patent contains at least one claim reciting one or more JDSU
26 Triple-Clad Fiber Innovations. For example, claim 1 of the '973 Patent recites an
27 apparatus with a gain fiber including an actively doped core, an inner cladding

1 surrounding the actively doped core, an outer cladding surrounding the inner cladding,
2 and a polymer cladding surrounding the outer cladding, wherein the gain fiber is
3 optically coupled to the one or more pump sources with a selected partitioning, and
4 wherein the partitioning of the pump light is selected and the gain fiber has a length
5 associated with the selected partition such that the output beam is a single mode beam
6 having an output beam power that is greater than or equal to 1 kW.

7 609. As set forth above, before the filing of the '506 Application or any
8 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
9 and interest in any contribution by him to the conception, development, and/or
10 reduction to practice of the JDSU Triple-Clad Fiber Innovations, including an
11 apparatus with a gain fiber including an actively doped core, an inner cladding
12 surrounding the actively doped core, an outer cladding surrounding the inner cladding,
13 and a polymer cladding surrounding the outer cladding, wherein the gain fiber is
14 optically coupled to the one or more pump sources with a selected partitioning, and
15 wherein the partitioning of the pump light is selected and the gain fiber has a length
16 associated with the selected partition such that the output beam is a single mode beam
17 having an output beam power that is greater than or equal to 1 kW, as claimed in the
18 '973 Patent.

19 610. Accordingly, Lumentum is entitled to a declaration that any right, title,
20 and interest of Kliner in and to the '973 Patent is owned by Lumentum.

21 611. By purporting not to assign his right, title, and interest in the '506
22 Application and the '973 Patent to JDSU, and instead purporting to assign such right,
23 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

24 612. As set forth above, before the filing of the '506 Application or any
25 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
26 and interest in any contribution by him to the conception, development, and/or
27 reduction to practice of the JDSU Triple-Clad Fiber Innovations, including an

1 apparatus with a gain fiber including an actively doped core, an inner cladding
2 surrounding the actively doped core, an outer cladding surrounding the inner cladding,
3 and a polymer cladding surrounding the outer cladding, wherein the gain fiber is
4 optically coupled to the one or more pump sources with a selected partitioning, and
5 wherein the partitioning of the pump light is selected and the gain fiber has a length
6 associated with the selected partition such that the output beam is a single mode beam
7 having an output beam power that is greater than or equal to 1 kW, as claimed in the
8 '973 Patent.

9 613. Accordingly, Lumentum is entitled to a declaration that any right, title,
10 and interest of Farrow in and to the '973 Patent is owned by Lumentum.

11 614. By purporting not to assign his right, title, and interest in the '506
12 Application and the '973 Patent to JDSU, and instead purporting to assign such right,
13 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

14 615. As set forth above, Muendel contributed in a significant manner to the
15 conception and reduction to practice of the JDSU Triple-Clad Fiber Innovations,
16 including an apparatus with a gain fiber including an actively doped core, an inner
17 cladding surrounding the actively doped core, an outer cladding surrounding the inner
18 cladding, and a polymer cladding surrounding the outer cladding, wherein the gain
19 fiber is optically coupled to the one or more pump sources with a selected partitioning,
20 and wherein the partitioning of the pump light is selected and the gain fiber has a
21 length associated with the selected partition such that the output beam is a single mode
22 beam having an output beam power that is greater than or equal to 1 kW, as claimed in
23 the '973 Patent.

24 616. As set forth above, Muendel made contributions to the JDSU Triple-
25 Clad Fiber Innovations as claimed in the '973 Patent that are not insignificant in
26 quality, when those contributions are measured against the dimension of the full
27 invention.

1 617. As set forth above, Muendel did more than merely explain to Kliner,
2 Farrow, or others well-known concepts and/or the current state of the art.

3 618. As set forth above, Gries contributed in a significant manner to the
4 conception and reduction to practice of the JDSU Triple-Clad Fiber Innovations,
5 including an apparatus with a gain fiber including an actively doped core, an inner
6 cladding surrounding the actively doped core, an outer cladding surrounding the inner
7 cladding, and a polymer cladding surrounding the outer cladding, wherein the gain
8 fiber is optically coupled to the one or more pump sources with a selected partitioning,
9 and wherein the partitioning of the pump light is selected and the gain fiber has a
10 length associated with the selected partition such that the output beam is a single mode
11 beam having an output beam power that is greater than or equal to 1 kW, as claimed in
12 the '973 Patent.

13 619. As set forth above, Gries made contributions to the JDSU Triple-Clad
14 Fiber Innovations as claimed in the '973 Patent that are not insignificant in quality,
15 when those contributions are measured against the dimension of the full invention.

16 620. As set forth above, Gries did more than merely explain to Kliner,
17 Farrow, or others well-known concepts and/or the current state of the art.

18 621. Accordingly, Lumentum is entitled to correction of the inventorship of
19 the '973 Patent to add Muendel and Gries as inventors.

20 622. Lumentum is further entitled to a declaratory relief that nLIGHT must
21 take all necessary actions to change the inventorship designation to add Muendel and
22 Gries as inventors on any foreign patent applications corresponding to the '973 Patent.

23 **3. U.S. Patent No. 10,916,908**

24 623. On December 11, 2019, nLIGHT filed U.S. Patent Application No.
25 16/711,174 (“the '174 Application”), listing Kliner and Farrow as inventors. The '174
26 Application issued on February 9, 2021 as U.S. Patent No. 10,916,908 (“the '908
27 Patent”), listing nLIGHT as the Assignee.

1 624. The '908 Patent is based on JDSU Triple-Clad Fiber Innovations. For
2 example, the '908 Patent generally discloses a pump light source and a laser fiber
3 optically coupled to the pump source, the laser fiber having a core situated to produce
4 a single-mode output beam with power greater than 1kW, a polymer inner cladding
5 layer surrounding the core, an outer glass cladding layer surrounding the inner
6 cladding layer, a third cladding layer surrounding the outer cladding, and a way of
7 partitioning light from the pump light source within the separate cladding layers.

8 625. The '908 Patent contains at least one claim reciting one or more JDSU
9 Triple-Clad Fiber Innovations. For example, claim 1 of the '908 Patent recites a
10 method including coupling a pump light into a glass inner cladding surrounding an
11 actively doped core and a glass outer cladding surrounding the glass inner cladding of
12 a gain fiber such that a portion of the pump light is guided by a polymer cladding
13 surrounding the glass outer cladding, wherein the method includes an output power of
14 1 kW or greater and generating a single-mode output beam from the gain fiber.

15 626. As set forth above, before the filing of the '174 Application or any
16 application to which it claims priority, Kliner assigned to JDSU all of his right, title,
17 and interest in any contribution by him to the conception, development, and/or
18 reduction to practice of the JDSU Triple-Clad Fiber Innovations, including coupling a
19 pump light into a glass inner cladding surrounding an actively doped core and a glass
20 outer cladding surrounding the glass inner cladding of a gain fiber such that a portion
21 of the pump light is guided by a polymer cladding surrounding the glass outer
22 cladding, wherein the method includes an output power of 1 kW or greater and
23 generating a single-mode output beam from the gain fiber, as claimed in the '908
24 Patent.

25 627. Accordingly, Lumentum is entitled to a declaration that any right, title,
26 and interest of Kliner in and to the '908 Patent is owned by Lumentum.

1 628. By purporting not to assign his right, title, and interest in the '174
2 Application and the '908 Patent to JDSU, and instead purporting to assign such right,
3 title, and interest to nLIGHT, Kliner breached the Kliner EPIIA.

4 629. As set forth above, before the filing of the '174 Application or any
5 application to which it claims priority, Farrow assigned to JDSU all of his right, title,
6 and interest in any contribution by him to the conception, development, and/or
7 reduction to practice of the JDSU Triple-Clad Fiber Innovations, including coupling a
8 pump light into a glass inner cladding surrounding an actively doped core and a glass
9 outer cladding surrounding the glass inner cladding of a gain fiber such that a portion
10 of the pump light is guided by a polymer cladding surrounding the glass outer
11 cladding, wherein the method includes an output power of 1 kW or greater and
12 generating a single-mode output beam from the gain fiber, as claimed in the '908
13 Patent.

14 630. Accordingly, Lumentum is entitled to a declaration that any right, title,
15 and interest of Farrow in and to the '908 Patent is owned by Lumentum.

16 631. By purporting not to assign his right, title, and interest in the '174
17 Application and the '908 Patent to JDSU, and instead purporting to assign such right,
18 title, and interest to nLIGHT, Farrow breached the Farrow EPIIA.

19 632. As set forth above, Muendel contributed in a significant manner to the
20 conception and reduction to practice of the JDSU Triple-Clad Fiber Innovations,
21 including coupling a pump light into a glass inner cladding surrounding an actively
22 doped core and a glass outer cladding surrounding the glass inner cladding of a gain
23 fiber such that a portion of the pump light is guided by a polymer cladding
24 surrounding the glass outer cladding, wherein the method includes an output power of
25 1 kW or greater and generating a single-mode output beam from the gain fiber, as
26 claimed in the '908 Patent.

1 633. As set forth above, Muendel made contributions to the JDSU Triple-
2 Clad Fiber Innovations as claimed in the '908 Patent that are not insignificant in
3 quality, when those contributions are measured against the dimension of the full
4 invention.

5 634. As set forth above, Muendel did more than merely explain to Kliner,
6 Farrow, or others well-known concepts and/or the current state of the art.

7 635. As set forth above, Gries contributed in a significant manner to the
8 conception and reduction to practice of the JDSU Triple-Clad Fiber Innovations,
9 including coupling a pump light into a glass inner cladding surrounding an actively
10 doped core and a glass outer cladding surrounding the glass inner cladding of a gain
11 fiber such that a portion of the pump light is guided by a polymer cladding
12 surrounding the glass outer cladding, wherein the method includes an output power of
13 1 kW or greater and generating a single-mode output beam from the gain fiber, as
14 claimed in the '908 Patent.

15 636. As set forth above, Gries made contributions to the JDSU Triple-Clad
16 Fiber Innovations as claimed in the '908 Patent that are not insignificant in quality,
17 when those contributions are measured against the dimension of the full invention.

18 637. As set forth above, Gries did more than merely explain to Kliner,
19 Farrow, or others well-known concepts and/or the current state of the art.

20 638. Accordingly, Lumentum is entitled to correction of the inventorship of
21 the '908 Patent to add Muendel and Gries as inventors.

22 639. Lumentum is further entitled to a declaratory relief that nLIGHT must
23 take all necessary actions to change the inventorship designation to add Muendel and
24 Gries as inventors on any foreign patent applications corresponding to the '908 Patent.

25 640. The '783, '973, '908 Patents are collectively referred to herein as the
26 **“nLIGHT Triple-Clad Fiber Patents.”**

1 641. The nLIGHT Triple-Clad Fiber Patents all claim priority to provisional
2 application 62/108,015 (“the ’015 Application”), filed on January 26, 2015.

3 642. In addition to the JDSU Triple-Clad Fiber Innovations described above,
4 on information and belief, the nLIGHT Triple-Clad Fiber Patents disclose and recite
5 other JDSU Company Innovations.

6 643. On information and belief, Kliner failed to disclose and describe to
7 JDSU all such Company Innovations, in violation of the Kliner EPIIA.

8 644. On information and belief, Farrow failed to disclose and describe to
9 JDSU all such Company Innovations, in violation of the Farrow EPIIA.

10 645. In addition to the JDSU Triple-Clad Fiber Innovations described above,
11 on information and belief, the nLIGHT Triple-Clad Fiber Patents disclose and recite
12 other JDSU Proprietary Information.

13 646. On information and belief, Kliner used and disclosed such Proprietary
14 Information during his employment with nLIGHT, in violation of the Kliner EPIIA.

15 647. On information and belief, Farrow used and disclosed such Proprietary
16 Information during his employment with nLIGHT, in violation of the Farrow EPIIA.

17 648. In addition to the JDSU Triple-Clad Fiber Innovations described above,
18 on information and belief, the nLIGHT Triple-Clad Fiber Patents disclose and recite
19 other Innovations conceived, reduced to practice, created, derived, developed, or made
20 by Kliner in whole or in part during the term of his employment and/or for three (3)
21 months thereafter.

22 649. On information and belief, Kliner failed to disclose promptly in writing
23 to JDSU all such Innovations, in violation of the Kliner EPIIA.

24 650. In addition to the JDSU Triple-Clad Fiber Innovations described above,
25 on information and belief, the nLIGHT Triple-Clad Fiber Patents disclose and recite
26 other Innovations conceived, reduced to practice, created, derived, developed, or made
27

1 by Farrow in whole or in part during the term of his employment and/or for three (3)
2 months thereafter.

3 651. On information and belief, Farrow failed to disclose promptly in writing
4 to JDSU all such Innovations, in violation of the Farrow EPIIA.

5 **COUNT I**

6 **Correction of Inventorship (Against all Defendants)**

7 652. Lumentum realleges and incorporates by reference paragraphs 1-651 of
8 the Complaint as if fully set forth herein.

9 653. Muendel contributed in a significant manner to the conception and
10 reduction to practice of each of the nLIGHT Adjustable Beam Patents.

11 654. Muendel made contributions to each of the nLIGHT Adjustable Beam
12 Patents that are not insignificant in quality, when those contributions are measured
13 against the dimension of the full invention.

14 655. In contributing to the conception and reduction to practice of each of the
15 nLIGHT Adjustable Beam Patents, Muendel did more than merely explain to Kliner,
16 Farrow, or others well-known concepts and/or the current state of the art.

17 656. Through error, Muendel was not named as an inventor on the nLIGHT
18 Adjustable Beam Patents.

19 657. Muendel contributed in a significant manner to the conception and
20 reduction to practice of each of the nLIGHT Triple-Clad Fiber Patents.

21 658. Muendel made contributions to each of the nLIGHT Triple-Clad Fiber
22 Patents that are not insignificant in quality, when those contributions are measured
23 against the dimension of the full invention.

24 659. In contributing to the conception and reduction to practice of each of the
25 nLIGHT Triple-Clad Fiber Patents, Muendel did more than merely explain to Kliner,
26 Farrow, or others well-known concepts and/or the current state of the art.

1 660. Through error, Muendel was not named as an inventor on the nLIGHT
2 Triple-Clad Fiber Patents.

3 661. Muendel has assigned to Lumentum his entire rights to the JDSU
4 Adjustable Beam Innovations and JDSU Triple-Clad Fiber Innovations.

5 662. Gries contributed in a significant manner to the conception and reduction
6 to practice of each of the nLIGHT Triple-Clad Fiber Patents.

7 663. Gries made contributions to each of the nLIGHT Triple-Clad Fiber
8 Patents that are not insignificant in quality, when those contributions are measured
9 against the dimension of the full invention.

10 664. In contributing to the conception and reduction to practice of each of the
11 nLIGHT Triple-Clad Fiber Patents, Gries did more than merely explain to Kliner,
12 Farrow, or others well-known concepts and/or the current state of the art.

13 665. Through error, Gries was not named as an inventor on the nLIGHT
14 Triple-Clad Fiber Patents.

15 666. Gries has assigned to Lumentum his entire rights to the JDSU Triple-
16 Clad Fiber Innovations.

17 667. Lumentum is entitled to correction of inventorship of the '845, '015,
18 '767, '391, '535, '220, '963, '330, '928, '742, '197, '199, '427, '567, '241, '872,
19 '6,440, '537, '342, '768, '769, '198, '984, '726, '487, '348, '785, '439, '621, '834, and
20 '2,440 Patents, and any other patents claiming priority to the '650 Application, by
21 adding Muendel as an inventor on these patents.

22 668. Lumentum further is entitled to declaratory relief that nLIGHT must take
23 all necessary actions to change the inventorship designation to add Muendel as an
24 inventor on the '412, '108, '261, '640, and '200 Publications and on any patent
25 applications corresponding thereto.

26 669. Lumentum further is entitled to declaratory relief that nLIGHT must take
27 all necessary actions to change the inventorship designation to add Muendel as an

1 inventor on any foreign patent applications corresponding to the nLIGHT Adjustable
2 Beam Patents.

3 670. Lumentum is entitled to correction of inventorship of the '783, '973, and
4 '908 Patents, and any other patents claiming priority to the '015 Application, by
5 adding Muendel and Gries as inventors on these patents.

6 671. Lumentum further is entitled to declaratory relief that nLIGHT must take
7 all necessary actions to change the inventorship designation to add Muendel and Gries
8 as inventors on any foreign patent applications corresponding to the nLIGHT
9 Adjustable Beam Patents.

10 **COUNT II**

11 **Declaration of Patent Ownership (Against all Defendants)**

12 672. Lumentum realleges and incorporates by reference paragraphs 1-671 of
13 the Complaint as if fully set forth herein.

14 673. On information and belief, Kliner has purported to assign all of his right,
15 title, and interest in and to the nLIGHT Adjustable Beam Patents and the nLIGHT
16 Triple-Clad Fiber Patents to nLIGHT.

17 674. On information and belief, Farrow has purported to assign all of his
18 right, title, and interest in and to the nLIGHT Adjustable Beam Patents and the
19 nLIGHT Triple-Clad Fiber Patents to nLIGHT.

20 675. All of the nLIGHT Adjustable Beam Patents and the nLIGHT Triple-
21 Clad Fiber Patents state on their face that they are assigned to nLIGHT.

22 676. Accordingly, on information and belief, nLIGHT purports to be the sole
23 owner of the nLIGHT Adjustable Beam Patents and the nLIGHT Triple-Clad Fiber
24 Patents.

25 677. Under the Kliner EPIIA, Kliner assigned to JDSU all of his right, title,
26 and interest in any contribution by him to the conception, development, and/or
27 reduction to practice of the JDSU Adjustable Beam Innovations.

1 678. Under the Farrow EPIIA, Farrow assigned to JDSU all of his right, title,
2 and interest in any contribution by him to the conception, development, and/or
3 reduction to practice of the JDSU Adjustable Beam Innovations.

4 679. Each of the nLIGHT Adjustable Beam Patents is based on one or more
5 JDSU Adjustable Beam Innovations.

6 680. Each of the nLIGHT Adjustable Beam Patents contains at least one
7 claim reciting one or more JDSU Adjustable Beam Innovations.

8 681. Under the Kliner EPIIA, Kliner assigned to JDSU all of his right, title,
9 and interest in any contribution by him to the conception, development, and/or
10 reduction to practice of the JDSU Triple-Clad Fiber Innovations.

11 682. Under the Farrow EPIIA, Farrow assigned to JDSU all of his right, title,
12 and interest in any contribution by him to the conception, development, and/or
13 reduction to practice of the JDSU Triple-Clad Fiber Innovations.

14 683. Each of the nLIGHT Triple-Clad Fiber Patents is based on one or more
15 JDSU Triple-Clad Fiber Innovations.

16 684. Each of the nLIGHT Triple-Clad Fiber Patents contains at least one
17 claim reciting one or more JDSU Triple-Clad Fiber Innovations.

18 685. Lumentum is the successor-in-interest of JDSU's rights under the Kliner
19 EPIIA and the Farrow EPIIA.

20 686. Muendel made inventive contributions to the nLIGHT Adjustable Beam
21 Patents and should be added as an inventor on those patents.

22 687. Muendel made inventive contributions to the nLIGHT Triple-Clad Fiber
23 Patents and should be added as an inventor on those patents.

24 688. Muendel has assigned to Lumentum his entire rights to the JDSU
25 Adjustable Beam Innovations and JDSU Triple-Clad Fiber Innovations.

26 689. Gries made inventive contributions to the nLIGHT Triple-Clad Fiber
27 Patents and should be added as an inventor on those patents.

1 690. Gries has assigned to Lumentum his entire rights to the JDSU Triple-
2 Clad Fiber Innovations.

3 691. By virtue of Kliner's, Farrow's, and Muendel's assignments, Lumentum
4 has sole or partial ownership of each of the nLIGHT Adjustable Beam Patents.

5 692. By virtue of Kliner's, Farrow's, Muendel's, and Gries's assignments,
6 Lumentum has sole or partial ownership of each of the nLIGHT Triple-Clad Fiber
7 Patents.

8 693. A controversy therefore exists between nLIGHT, Kliner, and Farrow, on
9 the one hand, and Lumentum, on the other, regarding ownership of the nLIGHT
10 Adjustable Beam Patents and nLIGHT Triple-Clad Fiber Patents.

11 694. Lumentum is entitled to a declaration that it is the sole or partial owner
12 of each of the '845, '015, '767, '391, '535, '220, '963, '330, '928, '742, '197, '199,
13 '427, '567, '241, '872, '6,440, '537, '342, '768, '769, '198, '984, '726, '487, '348,
14 '785, '439, '621, '834, and '2,440 Patents and any other patents claiming priority to
15 the '650 Application, and any foreign equivalents thereto.

16 695. Lumentum is entitled to a declaration that it is the sole or partial owner
17 of each of the '412, '108, '261, '640, and '200 Publications and the inventions claimed
18 in any patent applications and foreign equivalents corresponding thereto.

19 696. Lumentum is entitled to a declaration that it is the sole or partial owner
20 of each of the nLIGHT Triple-Clad Fiber Patents and any other patents claiming
21 priority to the '015 Application, and any foreign equivalents thereto.

22 697. Lumentum further is entitled to declaratory relief that nLIGHT must take
23 all necessary actions to change the inventorship designation to add Muendel as an
24 inventor on the '412, '108, '261, '640, and '200 Publications and on any patent
25 applications corresponding thereto.

26 698. Lumentum further is entitled to declaratory relief that nLIGHT must take
27 all necessary actions to change the inventorship designation to add Muendel as an

1 inventor on any foreign patent applications corresponding to the nLIGHT Adjustable
2 Beam Patents.

3 699. Lumentum further is entitled to declaratory relief that nLIGHT must take
4 all necessary actions to change the inventorship designation to add Muendel and Gries
5 as inventors on any foreign patent applications corresponding to the nLIGHT Triple-
6 Clad Fiber Patents.

7 700. Lumentum further is entitled to declaratory relief that nLIGHT must take
8 all necessary actions to effectuate Lumentum's ownership interests as set forth above.

9 **COUNT III**

10 **Breach of Contract (Against Kliner)**

11 701. Lumentum realleges and incorporates by reference paragraphs 1-700 of
12 the Complaint as if fully set forth herein.

13 702. In April 2008, JDSU and Kliner entered into the Kliner EPIIA, which is
14 a valid and enforceable contract.

15 703. Lumentum is the successor-in-interest of JDSU's rights under the Kliner
16 EPIIA.

17 704. JDSU and Lumentum have, at all times, performed their obligations
18 under the Kliner EPIIA.

19 705. Kliner breached the Kliner EPIIA by disclosing Proprietary Information
20 to individuals outside of JDSU in connection with his employment at nLIGHT. This
21 includes disclosure in connection with the development of fiber laser products at
22 nLIGHT and the filing of patent applications purportedly assigned to nLIGHT,
23 including the applications that issued as the nLIGHT Adjustable Beam Patents and
24 nLIGHT Triple-Clad Fiber Patents.

25 706. Kliner further breached the Kliner EPIIA by failing to disclose and
26 describe to JDSU all Company Innovations.

1 707. Kliner further breached the Kliner EPIIA by purporting not to assign to
2 JDSU all of his right, title, and interest in and to any and all Company Innovations.

3 708. Kliner further breached the Kliner EPIIA by failing to disclose promptly
4 in writing to JDSU all Innovations conceived, reduced to practice, created, derived,
5 developed, or made by him in whole or in part during the term of his employment and
6 for three (3) months thereafter.

7 709. Kliner further breached the Kliner EPIIA by failing to perform all acts
8 necessary to permit and assist JDSU and/or Lumentum in obtaining and enforcing the
9 full benefits, enjoyment, rights and title in and to the JDSU Adjustable Beam
10 Innovations, including without limitation by failing to assign the nLIGHT Adjustable
11 Beam Patents to Lumentum.

12 710. Kliner further breached the Kliner EPIIA by failing to perform all acts
13 necessary to permit and assist JDSU and/or Lumentum in obtaining and enforcing the
14 full benefits, enjoyment, rights and title in and to the JDSU Triple-Clad Fiber
15 Innovations, including without limitation by failing to assign the nLIGHT Triple-Clad
16 Fiber Patents to Lumentum.

17 711. Kliner further breached the Kliner EPIIA by soliciting or encouraging
18 Farrow to terminate his employment with, diminish his relationship with, and/or cease
19 providing services to JDSU.

20 712. Under the Kliner EPIIA, Lumentum is entitled to injunctive relief and/or
21 a decree of specific performance, including without limitation an order compelling
22 Kliner to take all actions necessary to assign all of his right, title, and interest in and to
23 the nLIGHT Adjustable Beam Patents and the nLIGHT Triple-Clad Fiber Patents to
24 Lumentum.

25 713. As a result of Kliner's breaches of the Kliner EPIIA, Kliner and nLIGHT
26 have been unjustly enriched, including by claiming to own patent rights relating to the
27 JDSU Adjustable Beam Innovations and JDSU Triple-Clad Fiber Innovations.

1 714. As a result of Kliner's breaches of the Kliner EPIIA, Lumentum has
2 suffered and continues to suffer damages in an amount to be proven at trial.

3 715. Kliner's breaches of the Kliner EPIIA were and are a substantial factor
4 in causing Lumentum's damages.

5 **COUNT IV**

6 **Breach of Contract (Against Farrow)**

7 716. Lumentum realleges and incorporates by reference paragraphs 1-715 of
8 the Complaint as if fully set forth herein.

9 717. In April 2008, JDSU and Farrow entered into the Farrow EPIIA, which
10 is a valid and enforceable contract.

11 718. Lumentum is the successor-in-interest of JDSU's rights under the
12 Farrow EPIIA.

13 719. JDSU and Lumentum have, at all times, performed their obligations
14 under the Farrow EPIIA.

15 720. Farrow breached the Farrow EPIIA by disclosing Proprietary
16 Information to individuals outside of JDSU in connection with his employment at
17 nLIGHT. This includes disclosure in connection with the development of fiber laser
18 products at nLIGHT and the filing of patent applications purportedly assigned to
19 nLIGHT, including the applications that issued as the nLIGHT Adjustable Beam
20 Patents and nLIGHT Triple-Clad Fiber Patents.

21 721. Farrow further breached the Farrow EPIIA by failing to disclose and
22 describe to JDSU all Company Innovations.

23 722. Farrow further breached the Farrow EPIIA by purporting not to assign to
24 JDSU all of his right, title, and interest in and to any and all Company Innovations.

25 723. Farrow further breached the Farrow EPIIA by failing to disclose
26 promptly in writing to JDSU all Innovations conceived, reduced to practice, created,
27

1 derived, developed, or made by him in whole or in part during the term of his
2 employment and for three (3) months thereafter.

3 724. Farrow further breached the Farrow EPIIA by failing to perform all acts
4 necessary to permit and assist JDSU and/or Lumentum in obtaining and enforcing the
5 full benefits, enjoyment, rights and title in and to the JDSU Adjustable Beam
6 Innovations, including without limitation by failing to assign the nLIGHT Adjustable
7 Beam Patents to Lumentum.

8 725. Farrow further breached the Farrow EPIIA by failing to perform all acts
9 necessary to permit and assist JDSU and/or Lumentum in obtaining and enforcing the
10 full benefits, enjoyment, rights and title in and to the JDSU Triple-Clad Fiber
11 Innovations, including without limitation by failing to assign the nLIGHT Triple-Clad
12 Fiber Patents to Lumentum.

13 726. Under the Farrow EPIIA, Lumentum is entitled to injunctive relief
14 and/or a decree of specific performance, including without limitation an order
15 compelling Farrow to take all actions necessary to assign all of his right, title, and
16 interest in and to the nLIGHT Adjustable Beam Patents and the nLIGHT Triple-Clad
17 Fiber Patents to Lumentum.

18 727. As a result of Farrow's breaches of the Farrow EPIIA, Farrow and
19 nLIGHT have been unjustly enriched, including by claiming to own patent rights
20 relating to the JDSU Adjustable Beam Innovations and JDSU Triple-Clad Fiber
21 Innovations.

22 728. As a result of Farrow's breaches of the Farrow EPIIA, Lumentum has
23 suffered and continues to suffer damages in an amount to be proven at trial.

24 729. Farrow's breaches of the Farrow EPIIA were and are a substantial factor
25 in causing Lumentum's damages.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Lumentum demands a trial by jury of all issues so triable.

WHEREFORE, PLAINTIFF PRAYS that this Court grant it judgment as follows:

A. Correction of inventorship of the '845, '015, '767, '391, '535, '220, '963, '330, '928, '742, '197, '199, '427, '567, '241, '872, '6,440, '537, '342, '768, '769, '198, '984, '726, '487, '348, '785, '439, '621, '834, and '2,440 Patents, and any other patents claiming priority to the '650 Application, to add Martin Muendel as an inventor;

B. Correction of inventorship of the '783, '973, and '908 Patents, and any other patents claiming priority to the '015 Application, to add Martin Muendel and Wolfgang Gries as inventors;

C. A declaration that nLIGHT must take all necessary actions to change the inventorship designation to add Muendel as an inventor on any foreign patent applications corresponding to the nLIGHT Adjustable Beam Patents;

D. A declaration that nLIGHT must take all necessary actions to change the inventorship designation to add Muendel and Gries as inventors on any foreign patent applications corresponding to the nLIGHT Triple-Clad Fiber Patents;

E. A declaration that Lumentum is the sole or partial owner of each of the '845, '015, '767, '391, '535, '220, '963, '330, '928, '742, '197, '199, '427, '567, '241, '872, '6,440, '537, '342, '768, '769, '198, '984, '726, '487, '348, '785, '439, '621, '834, and '2,440 Patents and any other patents claiming priority to the '650 Application, and any foreign equivalents;

1 F. A declaration that Lumentum is the sole or partial owner of each of the
2 '412, '108, '261, '640, and '200 Publications and the inventions claimed in any patent
3 applications and foreign equivalents corresponding thereto;

4 G. A declaration that Lumentum is the sole or partial owner of each of the
5 nLIGHT Triple-Clad Fiber Patents and any other patents claiming priority to the '015
6 Application, and any foreign equivalents;

7 H. An order that nLIGHT must take all necessary actions to effectuate
8 Lumentum's ownership interests as set forth above;

9 I. Judgment against Kliner for breach of the Kliner EPIIA, resulting
10 damages, injunctive relief, and specific performance, including the assignment of
11 Kliner's right, title, and interest in and to the nLIGHT Adjustable Beam Patents and
12 nLIGHT Triple-Clad Fiber Patents to Lumentum;

13 J. Judgment against Farrow for breach of the Farrow EPIIA, resulting
14 damages, injunctive relief, and specific performance, including the assignment of
15 Farrow's right, title, and interest in and to the nLIGHT Adjustable Beam Patents and
16 nLIGHT Triple-Clad Fiber Patents to Lumentum;

17 K. Pre- and post-judgment interest;

18 L. Reasonable attorneys' fees and costs; and

19 M. Such other and further relief as this Court deems just and proper.

20 DATED this 25th day of March, 2022.

21 CORR|DOWNS PLLC

22
23 By *s/ Gretchen J. Hoog*

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***Attorneys for Plaintiff Lumentum Operations
LLC***

EXHIBIT A

FOR USE IN NORTH AMERICA

JDS UNIPHASE CORPORATION
430 North McCarthy Blvd.
Milpitas, CA 95035

EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

This Employee Proprietary Information and Inventions Agreement ("Agreement") sets forth in writing certain understandings and procedures in effect as of the date of my initial employment with JDS Uniphase Corporation ("Company").

1. Duties. In return for the compensation now and hereafter paid to me, I will perform such duties for Company as the Company may designate from time to time. During my employment with Company, I will devote my best efforts to the interests of Company and its affiliates and subsidiaries ("Company Group"), will not engage in other employment or in any conduct in direct conflict with Company Group's interests that would cause a material and substantial disruption to Company Group, and will otherwise abide by all of Company's policies and procedures. Furthermore, I will not (a) reveal, disclose or otherwise make available to any person any Company Group password or key, whether or not the password or key is assigned to me or (b) obtain, possess or use in any manner a Company Group password or key that is not assigned to me. I will use my best efforts to prevent the unauthorized use of any laptop or personal computer, peripheral device, software or related technical documentation that the Company Group issues to me, and I will not input, load or otherwise attempt any unauthorized use of software in any Company Group computer, whether or not such computer is assigned to me.

2. "Proprietary Information" Definition. "Proprietary Information" includes (a) any technical or non-technical information that is confidential or proprietary, technical or non-technical information of Company Group, including for example and without limitation, information related to Innovations (as defined in Section 4 below), concepts, techniques, processes, methods, know-how, systems, access codes, designs, computer programs, source documentation, trade secrets (whether tangible or intangible, and whether or how stored, compiled or memorialized physically, electronically, graphically, photographically or in writing), formulas, development or experimental work, work in progress, forecasts, proposed and future products, marketing plans, business plans, customers, suppliers and prospective customer databases and any other nonpublic information that has commercial value and (b) any information Company Group has received from others that Company Group is obligated to treat as confidential or proprietary, which may be made known to me by Company Group, a third party or otherwise that I may learn during my employment with Company.

3. Ownership and Nondisclosure of Proprietary Information. All Proprietary Information is the sole property of Company Group, Company Group's assigns, Company Group's customers and Company Group's suppliers, as applicable. Company Group, Company Group's assigns, Company Group's customers and Company Group's suppliers, as applicable, are the sole and exclusive owners of all of the following worldwide patents (including, but not limited to, any and all patent applications, patents, continuations, continuation-in-parts, reissues, divisionals, substitutions and extensions), copyrights, mask works, trade secrets, trademarks, trade dress, service marks, and other rights in and to the Proprietary Information. During and after my employment with Company Group, I will not disclose any Proprietary Information to anyone outside Company Group, and I will use and disclose Proprietary Information to those inside Company Group only as may be necessary in the ordinary course of performing my duties as an employee of Company. I will (i) maintain at my work area such Proprietary Information that I have a current "need to know"; (ii) not remove such Proprietary Information from the Company Group's premises without approval from my Company manager; and (iii) return the Proprietary Information to the appropriate person or location or otherwise dispose of it once my need to know no longer exists. If I have any questions as to whether information constitutes Proprietary Information, or to whom, if anyone, inside Company Group, any Proprietary Information may be disclosed, I will consult with my manager at Company.

4. "Innovations" Definition. In this Agreement, "Innovations" means all discoveries, designs, developments, improvements, inventions (whether or not protectable under patent laws), works of authorship, information fixed in any tangible medium of expression (whether or not protectable under copyright laws), trade

FOR USE IN NORTH AMERICA

secrets, know-how, ideas (whether or not protectable under trade secret laws), mask works, trademarks, service marks, trade names, and trade dress.

5. Disclosure and License of Prior Innovations. I have listed on Exhibit A attached hereto all Innovations relating in any way to Company Group's business or demonstrably anticipated research and development or business, which were conceived, reduced to practice, created, derived, developed, or made by me prior to my employment with Company (collectively, the "Prior Innovations"). I represent that I have no rights in any Company Innovations (as defined herein) or Innovations otherwise related to the Company Group other than those Prior Innovations listed in Exhibit A ("Prior Innovations"). If nothing is listed on Exhibit A ("Prior Innovations"), I represent that there are no Prior Innovations at the time of signing this Agreement. I hereby grant to Company and Company's designees a royalty-free, irrevocable, transferable, worldwide, fully paid-up perpetual license (with rights to sublicense through multiple tiers of sublicensees) to practice all patent, copyright, moral right, mask work, trade secret and other intellectual property rights relating to any Prior Innovations that I incorporate, or permit to be incorporated, in any Company Innovations (as defined below). "Company Innovations" means Innovations that I, solely or jointly with others, conceive, develop or reduce to practice during my employment with Company that I have been hired to invent either specifically or in general in my area of employment with the Company. Notwithstanding the foregoing, I will not incorporate, or permit to be incorporated, any Prior Innovations in any Company Innovations without Company's prior written consent.

6. Disclosure and Assignment of Company Innovations. I will promptly disclose and describe to Company all Company Innovations. I hereby irrevocably do and will assign to Company or Company's designee all my right, title, and interest in and to any and all Company Innovations, including, without limitation, all copyrights in and to such Company Innovations from the moment of creation and fixation in tangible media. I acknowledge that all original works or authorship that are made by me (solely or jointly with others) within the scope of my employment and that are protectable by copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101). To the extent any of the rights, title and interest in and to Company Innovations cannot be assigned by me to Company, I hereby grant to Company an exclusive, royalty-free, transferable, irrevocable, worldwide, perpetual license (with rights to sublicense through multiple tiers of sublicensees) to practice such non-assignable rights, title and interest, including, but not limited to, the right to make, use, sell, offer for sale, import, have made, and have sold, such Company Innovations. To the extent any of the rights, title and interest in and to Company Innovations can neither be assigned nor licensed by me to Company, I hereby irrevocably waive and agree never to assert such non-assignable and non-licensable rights, title and interest, including, without limitation, moral rights, against Company or any of Company's successors in interest, or any of Company's customers. This Section 6 shall not apply to any Innovations that (a) do not relate, at the time of conception, reduction to practice, creation, derivation, development or making of such Innovation to Company's business or actual or demonstrably anticipated research, development or business; and (b) were developed entirely on my own time; and (c) were developed without use of any equipment, supplies or facilities owned, leased or contracted for by Company or any Proprietary Information of Company; and (d) did not result from any work I performed for Company.

7. Future Innovations. I will disclose promptly in writing to Company all Innovations conceived, reduced to practice, created, derived, developed, or made by me in whole or in part during the term of my employment and for three (3) months thereafter, whether or not I believe such Innovations are subject to this Agreement, to permit a determination by Company as to whether or not the Innovations should be considered Company Innovations. Company will receive any such information in confidence.

8. Notice of Nonassignable Innovations to Employees in California and North Carolina. If you are an employee whose principal workplace is either in California or North Carolina, as applicable, this Agreement does not apply to an Innovation that qualifies fully as a nonassignable invention under the provisions of Section 2870 of the California Labor Code or North Carolina General Statute 66-57.1, as applicable. I acknowledge that a condition for an Innovation to qualify fully as a non-assignable invention under the provisions of Section 2870 of the California Labor Code or North Carolina General Statute 66-57.1, as applicable, is that the invention must be protected under patent laws. I have reviewed the applicable notification in Exhibit B ("Limited Exclusion Notification") if I am an employee in California or North Carolina and agree that my signature acknowledges receipt of the applicable notification set forth on Exhibit B.

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9. Cooperation in Perfecting Rights to Innovations. I agree to perform, during and after my employment, all acts that Company deems necessary or desirable to permit and assist Company, at its expense, in obtaining and enforcing the full benefits, enjoyment, rights and title throughout the world in the Company Innovations or any other Innovations as provided to Company under this Agreement. If Company is unable for any reason to secure my signature to any document required to file, prosecute, register or memorialize the assignment of any rights or application or to enforce any right under any Innovations as provided under this Agreement, I, on behalf of myself and my heirs and legal representatives, hereby irrevocably designate and appoint Company and Company's duly authorized officers and agents as my and my heirs' and legal representatives' agents and attorneys-in-fact to act for and on my behalf and instead of me to take all lawfully permitted acts to further the filing, prosecution, registration, memorialization of assignment, issuance, and enforcement of rights under such Innovations, all with the same legal force and effect as if executed by me. The foregoing is deemed a power coupled with an interest and is irrevocable.

10. Return of Materials. At any time upon Company's request, and without request at any time my employment with Company is over, I will return all materials generated by, on behalf of or relating to the Company Group, including, without limitation, documents, drawings, papers, diskettes and tapes containing or disclosing any Proprietary Information and all copies thereof, as well as any keys, pass cards, identification cards, computers, printers, pagers, personal digital assistants or similar items or devices that the Company Group has provided to me. I will provide Company with a written certification of my compliance with my obligations under this Section.

11. No Violation of Rights of Third Parties. During my employment with Company, I will not (a) breach any agreement to keep in confidence any confidential or proprietary information, knowledge or data acquired by me prior to my employment with Company or (b) disclose to Company, or use or induce Company to use, any confidential or proprietary information or material belonging to any previous employer or any other third party. I am not currently a party, and will not become a party, to any other agreement that is in conflict, or will prevent me from complying, with this Agreement.

12. Survival. This Agreement (a) shall survive my employment by Company (provided, that if I am an employee whose principal place of work is in Georgia, with respect to my obligations to maintain the confidentiality of the Proprietary Information that is not a Company Group trade secret, such obligation shall survive this Agreement for a period of three (3) years from the termination of my employment with Company); (b) does not in any way restrict my right to resign or the right of Company to terminate my employment at any time, for any reason or for no reason, with or without cause and with or without notice; (c) inures to the benefit of successors and assigns of Company; and (d) is binding upon my heirs and legal representatives. I agree that upon termination of my employment with the Company, if requested by the Company, I will sign the Termination Certificate attached as Exhibit C hereto.

13. No Solicitation. During my employment with Company and for one (1) year thereafter, I will not solicit, encourage, or cause others to solicit or encourage any employees, consultants or contractors of Company Group to terminate their employment with, diminish their relationship with or cease providing services to Company Group.

14. Government Contracts. I understand that the Company has or may enter into contracts with the government under which certain intellectual property rights will be required to be protected, assigned, licensed, or otherwise transferred and I hereby agree to execute such other documents and agreements as are necessary to enable the Company to meet its obligations under any such government contracts.

15. Export Controls. I acknowledge that the disclosure or transfer of technology or data to any foreign national wherever located (including within Canada and the U.S.) may be deemed an "export," and accordingly may be unlawful without an export permit from the government of Canada or an export license from the government of the United States. I therefore agree to comply fully with all applicable export control requirements of Canada and the United States, and if a foreign national, will cooperate with the Company in applying for, and will comply fully with the terms of, any export permit issued by the government of Canada or any export license granted by the United States Department of Commerce.

FOR USE IN NORTH AMERICA

16. Notification to New Employer. In the event that I leave the employ of the Company, I hereby consent to the notification of my new employer of my rights and obligations under this Agreement.

17. Entire Agreement. This Agreement, including any agreement to arbitrate claims or disputes relating to my employment that I may have signed in connection with my employment by Company, represents my entire understanding with Company with respect to the subject matter of this Agreement and supersedes all previous understandings, written or oral.

18. No Disparagement. During my employment with Company and after the termination thereof, I will not disparage Company Group, its products, services, agents or employees.

19. Injunctive Relief. I agree that if I violate this Agreement, Company will suffer irreparable and continuing damage for which money damages are insufficient, and Company shall be entitled to injunctive relief and/or a decree for specific performance, and such other relief as may be proper (including money damages if appropriate), to the extent permitted by law.

20. Notices. Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows, with notice deemed given as indicated: (a) by personal delivery, when actually delivered; (b) by overnight courier, upon written verification of receipt; (c) by facsimile transmission, upon acknowledgment of receipt of electronic transmission; or (d) by certified or registered mail, return receipt requested, upon verification of receipt. Notices to me shall be sent to any address in Company's records or such other address as I may provide in writing. Notices to Company shall be sent to Company's Human Resources Department or to such other address as Company may specify in writing.

21. Governing Law; Forum. This Agreement shall be governed by the laws of the United States of America and by the laws of the State of California, as such laws are applied to agreements entered into and to be performed entirely within California between California residents. Company and I each irrevocably consent to the personal jurisdiction of the federal and state courts located in California for any matter arising out of or relating to this Agreement.

22. Severability. If an arbitrator or court of law holds any provision or portion of a provision of this Agreement to be illegal, invalid or unenforceable, (a) that provision shall be deemed amended, revised, or reformed to provide Company the maximum protection permitted by applicable law and (b) the legality, validity and enforceability of the remaining provisions of this Agreement shall not be affected.

23. Waiver; Modification. If Company waives any term, provision or breach by me of this Agreement, such waiver shall not be effective unless it is in writing and signed by Company. No waiver shall constitute a waiver of any other or subsequent breach by me. This Agreement may be modified only if both Company and I consent in writing.

24. Voluntary Agreement. I CERTIFY AND ACKNOWLEDGE THAT I HAVE CAREFULLY READ ALL OF THE PROVISIONS OF THIS AGREEMENT AND THAT I UNDERSTAND AND WILL FULLY AND FAITHFULLY COMPLY WITH SUCH PROVISIONS.

"COMPANY"

JDS Uniphase Corporation

By: [Signature]
Title: HR Coordinator
Dated: 4/7/08

EMPLOYEE:

DAHV KLINER
By: [Signature]
Title: _____
Dated: 4-7-08

FOR USE IN NORTH AMERICA

Exhibit A

PRIOR INNOVATIONS

Check one of the following:

™ NO SUCH PRIOR INNOVATIONS EXIST.

OR

™ YES, SUCH PRIOR INNOVATIONS EXIST AS DESCRIBED BELOW (include basic description of each Prior Innovation):

US Patents related to fiber lasers and amplifiers
and to nonlinear frequency conversion:

5,745,284	6,722,611
5,909,306	6,825,974
6,446,301	6,882,786
6,711,918	7,151,757
6,724,528	

Pending US Patents:

- Ferrule Structure Having an Optically Transparent Ferrule, and Methods of Making and Using Same (submitted 2005)
- Optical-waveguide Amplifier Having an Improved Transverse Refractive-Index Profile (submitted 2007)
- Optical Amplifier Exhibiting Non Phase-Mismatch Selected to at Least Partially Reduce Gain-Induced Phase-Matching During Operation Thereof and Method of Operation (submitted 2007)

Other:

- Calculations for double-clad fiber Raman laser.
- Analysis of side pumping method for double-clad fiber, including hollow ("air-clad") fiber.

Exhibit B

LIMITED EXCLUSION NOTIFICATION TO EMPLOYEES IN CALIFORNIA:

THIS IS TO NOTIFY you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any invention that you developed entirely on your own time without using Company's equipment, supplies, facilities or trade secret information except for those inventions that either:

(1) Relate at the time of conception or reduction to practice of the invention to Company's business, or actual or demonstrably anticipated research or development of Company; or

(2) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an invention otherwise excluded from the preceding Section, the provision is against the public policy of California and is unenforceable.

This limited exclusion does not apply to any patent or invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or invention to be in the United States.

LIMITED EXCLUSION NOTIFICATION TO EMPLOYEES IN NORTH CAROLINA:

THIS IS TO NOTIFY you in accordance with North Carolina General Statute 66-57.1 that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any invention that you developed entirely on your own time without using Company's equipment, supplies, facilities or trade secret information except for those inventions that either:

(3) Relate to Company's business, or actual or demonstrably anticipated research or development of Company; or

(4) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an invention otherwise excluded from the preceding Section, the provision is against the public policy of North Carolina and is unenforceable.

I ACKNOWLEDGE RECEIPT of a copy of this notification if I am an employee whose principal workplace is in California or North Carolina.

JDS Uniphase Corporation

By: _____

By: _____

(Printed Name of Employee)

Title _____

Date: _____

Date: _____

Exhibit C

TERMINATION CERTIFICATE

This termination certificate certifies that I have returned all materials (including, without limitation, documents, drawings, papers, diskettes and tapes) containing or disclosing any Proprietary Information of JDS Uniphase Corporation, as defined in my Employee Proprietary Information and Inventions Agreement and as set forth more specifically below, including all copies thereof, as well as any keys, pass cards, identification cards, computers, printers, pagers, personal digital assistants or similar items or devices that the JDS Uniphase Corporation has provided to me.

I understand that my Employee Proprietary Information and Inventions Agreement requires that I continue to be obligated to protect the secrecy and confidentiality of all Proprietary Information in perpetuity (But if I am an employee whose principal place of work is in Georgia, with respect to Proprietary Information that is not a trade secret, for a period of three (3) years from the date of termination of my employment with Company and with respect to trade secrets) including, for example and without limitation, all concepts; techniques; processes; methods; systems; designs; computer programs; source documentation; trade secrets; formulas; development or experimental work, work in progress; forecasts; proposed and future products; marketing plans; business plans; customers and suppliers; and any other nonpublic information that has commercial value.

I will not use the Proprietary Information for my benefit or for the benefit of any person or company other than JDS Uniphase Corporation. I will not disclose or provide the Proprietary Information to any other person other than JDS Uniphase Corporation, including, without limitation, my new employer.

DAHV KLINER.

(Printed Name of Employee)

DHV

Signature

9-21-12.

Date

EXHIBIT B

FOR USE IN NORTH AMERICA

JDS UNIPHASE CORPORATION
430 North McCarthy Blvd.
Milpitas, CA 95035

EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS AGREEMENT

This Employee Proprietary Information and Inventions Agreement ("Agreement") sets forth in writing certain understandings and procedures in effect as of the date of my initial employment with JDS Uniphase Corporation ("Company").

1. Duties. In return for the compensation now and hereafter paid to me, I will perform such duties for Company as the Company may designate from time to time. During my employment with Company, I will devote my best efforts to the interests of Company and its affiliates and subsidiaries ("Company Group"), will not engage in other employment or in any conduct in direct conflict with Company Group's interests that would cause a material and substantial disruption to Company Group, and will otherwise abide by all of Company's policies and procedures. Furthermore, I will not (a) reveal, disclose or otherwise make available to any person any Company Group password or key, whether or not the password or key is assigned to me or (b) obtain, possess or use in any manner a Company Group password or key that is not assigned to me. I will use my best efforts to prevent the unauthorized use of any laptop or personal computer, peripheral device, software or related technical documentation that the Company Group issues to me, and I will not input, load or otherwise attempt any unauthorized use of software in any Company Group computer, whether or not such computer is assigned to me.

2. "Proprietary Information" Definition. "Proprietary Information" includes (a) any technical or non-technical information that is confidential or proprietary, technical or non-technical information of Company Group, including for example and without limitation, information related to Innovations (as defined in Section 4 below), concepts, techniques, processes, methods, know-how, systems, access codes, designs, computer programs, source documentation, trade secrets (whether tangible or intangible, and whether or how stored, compiled or memorialized physically, electronically, graphically, photographically or in writing), formulas, development or experimental work, work in progress, forecasts, proposed and future products, marketing plans, business plans, customers, suppliers and prospective customer databases and any other nonpublic information that has commercial value and (b) any information Company Group has received from others that Company Group is obligated to treat as confidential or proprietary, which may be made known to me by Company Group, a third party or otherwise that I may learn during my employment with Company.

3. Ownership and Nondisclosure of Proprietary Information. All Proprietary Information is the sole property of Company Group, Company Group's assigns, Company Group's customers and Company Group's suppliers, as applicable. Company Group, Company Group's assigns, Company Group's customers and Company Group's suppliers, as applicable, are the sole and exclusive owners of all of the following worldwide patents (including, but not limited to, any and all patent applications, patents, continuations, continuation-in-parts, reissues, divisionals, substitutions and extensions), copyrights, mask works, trade secrets, trademarks, trade dress, service marks, and other rights in and to the Proprietary Information. During and after my employment with Company Group, I will not disclose any Proprietary Information to anyone outside Company Group, and I will use and disclose Proprietary Information to those inside Company Group only as may be necessary in the ordinary course of performing my duties as an employee of Company. I will (i) maintain at my work area such Proprietary Information that I have a current "need to know"; (ii) not remove such Proprietary Information from the Company Group's premises without approval from my Company manager; and (iii) return the Proprietary Information to the appropriate person or location or otherwise dispose of it once my need to know no longer exists. If I have any questions as to whether information constitutes Proprietary Information, or to whom, if anyone, inside Company Group, any Proprietary Information may be disclosed, I will consult with my manager at Company.

4. "Innovations" Definition. In this Agreement, "Innovations" means all discoveries, designs, developments, improvements, inventions (whether or not protectable under patent laws), works of authorship, information fixed in any tangible medium of expression (whether or not protectable under copyright laws), trade

secrets, know-how, ideas (whether or not protectable under trade secret laws), mask works, trademarks, service marks, trade names, and trade dress.

5. Disclosure and License of Prior Innovations. I have listed on Exhibit A attached hereto all Innovations relating in any way to Company Group's business or demonstrably anticipated research and development or business, which were conceived, reduced to practice, created, derived, developed, or made by me prior to my employment with Company (collectively, the "Prior Innovations"). I represent that I have no rights in any Company Innovations (as defined herein) or Innovations otherwise related to the Company Group other than those Prior Innovations listed in Exhibit A ("Prior Innovations"). If nothing is listed on Exhibit A ("Prior Innovations"); I represent that there are no Prior Innovations at the time of signing this Agreement. I hereby grant to Company and Company's designees a ~~royalty-free, irrevocable, transferable, worldwide, fully paid-up perpetual~~ license (with rights to sublicense through multiple tiers of sublicensees) to practice all patent, copyright, moral right, mask work, trade secret and other intellectual property rights relating to any Prior Innovations that I incorporate, or permit to be incorporated, in any Company Innovations (as defined below). "Company Innovations" means Innovations that I, solely or jointly with others, conceive, develop or reduce to practice during my employment with Company that I have been hired to invent either specifically or in general in my area of employment with the Company. Notwithstanding the foregoing, I will not incorporate, or permit to be incorporated, any Prior Innovations in any Company Innovations without Company's prior written consent.

6. Disclosure and Assignment of Company Innovations. I will promptly disclose and describe to Company all Company Innovations. I hereby irrevocably do and will assign to Company or Company's designee all my right, title, and interest in and to any and all Company Innovations, including, without limitation, all copyrights in and to such Company Innovations from the moment of creation and fixation in tangible media. I acknowledge that all original works or authorship that are made by me (solely or jointly with others) within the scope of my employment and that are protectable by copyright are "works made for hire," pursuant to United States Copyright Act (17 U.S.C., Section 101). To the extent any of the rights, title and interest in and to Company Innovations cannot be assigned by me to Company, I hereby grant to Company an exclusive, royalty-free, transferable, irrevocable, worldwide, perpetual license (with rights to sublicense through multiple tiers of sublicensees) to practice such non-assignable rights, title and interest, including, but not limited to, the right to make, use, sell, offer for sale, import, have made, and have sold, such Company Innovations. To the extent any of the rights, title and interest in and to Company Innovations can neither be assigned nor licensed by me to Company, I hereby irrevocably waive and agree never to assert such non-assignable and non-licensable rights, title and interest, including, without limitation, moral rights, against Company or any of Company's successors in interest, or any of Company's customers. This Section 6 shall not apply to any Innovations that (a) do not relate, at the time of conception, reduction to practice, creation, derivation, development or making of such Innovation to Company's business or actual or demonstrably anticipated research, development or business; and (b) were developed entirely on my own time; and (c) were developed without use of any equipment, supplies or facilities owned, leased or contracted for by Company or any Proprietary Information of Company; and (d) did not result from any work I performed for Company.

7. Future Innovations. I will disclose promptly in writing to Company all Innovations conceived, reduced to practice, created, derived, developed, or made by me in whole or in part during the term of my employment and for three (3) months thereafter, whether or not I believe such Innovations are subject to this Agreement, to permit a determination by Company as to whether or not the Innovations should be considered Company Innovations. Company will receive any such information in confidence.

8. Notice of Nonassignable Innovations to Employees in California and North Carolina. If you are an employee whose principal workplace is either in California or North Carolina, as applicable, this Agreement does not apply to an Innovation that qualifies fully as a nonassignable invention under the provisions of Section 2870 of the California Labor Code or North Carolina General Statute 66-57.1, as applicable. I acknowledge that a condition for an Innovation to qualify fully as a non-assignable invention under the provisions of Section 2870 of the California Labor Code or North Carolina General Statute 66-57.1, as applicable, is that the invention must be protected under patent laws. I have reviewed the applicable notification in Exhibit B ("Limited Exclusion Notification") if I am an employee in California or North Carolina and agree that my signature acknowledges receipt of the applicable notification set forth on Exhibit B.

FOR USE IN NORTH AMERICA

9. Cooperation in Perfecting Rights to Innovations. I agree to perform, during and after my employment, all acts that Company deems necessary or desirable to permit and assist Company, at its expense, in obtaining and enforcing the full benefits, enjoyment, rights and title throughout the world in the Company Innovations or any other Innovations as provided to Company under this Agreement. If Company is unable for any reason to secure my signature to any document required to file, prosecute, register or memorialize the assignment of any rights or application or to enforce any right under any Innovations as provided under this Agreement, I, on behalf of myself and my heirs and legal representatives, hereby irrevocably designate and appoint Company and Company's duly authorized officers and agents as my and my heirs' and legal representatives' agents and attorneys-in-fact to act for and on my behalf and instead of me to take all lawfully permitted acts to further the filing, prosecution, registration, memorialization of assignment, issuance, and enforcement of rights under such Innovations, all with the same legal force and effect as if executed by me. ~~The foregoing is deemed a power coupled with an interest and is irrevocable.~~

10. Return of Materials. At any time upon Company's request, and without request at any time my employment with Company is over, I will return all materials generated by, on behalf of or relating to the Company Group, including, without limitation, documents, drawings, papers, diskettes and tapes containing or disclosing any Proprietary Information and all copies thereof, as well as any keys, pass cards, identification cards, computers, printers, pagers, personal digital assistants or similar items or devices that the Company Group has provided to me. I will provide Company with a written certification of my compliance with my obligations under this Section.

11. No Violation of Rights of Third Parties. During my employment with Company, I will not (a) breach any agreement to keep in confidence any confidential or proprietary information, knowledge or data acquired by me prior to my employment with Company or (b) disclose to Company, or use or induce Company to use, any confidential or proprietary information or material belonging to any previous employer or any other third party. I am not currently a party, and will not become a party, to any other agreement that is in conflict, or will prevent me from complying, with this Agreement.

12. Survival. This Agreement (a) shall survive my employment by Company (provided, that if I am an employee whose principal place of work is in Georgia, with respect to my obligations to maintain the confidentiality of the Proprietary Information that is not a Company Group trade secret, such obligation shall survive this Agreement for a period of three (3) years from the termination of my employment with Company); (b) does not in any way restrict my right to resign or the right of Company to terminate my employment at any time, for any reason or for no reason, with or without cause and with or without notice; (c) inures to the benefit of successors and assigns of Company; and (d) is binding upon my heirs and legal representatives. I agree that upon termination of my employment with the Company, if requested by the Company, I will sign the Termination Certificate attached as Exhibit C hereto.

13. No Solicitation. During my employment with Company and for one (1) year thereafter, I will not solicit, encourage, or cause others to solicit or encourage any employees, consultants or contractors of Company Group to terminate their employment with, diminish their relationship with or cease providing services to Company Group.

14. Government Contracts. I understand that the Company has or may enter into contracts with the government under which certain intellectual property rights will be required to be protected, assigned, licensed, or otherwise transferred and I hereby agree to execute such other documents and agreements as are necessary to enable the Company to meet its obligations under any such government contracts.

15. Export Controls. I acknowledge that the disclosure or transfer of technology or data to any foreign national wherever located (including within Canada and the U.S.) may be deemed an "export," and accordingly may be unlawful without an export permit from the government of Canada or an export license from the government of the United States. I therefore agree to comply fully with all applicable export control requirements of Canada and the United States, and if a foreign national, will cooperate with the Company in applying for, and will comply fully with the terms of, any export permit issued by the government of Canada or any export license granted by the United States Department of Commerce.

FOR USE IN NORTH AMERICA

16. Notification to New Employer. In the event that I leave the employ of the Company, I hereby consent to the notification of my new employer of my rights and obligations under this Agreement.

17. Entire Agreement. This Agreement, including any agreement to arbitrate claims or disputes relating to my employment that I may have signed in connection with my employment by Company, represents my entire understanding with Company with respect to the subject matter of this Agreement and supersedes all previous understandings, written or oral.

18. No Disparagement. During my employment with Company and after the termination thereof, I will not disparage Company Group, its products, services, agents or employees.

19. Injunctive Relief. I agree that if I violate this Agreement, Company will suffer irreparable and continuing damage for which money damages are insufficient, and Company shall be entitled to injunctive relief and/or a decree for specific performance, and such other relief as may be proper (including money damages if appropriate), to the extent permitted by law.

20. Notices. Any notice required or permitted by this Agreement shall be in writing and shall be delivered as follows, with notice deemed given as indicated: (a) by personal delivery, when actually delivered; (b) by overnight courier, upon written verification of receipt; (c) by facsimile transmission, upon acknowledgment of receipt of electronic transmission; or (d) by certified or registered mail, return receipt requested, upon verification of receipt. Notices to me shall be sent to any address in Company's records or such other address as I may provide in writing. Notices to Company shall be sent to Company's Human Resources Department or to such other address as Company may specify in writing.

21. Governing Law; Forum. This Agreement shall be governed by the laws of the United States of America and by the laws of the State of California, as such laws are applied to agreements entered into and to be performed entirely within California between California residents. Company and I each irrevocably consent to the personal jurisdiction of the federal and state courts located in California for any matter arising out of or relating to this Agreement.

22. Severability. If an arbitrator or court of law holds any provision or portion of a provision of this Agreement to be illegal, invalid or unenforceable, (a) that provision shall be deemed amended, revised, or reformed to provide Company the maximum protection permitted by applicable law and (b) the legality, validity and enforceability of the remaining provisions of this Agreement shall not be affected.

23. Waiver; Modification. If Company waives any term, provision or breach by me of this Agreement, such waiver shall not be effective unless it is in writing and signed by Company. No waiver shall constitute a waiver of any other or subsequent breach by me. This Agreement may be modified only if both Company and I consent in writing.

24. Voluntary Agreement. I CERTIFY AND ACKNOWLEDGE THAT I HAVE CAREFULLY READ ALL OF THE PROVISIONS OF THIS AGREEMENT AND THAT I UNDERSTAND AND WILL FULLY AND FAITHFULLY COMPLY WITH SUCH PROVISIONS.

"COMPANY"

JDS Uniphase Corporation

By: Yen Le

Title: HR

Dated: 9/8/10

EMPLOYEE:

Roger L. Farrow

By: Rog L. Farrow

Title: Disting. Member of Technical Staff

Dated: Sept. 6, 2010

FOR USE IN NORTH AMERICA

Exhibit A

PRIOR INNOVATIONS

Check one of the following:

TM NO SUCH PRIOR INNOVATIONS EXIST.

OR

TM YES, SUCH PRIOR INNOVATIONS EXIST AS DESCRIBED BELOW (include basic description of each Prior Innovation):

1. Method for multiplexed optical detection including a multimode optical fiber in which propagation modes are coupled.
U.S. Patent No. 6,963,062 with Douglas R. Cyr.
Assigned to Eksigent Technologies, LLC.

Method includes imaging light into the input face of a multimode fiber, inducing coupling among the propagation modes of the light in the fiber, ^{and} coupling the output face of the fiber into the input faces of multiple individual fibers in a multifiber bundle, where each output face of the individual fibers emits similar light. The light is used to detect properties and/or analyze fluids using optical detectors which can be part of a high-performance liquid chromatography system.

Exhibit B

LIMITED EXCLUSION NOTIFICATION TO EMPLOYEES IN CALIFORNIA:

THIS IS TO NOTIFY you in accordance with Section 2872 of the California Labor Code that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any invention that you developed entirely on your own time without using Company's equipment, supplies, facilities or trade secret information except for those inventions that either:

(1) Relate at the time of conception or reduction to practice of the invention to Company's business, or actual or demonstrably anticipated research or development of Company; or

(2) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an invention otherwise excluded from the preceding Section, the provision is against the public policy of California and is unenforceable.

This limited exclusion does not apply to any patent or invention covered by a contract between Company and the United States or any of its agencies requiring full title to such patent or invention to be in the United States.

LIMITED EXCLUSION NOTIFICATION TO EMPLOYEES IN NORTH CAROLINA:

THIS IS TO NOTIFY you in accordance with North Carolina General Statute 66-57.1 that the foregoing Agreement between you and Company does not require you to assign or offer to assign to Company any invention that you developed entirely on your own time without using Company's equipment, supplies, facilities or trade secret information except for those inventions that either:

(3) Relate to Company's business, or actual or demonstrably anticipated research or development of Company; or

(4) Result from any work performed by you for Company.

To the extent a provision in the foregoing Agreement purports to require you to assign an invention otherwise excluded from the preceding Section, the provision is against the public policy of North Carolina and is unenforceable.

I ACKNOWLEDGE RECEIPT of a copy of this notification if I am an employee whose principal workplace is in California or North Carolina.

JDS Uniphase Corporation

By: *R. L. Farrow*

By: *Yen Le*

Roger L. Farrow
(Printed Name of Employee)

Title: *HR*

Date: *9/8/10*

Date: *Sept 6, 2010*

Exhibit C

TERMINATION CERTIFICATE

This termination certificate certifies that I have returned all materials (including, without limitation, documents, drawings, papers, diskettes and tapes) containing or disclosing any Proprietary Information of JDS Uniphase Corporation, as defined in my Employee Proprietary Information and Inventions Agreement and as set forth more specifically below, including all copies thereof, as well as any keys, pass cards, identification cards, computers, printers, pagers, personal digital assistants or similar items or devices that the JDS Uniphase Corporation has provided to me.

I understand that my Employee Proprietary Information and Inventions Agreement requires that I continue to be obligated to protect the secrecy and confidentiality of all Proprietary Information in perpetuity (But if I am an employee whose principal place of work is in Georgia, with respect to Proprietary Information that is not a trade secret, for a period of three (3) years from the date of termination of my employment with Company and with respect to trade secrets) including, for example and without limitation, all concepts; techniques; processes; methods; systems; designs; computer programs; source documentation; trade secrets; formulas; development or experimental work, work in progress; forecasts; proposed and future products; marketing plans; business plans; customers and suppliers; and any other nonpublic information that has commercial value.

I will not use the Proprietary Information for my benefit or for the benefit of any person or company other than JDS Uniphase Corporation. I will not disclose or provide the Proprietary Information to any other person other than JDS Uniphase Corporation, including, without limitation, my new employer.

ROGER L. FARROW

(Printed Name of Employee)

Rog L. Farrow

Signature

March 21, 2013

Date