

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

BECKMAN COULTER, INC.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	
	)	C.A. No. _____
CYTEK BIOSCIENCES, INC.,	)	
	)	<b>DEMAND FOR JURY TRIAL</b>
Defendant.	)	
	)	

**COMPLAINT**

Beckman Coulter, Inc. (“Beckman Coulter” or “Plaintiff”), by and through its attorneys, hereby alleges for its Complaint against Cytek Biosciences, Inc. (“Cytek”) as follows:

**NATURE OF THE ACTION**

1. This is an action for patent infringement arising under 35 U.S.C. §§ 1 *et seq.*, including 35 U.S.C. § 271.
2. Plaintiff brings this action to seek relief for Cytek’s infringement of Beckman Coulter’s rights arising under the patent laws of the United States, including 35 U.S.C. §§ 1, *et. seq.*, from U.S. Patent No. 10,330,582 (the “582 Patent”) and U.S. Patent No. 11,703,443 (the “443 Patent”) (collectively the “Asserted Patents”).

**THE PARTIES**

3. Beckman Coulter, Inc., is a corporation organized and existing under the laws of Delaware, with a principal place of business at 250 South Kraemer Boulevard, Brea, California 92821. Beckman Coulter, Inc. is the owner of all right, title, and interest in and to the Asserted Patents.

4. Upon information and belief, Cytek is a corporation organized and existing under the laws of Delaware, with its principal place of business at 47215 Lakeview Boulevard, Fremont, California 94538-6407.

### **JURISDICTION AND VENUE**

5. Beckman Coulter brings this action for patent infringement by Cytek arising under the patent laws of the United States, including Title 35 of the United States Code. Accordingly, this Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

6. This Court has personal jurisdiction over Cytek because, *inter alia*, Cytek is and was incorporated in Delaware, and committed, aided, abetted, induced, contributed to, and/or participated in the commission of tortious acts of patent infringement that led to foreseeable harm and injury to Plaintiff in Delaware. Further, Cytek has and had substantial contacts with the forum as a consequence of its incorporation in Delaware and, upon information and belief, conducting business in Delaware.

7. Venue is proper in this District under 28 U.S.C. § 1400(b) because Cytek is and was a Delaware corporation that, upon information and belief, conducts and did conduct business in Delaware. Delaware is also the most convenient forum, and litigating this action in Delaware is in the interests of justice, under 28 U.S.C. § 1404(a).

### **FACTUAL ALLEGATIONS**

#### **The Asserted Patents**

8. Beckman Coulter has been a pioneer in flow cytometry and cell sorter technologies and services for more than 40 years. Over the decades, Beckman Coulter has continued to innovate and develop flow cytometry and cell sorter technology. Two of Beckman Coulter's key innovations in this regard are reflected in the Asserted Patents.

9. The '582 Patent, entitled "Flow Cytometer," was duly and legally issued on June 25, 2019 to inventor Yong Qin Chen. A true and correct copy of the '582 Patent is attached as **Exhibit 1**.

10. The '443 Patent, entitled "Flow Cytometer," was duly and legally issued on July 18, 2023 to inventor Yong Qin Chen. A true and correct copy of the '443 Patent is attached as **Exhibit 2**.

11. Beckman Coulter owns all rights, title, and interest in the Asserted Patents.

### **Cytek's Infringing Products**

12. Cytek makes, uses, sells, supplies, offers for sale, and/or imports Infringing Products, including at least Cytek Aurora flow cytometers & Cytek Aurora CS cell sorters.

13. The Infringing Products further include any products, components, or conveyed or derivative products that were imported, made, used, sold, and/or offered for sale by or on behalf of Cytek in connection with and/or as part of Cytek Aurora flow cytometers or Cytek Aurora CS cell sorters and any other of Defendant's products that embody like functionality, including without limitation, Cytek Northern Lights and Cytek Northern Lights-CLC products.

14. By selling, manufacturing, using, offering for sale in the United States and/or importing into the United States the Infringing Products, Cytek has infringed and continues to infringe the Asserted Patents and has benefited from doing so.

15. An exemplary infringement chart, attached as **Exhibit 3**, details Cytek's infringement of the '582 Patent. An exemplary infringement chart, attached as **Exhibit 4**, details Cytek's infringement of the '443 Patent. **Exhibits 5-15 and 17-21**, cited in the exemplary infringement charts, include exemplary evidence of Cytek's infringement of the asserted patents. These descriptions are not intended to limit Beckman Coulter's right to amend, supplement, or modify these descriptions or any other analysis, description, or claim chart or allege that other activities of Cytek infringed the identified claim or any other claims of this patent or other patents.

16. On information and belief, Cytek knew of, should have known, and/or was willfully blind to the Asserted Patents, and Cytek's infringements of the Asserted Patents were knowing and willful or willfully blind.

17. *First*, on information and belief, Cytek is a competitor with sophisticated processes that identified, monitored, investigated, and assessed Beckman Coulter's patent portfolio and Beckman Coulter's marked flow cytometer and cell sorter patents, and that portfolio includes the Asserted Patents. *See, e.g.*, U.S. Patent No. 10,739,245 (Cytek patent citing Beckman Coulter's U.S. Patent No. 7,440,101, entitled "System and method for multiple laser triggering."); U.S. Patent No. 8,660,332 (Cytek patent stating "Companies such as... Beckman Coulter Inc. (Fullerton, Calif.)...continue to advance [flow cytometry] technologies." *Id.* at 2:7-10.).

18. Cytek has been long aware of the patent family containing the Asserted Patents and therefore knew, or should have known, about the existence of the Asserted Patents themselves. For example, Cytek's U.S. Patent No. 10,436,697 cites U.S. Publication No. 2015/0115174 (the "'174 Publication"), a publication of U.S. Application No. 14/555,102, which issued as U.S. Patent No. 9,746,412 (the "'412 Patent"), the parent of the '582 Patent and the grandparent of the '443 Patent. Cytek has known about the '174 Publication since at least May 7, 2019, when Cytek filed an Information Disclosure Statement with the U.S. Patent and Trademark Office identifying the '174 Publication. Similarly, Cytek's U.S. Patent No. 11,333,597 cites the '412 Patent. Cytek has known about the '412 Patent since at least June 17, 2021, when Cytek filed an Information Disclosure Statement with the U.S. Patent and Trademark Office identifying the '412 Patent. The '412 Patent and the Asserted Patents share the same inventor and specification.

19. *Second*, on information and belief, Cytek and Beckman Coulter are and were sophisticated parties and competitors in the flow cytometer and cell sorter markets. On information and belief, it is common practice for companies in the flow cytometer and cell sorter markets—such

as Cytex—to monitor, investigate, and assess competitor products and competitor patents for risk assessment purposes, including, on information and belief, patents marked on Beckman Coulter products such as Beckman Coulter’s CytoFLEX products. On information and belief, Cytex identified, monitored, investigated, and assessed its competitors’ patents, including the Asserted Patents. For example, Cytex publicly stated that it was aware of patents and applications owned by competitors that covered flow cytometers, cell sorters, and related devices, publicly acknowledged that third parties may have had patents on which Cytex’s products infringed, and expected to be increasingly subject to third-party infringement claims.<sup>1</sup> Further, the Infringing Products function in the same or substantially the same manner as the claimed invention. *Compare* ’582 Patent at FIG. 25 (illustrating an optical subsystem) with **Exhibit 8** (illustrating “Proprietary high sensitivity Coarse Wavelength Division Multiplexing (CWDM) semiconductor detector arrays,”), **Exhibit 14** at 2 (“Light emitted from the sample is collected and passes through the optical filter-based coarse wavelength division multiplexing (CWDM) demultiplexer arrays on the Cytex Aurora and Northern Lights cytometers.”), and Cytex’s U.S. Patent No. 11,169,076 at FIGS. 1, 7. For example, Cytex’s product literature and webpage for the Infringing Products feature optical ray diagrams that are substantially similar to the figures in the Asserted Patents. *Compare* ’582 Patent at FIG. 25 (illustrating an optical subsystem) with Exhibit 8 (illustrating “Proprietary high sensitivity Coarse Wavelength Division Multiplexing (CWDM) semiconductor detector arrays,”) and **Exhibit 14** (similar).

20. Prior to this complaint and during the damages period under 35 U.S.C. § 286, the Asserted Patents were listed on Beckman Coulter’s public virtual marking page<sup>2</sup> in association with

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<sup>1</sup> See Cytex, Inc. Form S1 (2021) at 123-24, available at <https://investors.cytexbio.com/node/6586/html>.

<sup>2</sup> See <https://www.beckman.com/patents>.

its CytoFLEX system, and Beckman Coulter properly fixed the words “patent” or “pat.” next to the virtual marking web address on its CytoFLEX products in compliance with 35 U.S.C. § 287. Finally, the Asserted Patents are known in the industry and have been cited by at least 20 patents. Therefore, on information and belief, Cytek knew or should have known that at least its Cytek Aurora, Cytek Aurora CS, Cytek Northern Lights, and Cytek Northern Lights-CLC products were infringing. Nevertheless, Cytek continued its willful and deliberate infringement of the Asserted Patents.

21. Cytek’s Aurora flow cytometers and Aurora CS cell sorters are in direct competition with Beckman Coulter’s CytoFLEX flow cytometer and cell sorter products marked with the Asserted Patents and therefore, on information and belief, Cytek considered Beckman Coulter’s CytoFLEX flow cytometer and cell sorter products to be in direct competition with at least its Cytek Aurora flow cytometers and Cytek Aurora CS cell sorters.<sup>3</sup> Thus, on information and belief, Cytek monitored, investigated, and assessed at least the patents marked on Beckman Coulter’s CytoFLEX flow cytometer and cell sorter products, and therefore knew or should have known that at least its Cytek Aurora flow cytometers and Cytek Aurora CS cell sorters were infringing at least the Asserted Patents, or else Cytek deliberately avoided evaluating its products and was willfully blind to its infringement of the Asserted Patents and acted despite an objectively high likelihood that its products infringed the Asserted Patents.

22. *Third*, on June 14, 2024, Beckman Coulter sent Cytek a letter identifying the Asserted Patents in connection with “Cytek products, such as the Cytek Aurora products.” The letter, attached as **Exhibit 16**, identified and attached a copy of the Asserted Patents. The letter provided Cytek with actual notice of the Asserted Patents and explained the how and why of Cytek’s infringement by at

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<sup>3</sup> See Cytek, Inc. Form S1 (2021) at 122-23, available at <https://investors.cytekbio.com/node/6586/html> (“Our direct competitors include ...Beckman Coulter (Danaher Corporation)...”).

least June 14, 2024. On information and belief, Cytek then analyzed the Asserted Patents and its family members and came to the conclusion that it infringed the Asserted Patents, as set forth in paragraphs 25 to 40 below. Thus, on information and belief, at least as of June 14, 2024, Cytek had actual knowledge of the Asserted Patents, and had actual knowledge of its infringement of those patents or was willfully blind to its infringement of those patents.

23. Nevertheless, Cytek has not licensed the Asserted Patents and has continued its willful and deliberate infringement of the Asserted Patents, including by continuing to make, use, import, promote, market, sell, and offer to sell the Infringing Products with knowledge of their infringement.

24. As the direct and proximate result of Cytek's conduct, Beckman Coulter has suffered, and if Cytek's conduct is not enjoined, will continue to suffer, severe competitive harm, irreparable injury, and significant damages, in an amount to be proven at trial. Because Beckman Coulter's remedy at law is inadequate, Beckman Coulter seeks, in addition to damages, injunctive relief. Beckman Coulter's businesses operate in a competitive market and they will continue suffering irreparable harm absent injunctive relief.

### **COUNT 1**

#### **(INFRINGEMENT OF THE '582 PATENT)**

25. Plaintiff incorporates each of the above paragraphs as though fully set forth herein.

26. On information and belief, Cytek directly or through the actions of its employees, agents, distributors, divisions, and/or subsidiaries, has infringed one or more of the claims of the '582 Patent, including at least claim 1 of the '582 Patent, directly, indirectly, literally and/or by equivalents under 35 U.S.C. §§ 1 *et seq.*, including, but not limited to § 271 by, among other things, making, using (including during research and development activities and product testing), selling, supplying, offering for sale the Infringing Products in the United States and/or importing the

Infringing Products within the United States, and/or inducing or contributing to such acts, without authority. To the extent there are any differences between the Infringing Products and the claims of the '582 Patent, such differences are insubstantial. For each claim limitation in at least claim 1 of the '582 Patent, one or more elements of each of Cytek's Infringing Products matches the function, way, and result of that claim limitation.

27. For example, the Infringing Products meet each element of, and infringe, claim 1, which states:

**Claim 1.** An optical subsystem for a flow cytometer, the optical subsystem comprising:  
a collimating optical element arranged to receive light from a light source, the collimating optical element configured to project a collimated beam;  
an optical relay element arranged to receive at least a portion of the collimated beam from the collimating optical element, the optical relay element comprising a curved mirror configured to reflect the portion of the collimated beam received from the collimating optical element to produce a first image;  
a first focusing optical element arranged to receive at least a portion of the collimated beam reflected by the optical relay element; and  
a first semiconductor detector,  
wherein the first focusing optical element is configured to focus the portion of the collimated beam received from the optical relay element onto the first semiconductor detector.

28. Cytek infringes each element of at least claim 1 of the '582 Patent. Cytek's own documents show that the Infringing Products infringe the claims of the Asserted Patents. As an example, U.S. Patent No. 10,330,582 Infringement Chart, detailing Cytek's infringement of that claim of the '582 Patent, is attached as **Exhibit 3**. This chart is not intended to limit Beckman Coulter's right to modify the chart or allege that other activities of Cytek infringe the identified claims or any other claims of the Asserted Patents. **Exhibit 3** is hereby incorporated by reference in its entirety. Each claim element in **Exhibit 3** that is mapped to the Infringing Products shall be considered an allegation within the meaning of the Federal Rules of Civil Procedure and therefore a response to each allegation is required.



29. Cytek has also induced infringement of the '582 Patent under § 271(b) by providing customers with the Infringing Products, along with instructions for use, that, when followed in an intended manner and in a normal mode of operation, Cytek knew infringed the Asserted Patents. *See, e.g., Exhibit 5*, Cytek Aurora User's Guide (providing instructions for using the Cytek Aurora flow cytometer); *Exhibit 6*, Cytek Aurora CS User's Guide (providing instructions for using the Cytek Aurora CS cell sorter). On information and belief, Cytek knew of the Asserted Patents at least as of June 14, 2024. Further, the Infringing Products function in the same manner as the claimed invention. *Compare* '582 Patent at FIG. 25 (illustrating an optical subsystem) with *Exhibit 14* at 2 ("Light emitted from the sample is collected and passes through the optical filter-based coarse wavelength division multiplexing (CWDM) demultiplexer arrays on the Cytek Aurora and Northern Lights cytometers."). The instructions for use of the Infringing Products instructed and encouraged Cytek's customers to use the Infringing Products in a way that infringed the patent. *See Exhibit 5; Exhibit 6*. Cytek provided its customers with the Infringing Products and instructions for use despite knowledge of or willful blindness to the '582 Patent and knowledge of or willful blindness to the fact that the induced acts infringed one or more claims of the '582 Patent. Therefore, Cytek specifically intended that its customers infringe the Asserted Patents.

30. Cytek has contributorily infringed the Asserted Patents under 35 U.S.C. § 271(c). Cytek designed the Infringing Products and/or its components specifically to be used in a manner as claimed in the '582 Patent. As such, the Infringing Products and/or its components were a material component of the patented combinations, specifically designed to be used according to the claims of the '582 Patent, and especially made and adapted for use in a manner that infringed the '582 Patent. The Infringing Products and/or its components were not staple articles of commerce and they did not have substantial uses that did not infringe the Asserted Patents. On information and belief, Cytek

knew of, should have known of, and/or was willfully blind to the '582 Patent and that the Infringing Products were especially made to be used in a system that infringed the '582 Patent.

31. Cytek's infringement has been willful and deliberate because, on information and belief, Cytek has known of, should have known of, and/or has been willfully blind to the Asserted Patents since at least June 14, 2024 and knew of, should have known of, and/or was willfully blind to its infringement but acted despite an objectively high likelihood that such acts would infringe the Asserted Patents.

32. As a direct and proximate result of Cytek's conduct, Plaintiff has suffered, and if Cytek's conduct is not enjoined, will continue to suffer, severe competitive harm, irreparable injury, and significant damages, in an amount to be proven at trial. Because Plaintiff's remedy at law is inadequate, Plaintiff seeks, in addition to damages, injunctive relief. Plaintiff's businesses operate in a competitive market and they will continue suffering irreparable harm absent injunctive relief.

## **COUNT 2**

### **(INFRINGEMENT OF THE '443 PATENT)**

33. Plaintiff incorporates each of the above paragraphs as though fully set forth herein.

34. On information and belief, Cytek directly or through the actions of its employees, agents, distributors, divisions, and/or subsidiaries, has infringed one or more of the claims of the '443 Patent, including at least claim 1 of the '443 Patent, directly, indirectly, literally and/or by equivalents under 35 U.S.C. §§ 1 *et seq.*, including, but not limited to § 271 by, among other things, making, using (including during research and development activities and product testing), selling, supplying, offering for sale the Infringing Products in the United States and/or importing the Infringing Products within the United States, and/or inducing or contributing to such acts, without authority. To the extent there are any differences between the Infringing Products and the claims of

the '443 Patent, such differences are insubstantial. For each claim limitation in at least claim 1 of the '443 Patent, one or more elements of each of Cytek's Infringing Products matches the function, way, and result of that claim limitation.

35. For example, the Infringing Products meet each element of, and infringe, claim 1, which states:

**Claim 1.** A wavelength division multiplexer (WDM) for a flow cytometer comprising:  
a set of filters, each filter of the set of filters configured to pass a corresponding portion of multiple portions of light;  
at least one mirror including at least one curved mirror, the at least one mirror configured to:  
receive one or more portions of the light from the set of filters; and  
reflect the one or more portions of the light to the set of filters; and  
a set of detectors, each detector of the set of detectors corresponding to a filter of the set of filters and configured to receive a portion of the light at the detector that passed through the filter corresponding to the detector.

36. Cytek infringes each element of at least claim 1 of the '443 Patent. Cytek's own documents show that the Infringing Products infringe the claims of the Asserted Patents. As an example, U.S. Patent No. 11,703,443 Infringement Chart, detailing Cytek's infringement of that claim of the '443 Patent, is attached as **Exhibit 4**. This chart is not intended to limit Beckman Coulter's right to modify the chart or allege that other activities of Cytek infringe the identified claims or any other claims of the Asserted Patents. **Exhibit 4** is hereby incorporated by reference in its entirety. Each claim element in **Exhibit 4** that is mapped to the Infringing Products shall be considered an allegation within the meaning of the Federal Rules of Civil Procedure and therefore a response to each allegation is required.

37. Cytek has also induced infringement of the '443 Patent under § 271(b) by providing customers with the Infringing Products, along with instructions for use, that, when followed in an intended manner and in a normal mode of operation, Cytek knew infringed the Asserted Patents. *See, e.g., Exhibit 5*, Cytek Aurora User's Guide (providing instructions for using the Cytek Aurora

flow cytometer); **Exhibit 6**, Cytek Aurora CS User’s Guide (providing instructions for using the Cytek Aurora CS cell sorter). On information and belief, Cytek knew of the Asserted Patents at least as of June 14, 2024. Further, the Infringing Products function in the same manner as the claimed invention. *Compare* ’443 Patent at FIG. 25 (illustrating an optical subsystem) with **Exhibit 14** at 2 (“Light emitted from the sample is collected and passes through the optical filter-based coarse wavelength division multiplexing (CWDM) demultiplexer arrays on the Cytek Aurora and Northern Lights cytometers.”). The instructions for use of the Infringing Products instructed and encouraged Cytek’s customers to use the Infringing Products in a way that infringed the patent. *See* **Exhibit 5**; **Exhibit 6**. Cytek provided its customers with the Infringing Products and instructions for use despite knowledge of or willful blindness to the ’443 Patent and knowledge or willful blindness to the fact that the induced acts infringed one or more claims of the ’443 Patent. Therefore, Cytek specifically intended that its customers infringe the Asserted Patents.

38. Cytek has contributorily infringed the Asserted Patents under 35 U.S.C. § 271(c). Cytek designed the Infringing Products and/or its components specifically to be used in a manner as claimed in the ’443 Patent. As such, the Infringing Products and/or its components were a material component of the patented combinations, specifically designed to be used according to the claims of the ’443 Patent, and especially made and adapted for use in a manner that infringed the ’443 Patent. The Infringing Products and/or its components were not staple articles of commerce and they did not have substantial uses that did not infringe the Asserted Patents. On information and belief, Cytek knew of, should have known of, and/or was willfully blind to the ’443 Patent and that the Infringing Products were especially made to be used in a system that infringed the ’443 Patent.

39. Cytek’s infringement has been willful and deliberate because, on information and belief, Cytek has known, should have known, and/or has been willfully blind to the Asserted Patents since at least June 14, 2024 and knew of, should have known of, and/or was willfully blind

to its infringement but acted despite an objectively high likelihood that such acts would infringe the Asserted Patents.

40. As a direct and proximate result of Cytek's conduct, Plaintiff has suffered, and if Cytek's conduct is not enjoined, will continue to suffer, severe competitive harm, irreparable injury, and significant damages, in an amount to be proven at trial. Because Plaintiff's remedy at law is inadequate, Plaintiff seeks, in addition to damages, injunctive relief. Plaintiff's businesses operate in a competitive market and they will continue suffering irreparable harm absent injunctive relief.

#### **DEMAND FOR JURY TRIAL**

41. Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff hereby demands a trial by jury on all issues so triable.

#### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiff prays for relief, declaration and judgment that:

- a. Cytek has infringed the Asserted Patents;
- b. Plaintiff is entitled to preliminary and permanent injunctive relief enjoining Cytek, its officers, agents, servants, and employees, and those persons in active concert or participation with any of them, from manufacturing, using, offering for sale, selling in the United States, or importing into the United States, the Infringing Products, and any other product that infringes or induces or contributes to the infringement of the Asserted Patents, prior to the expiration date of the last to expire of those patents;
- c. Plaintiff is entitled to an award of damages adequate to compensate for Cytek's infringement pursuant to 35 U.S.C. § 284, including lost profits or, at a minimum, a reasonable royalty, as well as pre-judgment and post-judgment interest;

- d. Cytex's infringement of the Asserted Patents was willful and Plaintiff is entitled to enhanced damages up to and including trebling of the damages awarded to it;
- e. Plaintiff is entitled to costs and reasonable expenses to the fullest extent permitted by law;
- f. This case is exceptional pursuant to 35 U.S.C. § 285, and Plaintiff is entitled to an award of attorneys' fees; and
- g. Plaintiff is entitled to other and further relief as the Court may deem just and proper.

August 14, 2024

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