UNITED STATES PATENT AND
TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

OPTICIS CO., LTD

Petitioner,

v.

INNEOS LLC,

Patent Owner.

Case No. IPR2023-01256
U.S. Patent No. 7,198,416

DECLARATION OF ERIC GRANN IN SUPPORT OF PATENT OWNER'S RESPONSE TO PETITION

I, Eric Grann, hereby declare and state the following:

1. I am over the age of 18 years, I am a citizen of the United States, and I have personal knowledge of the facts recited herein and could testify competently thereto.

2. I work at Inneos as a Senior Vice President of Engineering and Operations. I have worked at Inneos, including its predecessor entities Blaze, Aduro, and Omron, since 1998. But, I did not work at Inneos from April 9, 2013, to January 11, 2016.

3. I am a co-inventor on U.S. Patent No. 7,198,416 ("the '416 Patent"). EX1001.

4. During prosecution of the '416 Patent, I submitted declarations attesting to activities surrounding the conception and reduction of the invention of the '416 Patent ("Prior Declarations"). EX1002 p. 45–49, 118–122. I understand that this declaration will be submitted in support of Inneos' Patent Owner Response to the Petition for *Inter Partes* Review of the '416 Patent. My Prior Declarations are a true and accurate reflection of my personal experience with the conception and reduction to practice of the '416 Patent. This declaration is to provide supplemental evidence related to our efforts to reduce the '416 Patent to practice. This declaration should be read as supplementing and complementing my Prior Declarations.

5. In 2003, Inneos (then Aduro) was a small operation. We were just three people (myself, Curtis Ray, and Brian Peters) working out of nine cubes. EX2036. Because of the proximity of our desks and the collaborative nature of our work, we worked face-to-face on the reduction to practice of the '416 Patent.

6. As a self-funded startup, Mr. Ray, Mr. Peters, and I spent most of our time in 2003 building products by hand to keep the company afloat. Because of the financial constraints we faced at Aduro at this time, Mr. Peters, Mr. Ray, and myself

spent as much available free time as we could afford working on the modeling, analysis, and simulation of the '416 Patent invention to see if and how it would work to avoid the prohibitive expense associated with purchasing and developing a custom mold.

7. In connection with figuring out whether our optical combiner invention would work, I performed several iterative designs of the optical modeling. The Zemax software regularly updates the model, so earlier versions of the modeling are overwritten as new iterations are developed. The iterative models must be manually saved to be preserved. Throughout the design process, I manually saved versions on July 21, 2003, July 22, 2003, and January 29, 2004. EX2037–2040.

8. The initial Zemax model was created on or around July 21, 2003. *See* EX2037, EX2039. The optical modeling from this version contributed to the embodiments seen in FIGS. 1–4 of the '416 Patent. This can be seen because the optical path is redirected by a prism as shown in FIGS. 1–4 of the '416 Patent.

9. A second version of the optical modeling was created on or around July 22, 2003. *See* EX2038, EX2039. The optical modeling from the second version contributed to the figures seen in FIGS. 5–6 of the '416 Patent. This can be seen because the optical path is straight as shown in FIGS. 5–6 of the '416 Patent.

10. I did not manually create new file versions or distinct file names for each modeling iteration. As I stated in my Prior Declarations, I performed approximately eight separate iterations as part of the optical modeling project. EX1002 p. 120 at ¶ 7.

11. In August and September of 2003, I performed an initial round of prior art searching related to the invention carried into the '416 Patent. I spent several hours each week, over many weeks, doing the first round of prior art searching.

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12. Inneos (then Aduro) requires all possible inventions to be logged within a "Report of Possible Subject Invention" disclosure form. As I understand it, the purpose of the disclosure form is two-fold. On the one hand, it helps from a business perspective to understand whether the possible invention is worth pursuing. On the other hand, it helps to prepare an eventual patent application. In fact, the final version of this document was shared with the attorney to aid the attorney in preparing the provisional application that led to the '416 Patent. The invention form allowed the attorney to file the provisional application within a week by quoting from this form.

13. I worked with Curtis Ray during the period from October 7, 2003, through October 16, 2003, to prepare the first draft "Report of Possible Subject Invention" ("Rev 0").

14. Following the circulation of Rev 0 on October 16, 2003, Mr. Ray, Mr. Peters, and I discussed the prior art, the unique and novel aspects of the invention, and the various physical embodiments feasibly available to house the optical components. *See also* EX1002 p. 121 at ¶ 8.

15. On or about November 10, 2003, Mr. Peters, Mr. Ray, and I held a meeting to discuss various to-do items and strategic decisions related to the company, including specific tasks related to the invention. EX2034.

16. Among the tasks to be discussed at and following the November 10, 2003, meeting included "File provision patent[:] patent searches- prior art search" and "Invent new demux with no filters." These notations are seen in cells 11A, 12B, and 13A. EX2034.

17. The notation in cells 11A and 12B "File provision patent[:] patent searches- prior art search" refers to our continuing efforts to reduce the '416 Patent to practice by understanding the state of the art and preparing our invention disclosure form to be provided to our attorney.

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18. The notation in cell 13A "Invent new demux with no filters" refers to developing a de-multiplexing ("demux") application in light of the multiplexing ("mux") invention that led to the '416 Patent. EX2034. As a natural follow on to the reason we invented the mux, we contemplated how we could apply the technology on the demux side. Although the mux does not require a demux of the same design to work, there were questions regarding whether the patent should be less restrictive so as to include demuxing capabilities. Our discussions regarding a possible demux with no filters also led to discussions on other possible embodiments.

19. Following the November meeting, I conducted prior art searches several days from November 10, 2003, through January 15, 2004. My prior art search process is iterative. I usually read over the patents that I pull to make sure no one has already done what I think I invented and allows me to explain the invention in light of the state of the art. I will look more carefully at each reference later. I go back and dig in in one way to see what I can learn about the prior art and my invention. I read more patents that may be teaching me something new or that feeds back into the invention in understanding how to reduce it to practice and make the invention work.

20. Also as a result of our November 10, 2003, meeting, Mr. Peters, Mr. Ray, and I tried to figure out how to make the optical design work within Aduro's current mold for optical housing. Molds are prohibitively expensive, so we were motivated to understand the extent to which the optical components could be housed within other embodiments, including pre-existing and modifiable molds.

21. The time period between November 22, 2003, and January 2, 2004, is a holiday-filled period that includes Thanksgiving, Christmas, and the New Year holidays. Based on a review of emails from that time, I can confirm that Aduro was closed from about December 22, 2003, to about January 2, 2004. EX2041.

22. On or about January 13, 2004, the Aduro team held a meeting to discuss various to-do items and strategic decisions related to the company, including the invention that became the '416 Patent. EX2035.

23. Among the tasks to be discussed at the January 13, 2004, meeting was "New optic for Mux, same as current, Bar[r]el Optic." This notation is seen in cells 35A, 36B, and 37B. In general, it refers to ideas for a potential prototype for the multiplexing invention ultimately disclosed in the '416 Patent. The notation "Same as current" (cell 36B) refers to the mechanical design previously developed for a construction used in U.S. Patent Number 6,396,978. Using a pre-existing mechanical design would have been cost-effective because we already owned the mold machine to create the necessary housing for the optical components. By contrast, "Bar[r]el Optic" (37B) refers to a mechanical design option that would have required purchasing a new and cost-prohibitive mold machine. A "barrel optic" is seen in Figures 5 and 6 of the '416 Patent as one embodiment of the invention. *See* EX1001.

24. A third version of the optical modeling was last saved on January 29, 2004. EX2040. I took the screenshot on February 21, 2006, and identified the file to the patent attorney.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on this 23rd day of April, 2024.

By: 

Eric Grann