

relevant to Trade Secret No. 25, which involves a sophisticated set of sensing parameters relating to a carefully selected set of important "use cases" that are most likely to drive the overall LiDAR design. It is my opinion that a similarly comprehensive set of self-driving parameters could only be independently derived if Defendants had undertaken the same years of testing and millions of test miles driven. Thus, it is my opinion that Defendants' misappropriation of Trade Secret No. 25 saved them at least 2 years of development time in their self-driving vehicle program[.] With regards to Trade Secret No. 111, I understand that 456. Waymo and its predecessor 510 Systems devoted at least 1 year in ruling out LiDAR system for medium-/long-range sensing. This is consistent with my expectation in the field where, as discussed above, there is no settled approach to the design of medium-/long-range LiDAR sensor design, and I would expect a company independently developing technology to have to eliminate certain design options through the trial-and-error process. Thus, it is my opinion that Defendants' misappropriation of Trade Secret No. 111, and their immediate pivot to exactly the "right" architecture for the Fuji design, saved Defendants at least 1 year of development time in their self-driving vehicle program. With regards to Trade Secret No. 90, as discussed above, 457. Defendants' [sic] accelerated their knowledge of fiber-laser technology by acquiring Tyto LiDAR in the Spring of 2016. For several years prior to this, Tyto LiDAR — at the direction of Anthony Levandowski — exploited Waymo's trade secret information regarding fiber laser technology in order to create a lower cost design for their "Owl" device. For example, at least by November 2013, Tyto LiDAR had "defined a plan to reduce the cost of the fiber laser and bring the BOM cost down to \$9,500 by January 2014." Tyto's continued work on lowering the cost of its own, custom-built fiber laser from late 2013 until its acquisition by Ottomotto in May 2016 further enhanced Tyto's value to Defendants. It is therefore my opinion that the 2 year, 5 month period of time spent by Tyto exploiting Waymo's Trade Secret No. 90 is a reasonable approximation of the time saved by Defendants in not having to independently develop their own fiber laser technology from the ground up. As Uber points out, the foregoing portions of Hesselink's report essentially amounted to a black box. Hesselink simply recited fact evidence of how much time Waymo supposedly spent developing alleged trade secret numbers 25 and 111, and how much time Tyto supposedly spent exploiting alleged trade secret number 90, then concluded with no discernible analysis or reasoning whatsoever that Uber saved at least that much time in its own development efforts. To give just one non-exhaustive example, Hesselink made no attempt to explain why Waymo,

28 Uber, and Tyto — three very different companies with different resources, personnel, and

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1	development plans — would necessarily take the same amount of time to develop the same
2	technology. His conclusions amounted to attorney argument, not expertise.*
3	Hesselink came closest to bridging the gap between his data and opinions in Paragraphs
4	455 and 456, where he injected conclusory assertions that the amount of time supposedly
5	invested by Waymo in alleged trade secret numbers 25 and 111 comported with his
6	expectations. Such bald assertions, however, constitute mere <i>ipse dixit</i> and fall well short of the
7	reliability required by Federal Rule of Evidence 702. See Daubert v. Merrell Dow Pharms.,
8	Inc., 509 U.S. 579, 589–95 (1993); Gen. Elec. Co. v. Joiner, 522 U.S. 136, 146 (1997).
9	Because Hesselink failed to provide a reliable foundation for his opinions on saved
10	development time estimates for alleged trade secret numbers 25, 90, and 111, and because there
11	was simply too great an analytical gap between the data he cited and the opinions he proffered,
12	those opinions will be excluded.
13	With respect to the "bottleneck" theory, the relevant paragraphs of Hesselink's reply
14	report are reproduced here in full (Dkt. No. 2201-5 (citations omitted)):
15	282. Dr. Lebby opines that the proposed re-designs would not
16	disagree. It is my opinion that the re-design times proposed by
17	Defendants will <i>al teast</i> result in an equivalent schedule impact to Defendants' overall self-driving car program. In other words,
18	minimum of a day of delay in Defendants [ <i>sic</i> ] overall self-driving
19	paragraph 281.
20	283. This opinion is based on the importance of the medium-
21	solution, the fact that any changes in the medium-range LiDAR
22	car technology, and the fact that certain aspects of self-driving car
23	software needed to interpret the LiDAR sensor data. For example,
24	will, in turn, require reconfigurations to the perception software
25	Additionally, re-designing the mechanical design will require
26	that the other hardware interfaces be similarly re-designed in order to properly interact with the proposed re-designed components.
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28	* Incredibly, Hesselink's curriculum vitae, in a section titled "legal expertise," boasts, "Over the years I have gained a reputation as a worldwide recognized expert on optics and holography. I have been an expert

short of the

n expert witness in over 15 major case [*sic*] and *I have never lost a case*" (Dkt. No. 2239-2 at 15 (emphasis added)).

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First, Uber complains that this opinion was not adequately disclosed in Hesselink's opening report. As the quoted portions show, however, Hesselink proffered the opinion in response to a contrary opinion by Uber's expert. Hesselink will therefore be allowed to present his opinion at trial, but only on rebuttal after Lebby opines to the contrary. Second, Uber contends Hesselink's analysis was "conclusory, methodologically unsound, and unreliable." This order disagrees. Hesselink adequately explained his reasoning for why, due to the interlocking nature of self-driving car development, re-design of LiDAR components would have a ripple effect that would delay the overall development timeline. Uber's arguments that Hesselink's reasoning was flawed and his conclusion was incorrect may have merit but go to the weight of his testimony, not to its admissibility. *Third*, Uber contends "an optical engineer who has never worked on self-driving cars . . . is not qualified to offer such an opinion." But Hesselink's "bottleneck" opinion did not exceed the scope of his optical engineering qualifications and was not so specialized that only an expert who personally worked on selfdriving cars could render it. Again, Uber's criticism goes to the weight of Hesselink's testimony, not to its admissibility.

As stated herein, Uber's motion is **GRANTED IN PART** and **DENIED IN PART**. Hesselink will be permitted to testify on rebuttal about his "bottleneck" theory but will not be permitted to opine on saved development time estimates for alleged trade secret numbers 25, 90, and 111.

**IT IS SO ORDERED.** 

22 Dated: January 18, 2018.

UNITED STATES DISTRICT JUDGE