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Case 3:17-cv-00939-WHA Document 433 Filed 05/15/17 Page 1 of 26 1 2 3 4 5 IN THE UNITED STATES DISTRICT COURT 6 FOR THE NORTHERN DISTRICT OF CALIFORNIA 7 8 9 WAYMO LLC, No. C 17-00939 WHA 10 Plaintiff. 11 ORDER GRANTING IN PART v. AND DENYING IN PART 12 UBER TECHNOLOGIES, INC., et al., PLAINTIFF'S MOTION FOR PROVISIONAL RELIEF 13 Defendants. 14 15 **INTRODUCTION** 16 17 18

In this action for trade secret misappropriation, patent infringement, and unfair competition, plaintiff moves for provisional relief. The motion is **GRANTED IN PART** and DENIED IN PART.

## **STATEMENT**

By way of summary, this order finds plaintiff Waymo LLC has shown compelling evidence that its former star engineer, Anthony Levandowski, downloaded over 14,000 confidential files from Waymo immediately before leaving his employment there. The evidence shows that, both before and after his departure, Levandowski and defendant Uber Technologies, Inc., planned for Uber to acquire Levandowski's new companies, defendants Ottomotto LLC and Otto Trucking LLC, and to hire Levandowski as the head of its self-driving car efforts. Moreover, defendants and Levandowski anticipated and took steps to defend against litigation with Waymo in connection with his move to Uber. Significantly, the evidence indicates that,

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during the acquisition, Uber likely knew or at least should have known that Levandowski had taken and retained possession of Waymo's confidential files. Waymo has also sufficiently shown, for purposes of the instant motion only, that the 14,000-plus purloined files likely contain at least *some* trade secrets, and that some provisional relief is warranted while this case progresses toward trial. The scope of relief warranted at this stage, however, is limited by several countervailing factors. As nonexhaustive examples, not all of Waymo's 121 asserted trade secrets actually qualify as such, and few have been traced into the accused technology. Waymo's patent infringement accusations on this motion also proved meritless. Accordingly, this order grants important but narrowly-tailored provisional relief necessary to equitably balance the parties' competing needs at this stage. Now follow the details.

Waymo and Uber compete in the nascent self-driving car industry. Both companies have set their sights on developing custom, in-house Light Detection and Ranging (LiDAR) technology that helps self-driving cars "see" their surroundings. Both sides see such technology as a tremendous advantage over the commercially-available, off-the-shelf LiDAR systems currently used in self-driving cars.<sup>1</sup>

Waymo has supplied a compelling evidentiary record that Levandowski resigned without prior notice from his position at Waymo under highly suspicious circumstances with over 14,000 confidential Waymo files in tow to become the head of Uber's self-driving car team. Waymo now seeks to leverage that evidence into a preliminary injunction and other relief against defendants based on claims that defendants misappropriated Waymo's trade secrets and infringed its patents pertaining to LiDAR. For their part, defendants seek to steer Waymo's misappropriation claims into arbitration by invoking an arbitration clause in Levandowski's employment agreements with Waymo. Defendants' motion to compel arbitration is addressed in a companion order.

Waymo originated and existed as Google Inc.'s self-driving car project (codename "Chauffeur") before spinning out into a separate subsidiary under the same parent company, Alphabet, in December 2016. This order refers to both Chauffeur and Waymo as simply "Waymo."

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The following is supported by the motion record and, unless otherwise indicated, is likely to be proven at trial, for the most part without contradiction.<sup>2</sup>

In summer of 2015, while working for Waymo, Levandowski told coworker Pierre Yves Droz that it would be nice to create a new self-driving car startup; that he had talked with Brian McClendon, an Uber executive involved with Uber's self-driving car project; and that Uber would be interested in buying the team responsible for Waymo's LiDAR (Dkt. No. 25-31 ¶ 28).

On December 3, 2015, Levandowski used his company-issued work laptop to search Waymo's intranet for "chauffeur svn login" and "chauffeur svn eee setup." "SVN" referred to Waymo's password-protected repository of design files, schematics, and other confidential information (Dkt. No. 25-29 ¶¶ 12, 15). To protect the contents of the SVN repository, Waymo encrypted and authenticated all ingress and egress traffic against a regularly audited list of specific authorized users. Additionally, the SVN repository could be accessed only through specialized software called TortoiseSVN (Dkt. No. 25-47 ¶ 25).

On December 11, 2015, Levandowski equipped his work laptop with TortoiseSVN, then used that laptop to download over 14,000 files from the SVN repository. The 9.7 GBs of downloaded data included 2GBs from LiDAR subdirectories. On December 14, Levandowski attached a portable data transfer device to his work laptop for approximately eight hours. On December 18, he reformatted that laptop with a new operating system, wiping it clean. On January 4 and January 11 of 2016, he also used his corporate account credentials to export six additional documents pertaining to Waymo and LiDAR from Google Drive to a personal device (Dkt. No. 25-29 ¶¶ 16–19, 21–23).

On January 5, Levandowski told Droz he planned to "replicate" Waymo's LiDAR technology at his new company (Dkt. No. 25-31 ¶ 27). Meanwhile, emails between Uber executives on January 12 and January 13 showed they had prepared a document titled "NewCo Milestones v5" for Levandowski to review in advance of a meeting the following day. While discovery has yet to unearth the document itself, Uber executive John Bares described it as "full

<sup>&</sup>lt;sup>2</sup> For the benefit of the court of appeals and with apologies to the public, all record citations herein are to the unredacted versions of the documents cited.

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of numbers all of which can and should be adjusted and negotiated . . . over the next week." Referring to the same document, he told another Uber executive, "this list of deliverables is a high bar for sure. But then again so is what [Levandowski] is asking for in \$\$."

On January 15, Levandowski formed Ottomotto (Dkt. No. 27-21). Later in January, Levandowski admitted to Droz that he had met with Uber to look for investors for his new company (Dkt. No. 25-31 ¶ 29). On January 27, Levandowski resigned from Waymo without prior notice. By January 29, internal emails at Uber reflected communications made in confidence by Levandowski or his attorney and shared pursuant to "joint defense agreement" to further investigation for the purpose of obtaining or giving legal advice, "in anticipation of litigation," regarding "due diligence" for the potential acquisition of Ottomotto (Dkt. No. 272-2 at No. 2060). On February 1, Levandowski formed Otto Trucking (Dkt. No. 27-22).

By March, Uber had directed Stroz Friedberg — a firm specializing in, among other things, digital forensics, intellectual property, and litigation support — to prepare a "due diligence report" on its investigation and analysis of files and electronic media from Levandowski. On April 11, defendants, Levandowski, and their counsel executed a written joint defense agreement (Dkt. No. 147-1). In other words, it seems Uber performed specialized "due diligence" on Levandowski with an eye toward jointly defending against potential intellectual property litigation with Waymo as a result of his move to Uber.

In June and July, Sameer Kshirsagar (then a Waymo manager who, among other things, negotiated with LiDAR hardware suppliers) used his corporate account credentials to export five documents from Google Drive. In July, Radu Raduta (then a manufacturing engineer in Waymo's LiDAR department) likewise exported three more documents (see Dkt. No. 25-29 ¶¶ 24–29). In late July, Kshirsagar and Raduta left Waymo to join Levandowski at Otto.

In August, Uber bought Otto for approximately \$680 million and hired Levandowski to lead its self-driving car efforts. In his new position, Levandowski reported directly to Uber CEO Travis Kalanick (Dkt. Nos. 27-23, 27-25). At the time of its acquisition, Otto was working on a LiDAR project called "Spider," which continued at Uber until October 2016. In late October of 2016, Uber abandoned Spider in favor of its current LiDAR project, "Fuji."

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Details about both Spider and Fuji are discussed further below in the context of the parties' arguments concerning Waymo's asserted trade secrets.

Meanwhile, in summer of 2016, Waymo had become suspicious over the abrupt exodus of employees to join Levandowski and investigated the circumstances of their departures. Around October 2016, Gary Brown, a forensics security engineer at Google, discovered the aforementioned downloading by Levandowski, Kshirsagar, and Raduta (see Dkt. No. 25-3 at 9). On December 13, Waymo employee William Grossman became an accidental recipient on an email string among employees at Gorilla Circuits, one of Waymo's LiDAR component vendors. The email concerned Otto and Uber but somehow got mis-sent to Grossman. It was also sent to "Uber@gorillacircuits.com," featured the subject line "OTTO FILES," and appended machine drawings of a printed circuit board (the "Gorilla drawings"). Waymo claims the depicted printed circuit board design for Uber closely resembles the design for Waymo's own currentgeneration LiDAR system, Grizzly Bear version 3 (GBr3) (Dkt. Nos. 25-45; 245-3 at 3).

On February 3, 2017, Waymo filed a public records request with the Nevada Governor's Office of Economic Development and Department of Motor Vehicles (Dkt. No. 27-31). On February 9, Waymo's request turned up a document titled "Autonomous Technology Knowledge and Expertise," which Otto had submitted in accordance with Nevada regulations ("Otto's Nevada submission") (Dkt. No. 27-32 at 51-62). That Otto document stated in relevant part (*id.* at 60–61):

> Selected advanced self-driving technologies developed in-house and/or currently deployed in Otto's autonomous vehicles include . . . LiĎAR - Ĭn-house custom built 64-laser (Class 1) emitting 6.4 million beams a second at 10Hz.

Defendants subsequently walked back this statement on March 15 — after the commencement of this action — when Uber sent a letter to the Nevada DMV "clarifying that any vehicles tested and certified by [Otto in Nevada] that used LiDAR only used 'commercially available' LiDAR" (Dkt. No. 216 at 1). During oral argument on April 12, defense counsel represented to the Court that the LiDAR mentioned in Otto's Nevada submission was Fuji or Velodyne (a commercially-available LiDAR system). In its reply brief, Waymo claims that —

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contrary to both defendants' letter dated March 15 and the representations of defense counsel — Otto's Nevada submission actually referred to Spider, an assertion defendants don't contest.

Waymo filed this civil action on February 23 and moved for provisional relief on March 10. On March 16, after a case management conference, an order approved a plan for expedited discovery (Dkt. No. 61). On March 29, at Uber's cryptic request, the Court convened a non-public conference at which separate counsel appeared for Levandowski. At that conference, defense counsel explained, "Before the acquisition [of Otto] some due diligence was done. A third party prepared a report based on that due diligence. We intend to put that report on a privilege log" (Dkt. No. 131 at 12:22–13:1). Levandowski through separate counsel, however, broadly asserted his Fifth Amendment privilege against self-incrimination, seeking to prohibit defendants from revealing certain information about the due diligence report — even on a privilege log. (The transcript of that conference was eventually made public.)

On April 4, Levandowski filed a formal motion to intervene to seek to redact defendants' privilege log to conceal the identity of the third party that prepared the due diligence report, as well as descriptions of items from Levandowski reviewed during its preparation (Dkt. No. 147). On April 10, after briefing and argument, an order denied the motion (Dkt. No. 202). Levandowski's emergency appeal from that order was rejected.

Levandowski has also asserted his Fifth Amendment privilege against self-incrimination in response to the vast majority of document requests and deposition questions directed at him. This has frustrated Waymo's attempts to learn how Levandowski has used the downloads.

In support of defendants' opposition to the motion for provisional relief, Kshirsagar submitted a sworn declaration stating that, while he did export five documents from Google Drive as described above, he did so in furtherance of his job duties at Waymo and did not take any copies of said documents with him when he left Waymo (Dkt. No. 184 at ¶¶ 9–15). He further stated that he has not used any information from those documents in his work at Otto or Uber, or used Waymo's confidential information to make decisions regarding suppliers or vendors for Otto or Uber (id. at ¶¶ 16, 18). His declaration also included copies of his signed

offer letters with Otto and Uber, each of which required that he not bring or use any intellectual property or confidential information from other companies.

In contrast, defendants have not offered any declaration or other exculpating evidence from Levandowski. Significantly, they do not deny that he took over 14,000 files from Waymo, that Uber lured him with the possibility of acquisition as soon as (and before) he left Waymo, or that Uber anticipated litigation from Waymo over that acquisition. Nor do they offer evidence of any prophylactic steps taken specifically as to Levandowski — for example, offer letters like those signed by Kshirsagar — to prevent him from bringing and using intellectual property or confidential information from other companies. On the contrary, defendants represent that, after diligent investigation, they could not find any documents "sufficient to show any ethical wall or policy regarding Anthony Levandowski's participation or input into Defendants' LiDAR designs or other self-driving car technology" (Dkt. No. 246-19).

Instead, defendants' main theme has been that none of the various term searches done in expedited discovery thus far have located any of the 14,000-plus files on Uber's servers.

Notably, however, whether those searches have been adequate under these circumstances has been a subject of frequent and heated debate. Defendants have also presented an "independent development" narrative in which they developed their own LiDAR technology without using any confidential information from Waymo. That narrative, however, studiously omitted any inquiry into Levandowski's work, essentially erasing him from the history of Uber's self-driving car development. Put differently, the record shows Uber bought Levandowski's services for a tremendous amount of money and positioned him at the forefront of its self-driving car efforts but is barren on how Levandowski has been earning that money and title.

To summarize, Waymo has made a strong showing that Levandowski absconded with over 14,000 files from Waymo, evidently to have them available to consult on behalf of Otto and Uber. As of the date of this order, those files have not been returned and likely remain in Levandowski's possession. The record further indicates that Uber knew or at least should have known of the downloading but nevertheless proceeded to bring Levandowski and Otto on board. Even after this litigation commenced, Uber kept Levandowski as the head of its self-

driving efforts until his "recusal" from LiDAR development on the day before defendants' surreply in opposition to provisional relief (*see* Dkt. No. 295-4 at 2 & n.2).

Defendants maintain that Waymo's files never crossed over to Uber's servers or devices and that "Uber took strict precautions to ensure that no trade secrets belonging to a former employer would be brought to or used at Uber" (Dkt. No. 222-1 at 8–9). These denials, however, leave open the danger of all manner of mischief. For example, it remains entirely possible that Uber knowingly left Levandowski free to keep that treasure trove of files as handy as he wished (so long as he kept it on his own personal devices), and that Uber willfully refused to tell Levandowski to return the treasure trove to its rightful owner. At best (and this has *not* been shown), Uber may have required Levandowski, as a matter of form, to commit not to use the Waymo files. But even if Levandowski so agreed, his word under these circumstances would be cold comfort against the danger of trade secret misappropriation for Uber's benefit.

# **ANALYSIS**

This order decides Waymo's motion based on the actual facts in the record (and reasonable inferences therefrom) without resorting to "adverse inferences" based on Levandowski's assertion of his Fifth Amendment privilege or defendants' alleged obstruction in discovery. Here is why.

The history of this litigation has been and continues to be wrought with contentious discovery disputes that fall into two categories. *First*, as stated, Levandowski has broadly asserted his Fifth Amendment privilege in these proceedings. *Second*, defendants have also asserted extensive claims of privilege in response to attempted discovery. The result has been a proliferation of discovery battles, motion practice, and relentless concealment of likely probative evidence, both documentary and testimonial, from Waymo's view.

In response, Waymo has requested multiple adverse inferences in its favor. Specifically, Waymo asks the Court to infer, based on Levandowski's assertion of his Fifth Amendment privilege and defendants' withholding of discovery, that "(i) copies of Waymo's files are in Levandowski's possession, (ii) Levandowski has brought copies of Waymo's files to Uber on his personal laptops and electronic devices (which Uber has admittedly never searched), (iii)

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Levandowski has accessed copies of Waymo's files while 'working from home' for Uber, and (iv) Uber has used the items delineated in Waymo's Trade Secret List in its LiDAR development" (Dkt. No. 245-3 at 13). During oral argument on this motion, Waymo's counsel stated, "If your Honor only rules on an injunction with just the evidence we've discovered . . . then they will . . . get away with blocking and then using Levandowski's Fifth Amendment assertion to block [Waymo] from the evidence." At this stage, this order disagrees and declines to draw the foregoing adverse inferences on the bases asserted by Waymo, for three reasons.

First, Waymo itself embraced early on the foreseeable disadvantage of an incomplete evidentiary record. It requested expedited discovery and insisted that this motion be heard and decided quickly. For example, during a hearing on multiple discovery disputes on April 12, the undersigned judge cautioned Waymo's counsel, "you're the one that wants this on a hurry-up basis . . . you can't have everything. So . . . we either have the hearing on May 3rd, but you're not going to get a full deck of cards . . . because it's all expedited. It's impossible to get everything. Or we can push it off two months and you'll get 25 percent more." Waymo's counsel replied, "we don't want to move the hearing, and we're willing to do whatever it takes to keep the hearing" (Dkt. No. 230 at 97:18–98:9). In other words, Waymo clearly understood that it would not have the benefit of a full evidentiary record on this motion but pushed full speed ahead anyway, confident that it could meet its burden of proof with less. It cannot now complain that it should be excused from that burden simply because it failed, in the limited time available, to drum up sufficient evidence to support all its requests for extraordinary relief.

Second, the specific adverse inferences Waymo seeks are unnecessary or unwarranted on this record. That the 14,000-plus downloaded files remain in Levandowski's possession can be readily surmised from just the overwhelming evidence that he took those files with him when he left Waymo, combined with the total absence of any evidence that he returned or otherwise surrendered possession of the files. As to whether Levandowski ever consulted those files in his work for Uber, defense counsel has admitted that nothing prevented him from doing so. Whether Levandowski kept the files on personal or work devices and servers would make little difference to his ability to consult the files. And, on this record, it would strain credulity to

imagine that Levandowski plundered Waymo's vault the way he did with no intent to make use of the downloaded trove. Finally, as to whether Uber has used any information enumerated in Waymo's list of trade secrets, that is the main question on the instant motion. Accordingly, Waymo has received expedited discovery — including an inspection of defendants' LiDAR devices, document production, and depositions of defendants' engineers and experts — to shed light on the answer. Insofar as Waymo still falls short of showing use as to certain asserted trade secrets, this order declines to fill the gap with adverse inferences at this stage.

Third, Waymo's counsel was and remains wrong in suggesting that, if Waymo's request for adverse inferences is spurned, Waymo will have no future recourse. As the undersigned judge pointed out during oral argument on this motion, provisional relief remains available "right up to the day of trial." If, as litigation continues, Waymo substantially improves its showing of entitlement thereto, then it remains free to bring additional motions for such relief.

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To obtain a preliminary injunction, Waymo must establish that it is likely to succeed on the merits, that it is likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in its favor, and that an injunction is in the public interest. *Winter v. Natural Resources Defense Council, Inc.*, 555 U.S. 7, 20 (2008). In our circuit, "serious questions going to the merits" and a balance of hardships that tips sharply in Waymo's favor can support issuance of a preliminary injunction so long as Waymo also shows a likelihood of irreparable injury and that the injunction is in the public interest. *Alliance for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1134–35 (9th Cir. 2011). Waymo relies on only its patent infringement and trade secret misappropriation claims as the basis for this motion.<sup>3</sup>

### 1. PATENT INFRINGEMENT CLAIMS.

Waymo's patent theories are too weak to support any provisional relief. The reason can be succinctly stated.

<sup>&</sup>lt;sup>3</sup> As this litigation proceeds, the parties shall instruct their experts to *not* rely upon or quote in any way from this order as support for the experts' opinions.

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In its motion, Waymo initially accused defendants of infringing U.S. Patent Nos.
8,836,922 ("the '922 patent") and 9,285,464 ("the '464 patent"), both of which concern a
"fundamental common lens design" requiring a single, common lens to both transmit and
receive beams (see Dkt. No. 25-3 at 16). Those accusations relied on analysis by Gregory
Kintz, a hired expert witness who predicted under oath the existence of an infringing Uber
LiDAR system based only on extrapolation from the Gorilla drawings and Otto's Nevada
submission (see Dkt. Nos. 25-3 at 17–19; 25-61 $\P\P$ 11, 61–74). Contrary to Kintz's prediction,
however, Fuji turned out to be a LiDAR system
. Among other distinctions, Fuji notably does not use a

In its reply, Waymo shifted from accusing Fuji to accusing Spider. But "Spider . . . never evolved into a working prototype and was abandoned in October 2016," and "a Spider LiDAR . . . was never made, used, offered for sale, sold, or imported" (Dkt. No. 295-4 at 7). Even if Spider used a common-lens design and would have infringed Waymo's patents, it seems clear that Spider is now defunct and does not need to be enjoined.

common-lens design (see Dkt. No. 174-1 ¶ 7). Expert Kintz was flat-out wrong.

### 2. TRADE SECRET MISAPPROPRIATION CLAIMS.

By contrast, the trade secrets case presented by Waymo does warrant provisional relief. This order concludes that Waymo has established all four *Winter* factors as to its trade secret misappropriation claims and that certain provisional relief is warranted, as detailed below.

### A. Likelihood of Success on the Merits.

Waymo brings misappropriation claims under the California Uniform Trade Secrets Act and the federal Defend Trade Secrets Act, both of which offer essentially the same definitions for our purposes. "Misappropriation" means:

- (1) Acquisition of a trade secret of another by a person who knows or has reason to know that the trade secret was acquired by improper means; or
- (2) Disclosure or use of a trade secret of another without express or implied consent by a person who:
  - (A) Used improper means to acquire knowledge of the trade secret; or

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(B) At the time of disclosure or use, knew or had re	ason to
know that his or her knowledge of the trade secret v	vas:

- (i) Derived from or through a person who had utilized improper means to acquire it;
- (ii) Acquired under circumstances giving rise to a duty to maintain its secrecy or limit its use; or
- (iii) Derived from or through a person who owed a duty to the person seeking relief to maintain its secrecy or limit its use; or
- (C) Before a material change of his or her position, knew or had reason to know that it was a trade secret and that knowledge of it had been acquired by accident or mistake.

"Trade secret" means information that:

- (1) Derives independent economic value, actual or potential, from not being generally known to the public or to other persons who can obtain economic value from its disclosure or use; and
- (2) Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.

And "improper means" includes theft, bribery, misrepresentation, breach or inducement of a breach of duty to maintain secrecy, or espionage, and excludes reverse engineering or independent derivation. CAL. CIV. CODE § 3426.1; *see also* 18 U.S.C. 1839 (for brevity's sake, this order quotes only from the CUTSA).

As stated, Waymo has supplied a compelling record that Levandowski pilfered over 14,000 files from Waymo, and that Uber knew or should have known as much when it brought him on board. The parties dispute, however, whether defendants have actually used any information within those files. They also dispute whether any such information qualifies as a trade secret. Since Waymo has also made a strong showing — and defendants have not disputed — that it used reasonable efforts to maintain the secrecy of the files, the latter question further boils down to whether any information within those files derives independent economic value from not being generally known.

In this connection, Waymo's descriptions of its asserted trade secrets follow a pattern of claiming broad swaths of solutions to general competing considerations and engineering trade-offs rather than the single, specific solution adopted by Waymo. The problem, of course, is that

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such considerations and trade-offs are known outside of Waymo. Every company in the field can be expected to settle on some specific resolution thereof, and every company's specific resolution may well qualify as a trade secret. But it would be wrong to allow any company to leverage a single solution into a monopoly over broad swaths of other solutions — for example, merely because they all fall on the side of generally favoring a particular consideration over others. To do so would be to allow monopolization of broad scientific or engineering concepts and principles. Waymo's gamesmanship on this score undermines its credibility on this motion.

That being said, Waymo has shown at least serious questions going to the merits concerning whether some information within the 14,000-plus downloaded files has been used by defendants and qualifies for trade secret protection. Two examples will suffice.

*First*, Waymo claims as a trade secret (Dkt. No. 25-7  $\P$  7). At face value, this asserted trade secret broadly captures the *concept* of diodes on printed circuit boards in a LiDAR transmit block. The problem is that there are, broadly speaking, only three possibilities — overhang, underhang, or hanging exactly flush. The engineering pros and cons of each are generally known. To claim a broad swath of all solutions is thus not credible. In the face of this criticism, Waymo has now retreated to claiming Uber's Fuji uses precisely this (Dkt. No. 245-3 at 5).4 When the Court asked what was so special about the , Waymo responded that it arrived at "after months of research and development and trial and error, and spent years validating it in a production environment. The reflects Waymo's resulting knowledge about the benefits of particular amounts of weighed against associated drawbacks with intentional ." In short, Waymo now claims its

<sup>&</sup>lt;sup>4</sup> Although both sides and this order refer to the design at issue as should be noted that all agree the actual with respect to LiDAR printed circuit boards will vary simply due to manufacturing tolerances. This practical caveat does not, however, alter the analysis, since all agree that the designs for Fuji and GBr3 both specifically call for

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undersigned judge noted during oral argument, this is not a credible explanation.

<sup>&</sup>lt;sup>6</sup> This conclusion does not in any way bless Waymo's overreaching attempt to sweep into the ambit of trade secret protection general approaches and principles far broader than its actual GBr3 design, or its use of moving targets as asserted trade secrets. But at this stage and on this record, to jettison Waymo's showing of likely misappropriation by defendants simply because Waymo engaged in litigation gamesmanship (of which defendants themselves are hardly innocent) would be an unduly severe response. Instead, Waymo's inequitable conduct is factored into the relief granted herein, as this order explains below.

1	(Dkt. No. 25-7 $\P$ 2-3). Whereas Waymo's GBr3 uses			
2	, Uber's Fuji uses . Moreover,			
3	whereas			
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5	Waymo contends, however, that the foregoing distinctions are "minor modifications"			
6	that do not defeat its claims of misappropriation. What matters, according to Waymo, is that			
7	Uber uses (Dkt. No. 245-			
8	3 at 6). Defendants essentially respond that these choices constitute an "obvious configuration			
9	in view of known design considerations" but identify no technical literature disclosing or other			
10	LiDAR device using			
11	. Again, that Fuji — and, at least on			
12	this record, no other LiDAR — copies such specific GBr3 specifications is striking evidence			
13	suggesting that at least some information from Waymo's files has already found its way into			
14	Uber's LiDAR designs.			
15	There are many possible combinations of PCBs and diode arrangements that would			
16	, is only one. It remains somewhat			
17	unclear why this particular configuration is better than any other, but the rub is that Uber's			
18	adoption of the exact same configuration is suspicious. This suspicion is not relieved simply			
19	because Uber has split up the configuration to operate in a , since the			
20	configuration itself is supposedly valuable without reference to its placement in any particular			
21	overall LiDAR design. Put differently, Uber appears to be using Waymo's			
22	, simply adapted for			
23	·			
24	In short, on this record, Waymo has shown at least serious questions going to the merits			
25	as to whether Uber's adoption of and			
26	— the exact			
27	used by Waymo — resulted from old-fashioned, all-American			
28	misappropriation of trade secrets. At this stage, that is sufficient to extrapolate that at least			

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some of the information in the 14,000-plus downloads likely qualifies for trade secret
protection, and that certain relief is warranted to prevent the misuse of those downloads as this
litigation progresses.

Turning briefly to the rest of Waymo's 121 asserted trade secrets, this order notes that not all qualify for trade secret protection. As stated, Waymo has overreached in attempting to claim ownership over general principles and approaches in the field. One example deserves notice here.

Waymo claims as its first asserted trade secret "a PCB for a LiDAR system comprising a plurality of light sources configured to emit a plurality of light beams, wherein the

between the plurality of light sources

" (Dkt. No. 25-7 ¶ 1). Notably, despite claiming that its *specific* design copied by Uber required a six-month "iterative process" to figure out the "optimal layout, orientation, and spacing of all the laser diodes," Waymo does not limit its claimed trade secret to the specifications of its own PCBs but broadly claims any PCB with between "light sources" (see Dkt. Nos. 25-3 at 13–14;

25-31 ¶ 22). The broad scope of this asserted trade secret is breathtaking and appears to have been a litigation gimmick to anticipate the possibility that discovery would reveal different between Uber's Fuji and Waymo's GBr3.

Since Matthew Brady, if not Galileo Galilei, the science of optics has taught that all points within the field of view in front of a lens come into focus behind the lens, organized to duplicate the same overall image (albeit upside down and reversed left to right). This known principle led to cameras and film photography. Another known principle is the converse, i.e., that a light source, like a laser, behind the lens will be projected to its corresponding point in the terrain in front of the lens. By adjusting the specific positioning of the light source, any point in a landscape visible in front of the lens, even a distant point, can be illuminated. This, of course, is used in LiDAR to illuminate specific points in the field of view.

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Co., 350 F.2d 134, 139 (9th Cir. 1965).

points	, then the lasers me	ast be
recedes. T	his simple proposition tells us that if an array of lasers behind a	a lens is to sample
behind the	lens to illuminate each end of the line will need to be closer an	d closer as the lens
line 10 fee	t long painted on a road will shrink with distance. Conversely,	the light sources used
known that	t the object's image behind the lens will shrink and vice versa.	Thus, the image of a
As	a lens moves farther and farther away from an object in a lands	scape, it is commonly

By the same token, a vertical row of light sources evenly spaced behind a lens will project onto the landscape in its field of view at ever greater distances. For LiDAR purposes, this may undersample the far field. To sample at , the corresponding laser positions must, as explained above, In short, Waymo's supposed trade secret is nothing more than Optics 101. General approaches dictated by well-known principles of physics, however, are not "secret," since they consist essentially of general engineering principles that are simply part of the intellectual equipment of technical employees. They are

The foregoing is not an exhaustive analysis of the many arguments raised by both sides. For example, at oral argument, the parties debated at length various facets of each asserted trade secret discussed above, which debate need not be repeated here. The Court has also considered other arguments raised in the parties' briefing and at oral argument and concludes they would not alter the outcome of this order.

therefore not protectible as trade secrets. See Winston Research Corp. v. Minn. Min. & Mfg.

The bottom line is the evidence indicates that Uber hired Levandowski even though it knew or should have known that he possessed over 14,000 confidential Waymo files likely containing Waymo's intellectual property; that at least some information from those files, if not the files themselves, has seeped into Uber's own LiDAR development efforts; and that at least

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some of said information likely qualifies for trade secret protection. This is sufficient for Waymo to show serious questions going to the merits of its case.

#### В. Likelihood of Irreparable Harm.

The parties debate whether courts may presume irreparable harm in trade secret cases. This order need not reach the issue, because it concludes Waymo has shown likelihood of irreparable harm without the benefit of any presumption in its favor.

Waymo claims it will suffer irreparable harm if defendants are allowed to use its trade secrets to gain a competitive edge — or even beat Waymo to market — in the nascent selfdriving car industry (Dkt. No. 25-3 at 20–21). Defendants respond that

reason, the Court can always prevent them from "hitting the market first," thereby undoing any competitive harm Waymo might suffer. There is thus no threat of irreparable harm that warrants injunctive relief at this stage (Dkt. No. 295-4 at 9–10).

At that point, defendants

Defendants' argument oversimplifies our case. The root problem remains that, on this record, Levandowski downloaded and retained possession of over 14,000 confidential Waymo files — at least some of which likely contain trade secrets — for the ostensible purpose of using the information therein in his work for a competitor. He can easily and at any time consult that information to further defendants' LiDAR development even if none of the files ever actually pass through an Uber server. Such misuse of Waymo's trade secrets might be virtually untraceable. For example, defendants might claim that any suspicious "breakthrough" in their self-driving car efforts is simply independent development or even the result of Levandowski's brilliance rather than his exploitation of Waymo's confidential information (see, e.g., Dkt. No. 169 at 49:20–50:6 (extolling Levandowski's accomplishments before concluding, "this is not someone who has to steal anything. He knows this stuff.")).

Indeed, defendants have already carefully crafted a narrative of their self-driving car efforts that conspicuously and incredibly denies any meaningful contribution by Levandowski — even though Uber, in a deal worth approximately \$680 million dollars, hired him to lead those efforts. Levandowski has broadly asserted his Fifth Amendment privilege. And troves of

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likely probative evidence have been concealed from Waymo under relentless assertions of		
privilege that shroud dealings between Levandowski and defendants in secrecy. As this motion		
has shown, questions on the merits as to even a few asserted trade secrets provoke bitter		
evidentiary disputes and intense debate. Contrary to defendants' suggestion, it would not be an		
easy matter — even if Waymo prevails at trial — to simply identify and enjoin parts of		
defendants' technology that use Waymo's trade secrets. It will be a bone-crushing endeavor.		
And, even then, it may prove impossible to fully restore the parties to their respective		
competitive positions as if no misappropriation had occurred. It is far better to instead put in		
prophylactic measures now to prevent misappropriation (or further misappropriation) to the		
extent warranted on this record.		

Waymo may also suffer other irreparable harms from misappropriation of its trade secrets even if For example, any Waymo trade secret used in defendants' technology may be destroyed via disclosure in defendants' regulatory filings. Defendants claim this is a speculative possibility, but do not dispute that such filings — including technical disclosures — are part and parcel of the commercialization process for self-driving cars. Otto's Nevada submission shows as much. As another example, if defendants use Waymo's trade secrets to accelerate their own progress in LiDAR development, that momentum would improve their ability to attract investors and talented engineers away from competitors — including Waymo itself. That poaching scenario and the harm it entails are, in fact, the subject of Waymo's separate arbitration proceedings against Levandowski.

It would likely be futile to attempt, after the fact, to estimate the monetary value of injury suffered from either the loss of Waymo's competitive position in this nascent industry or the destruction of its trade secrets pertaining to the same. Monetary damages would thus be unavailable to compensate for the irreparable harm threatened here.

Defendants also contend that Waymo unduly delayed in filing this action. This delay, they argue, implies a lack of urgency and undermines Waymo's claims of irreparable harm. Defendants' theory seems to be that Waymo should have sued as soon as it found evidence of

Levandowski's downloads in October 2016, if not earlier (*see* Dkt. No. 222-1 at 21–22). Waymo responds it had no evidence that defendants were actually *using* the files until the Gorilla email dated December 13, but defendants dismiss this development as immaterial (*see* Dkt. No. 295-4 at 10). A linchpin of defendants' misappropriation defense, however, is their contention that, *even now*, Waymo cannot prove its case because it lacks evidence that defendants have actually *used* the 14,000-plus downloaded files. In other words, defendants contend that Waymo lacks *sufficient* evidence of use but simultaneously criticize Waymo for not suing before it had *any* evidence of use. This argument impeaches itself. This order finds that Waymo reasonably refrained from bringing suit until it discovered evidence indicating use, and that nothing about this course of action suggests a lack of urgency belying likelihood of irreparable harm.

To repeat, as far as the record shows, Levandowski remains in possession of over 14,000 confidential files from Waymo, at least some of which likely contain Waymo's trade secrets. Misuse of that treasure trove remains an ever-present danger wholly at his whim. Under these circumstances, the harm that Waymo is likely to suffer as a result of such misuse cannot be unwound after the fact, nor can it be adequately compensated for with monetary damages. This order therefore concludes Waymo has shown likelihood of irreparable harm sufficient to justify the relief granted herein.

### C. Public Interest.

Defendants do not dispute that the public has an interest in vindicating intellectual property rights, and in prohibiting unfair competition. Rather, defendants argue that this public interest does not weigh in Waymo's favor because Waymo has not shown likelihood of success on its claims (Dkt. No. 222-1 at 24–25). This order disagrees. As stated, Waymo has shown at least serious issues going to the merits of its misappropriation claims. Inasmuch as Waymo may have rights in valid trade secrets warranting protection until trial — and defendants have not yet shown otherwise — the public has an interest in vindicating those rights.

Defendants also argue that the public interest weighs in their favor because allowing Uber to continue developing its technology will lead to more competition and consumer choice

in the self-driving car market. But the limited relief granted herein will not stop Uber from continuing to develop its technology. Moreover, safeguards imposed on Uber in response to brazen misappropriation of trade secrets by its executive and engineer would hardly discourage *legitimate* competition in a field where intellectual property rights are important to innovation.<sup>7</sup>

On balance, the public interest factor favors the tailored relief granted herein.

# D. Balance of Hardships.

Waymo asks "that Uber be preliminarily enjoined from . . . using the trade secrets discussed in Waymo's briefing [and,] based on adverse inference, using the additional trade secrets identified in Waymo's list of trade secrets" (Dkt. No. 245-3 at 15). But, as explained, even the handful of asserted trade secrets briefed on this motion contains information that likely does *not* qualify for trade secret protection. Moreover, it has become clear that Waymo has both overreached in defining its trade secrets and made moving targets out of its asserted trade secrets to evade defensive arguments. Under these circumstances and on this record, no adverse inference that could be drawn in Waymo's favor would justify overlooking these problems, pretending that all 121 of Waymo's asserted trade secrets are valid, and enjoining defendants from using any of them so as to effectively halt Uber's self-driving efforts until trial.

For similar reasons, this order also declines, at this stage, to enjoin Uber from using even the specific asserted trade secrets on which Waymo has shown serious questions going to the merits — *i.e.*, discussed above.

Even a limited injunction as to these specific features would impose hardship on Uber's overall LiDAR development that is disproportionate to Waymo's limited showing of misappropriation by defendants thus far.<sup>8</sup>

Importantly, Waymo's motion seeks relief via the Court's equitable power. The unusual and difficult circumstances here demand narrow and carefully-tailored relief. *See Sierra Forest* 

 $<sup>^{7}</sup>$  Plus, it is hard to see how the relief granted herein would appreciably limit consumer choice if, as defendants say,

<sup>&</sup>lt;sup>8</sup> If the jury finds, however, that Waymo's trade secrets have been wrongly incorporated into any accused technology, this order will not necessarily protect defendants from a permanent injunction stripping those trade secrets from the offending technology.

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Legacy v. Rey, 577 F.3d 1015, 1022 (9th Cir. 2009) ("When deciding whether to issue a narrowly tailored injunction, district courts must assess the harms pertaining to injunctive relief in the context of that narrow injunction."); High Sierra Hikers Ass'n v. Blackwell, 390 F.3d 630, 641 (9th Cir. 2004) (recognizing the district court's broad latitude in crafting equitable relief); United States v. Odessa Union Warehouse Co-op, 833 F.2d 172, 175 (9th Cir. 1987) ("The essence of equity jurisdiction is the power of the court to fashion a remedy depending upon the necessities of the particular case."). Waymo itself contributed significantly to the difficulty by both overreaching in its assertion of supposed trade secrets and moving the target as discovery and briefing progressed. This further weighs against granting Waymo broader relief, at least at this stage. See Ctv. Sanitation Dist. No. 2 of Los Angeles Ctv. v. Inland Container Corp., 803 F.2d 1074, 1080 (9th Cir. 1986) ("He who seeks equity must do equity."). Having considered all the foregoing factors and the unique demands of this case on Waymo's instant motion, this order prescribes relief to strike the proper balance.

This order mainly prohibits Levandowski from working on Uber's LiDAR — a measure Uber has very recently implemented of its own initiative, so the hardship on defendants will be minimal. On the other hand, this will provide considerable protection to Waymo against Levandowski's potential misuse of its proprietary information in competing technology. This order therefore concludes the balance of hardships tips sharply in Waymo's favor, at least as to the relief described herein.

#### 3. SCOPE OF RELIEF GRANTED.

Having considered the foregoing, the Court **ORDERS** as follows:

1. The term "downloaded materials," as used in this provisional order, means any and all materials that Anthony Levandowski downloaded from Waymo and kept upon leaving Waymo's employment, regardless of how long he kept them for and whether or not any such materials qualify as trade secrets or proprietary or confidential information.

2. Defendants must immediately and in writing exercise the
full extent of their corporate, employment, contractual, and other
authority to (a) prevent Anthony Levandowski and all other
officers, directors, employees, and agents of defendants from
consulting, copying, or otherwise using the downloaded materials
and (b) cause them to return the downloaded materials and all
copies, excerpts, and summaries thereof to Waymo (or the Court)
by MAY 31 AT NOON. Copies essential for counsel of record and
their litigation experts to use in defending this civil action are
exempted from the foregoing requirement. <sup>9</sup>

3. With respect to Anthony Levandowski, defendants shall immediately (a) remove him from any role or responsibility pertaining to LiDAR; (b) take all steps in their power to prevent him from having any communication on the subject of LiDAR with any officer, director, employee, agent, supplier, consultant, or customer of defendants; and (c) prohibit him from consulting, copying, or otherwise using the downloaded materials in any way. Defendants shall instruct all their officers, directors, employees, agents, suppliers, consultants, and customers in writing of this prohibition, and further instruct them in writing to immediately

<sup>&</sup>lt;sup>9</sup> In their presentation for oral argument, defendants quoted *Doe ex rel. Rudy-Glanzer v. Glanzer* for the proposition that "individuals cannot be forced to waive their Fifth Amendment rights against self-incrimination by threats that their employment will be terminated." 232 F.3d 1258, 1265 (9th Cir. 2000). Perhaps defendants mean to suggest that Uber cannot use any employer authority to pressure Levandowski to produce the 14,000-plus downloaded files. If so, the suggestion is baseless. *Glanzer* produced the foregoing quote as an example of how "certain sanctions stemming from a party's refusal to answer a question on Fifth Amendment grounds are too costly." This order, however, threatens no sanctions against *Levandowski*. It simply directs *Uber*, a private employer, to do whatever it can to ensure that its employees return 14,000-plus pilfered files to their rightful owner. If Uber were to threaten Levandowski with termination for noncompliance, that threat would be backed up by only Uber's power as a private employer, and Levandowski would remain free to forfeit his private employment to preserve his Fifth Amendment privilege. No binding case law holds that the Fifth Amendment prohibits such actions by private employers. In short, in complying with this order, Uber has no excuse under the Fifth Amendment to pull any punches as to Levandowski.

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report any suspected breaches thereof to the special master (or to the Court).

4. With respect to all other persons, including those with Stroz Friedberg, defendants shall conduct a thorough investigation and provide a detailed accounting under oath setting forth every person who has seen or heard any part of any downloaded materials, what they saw or heard, when they saw or heard it, and for what purpose. In their investigation, defendants must do more than query servers with term searches. For example, they must interview personnel with particular focus on anyone who has communicated with Anthony Levandowski on the subject of LiDAR. Defendants' accounting shall not be limited to Uber but shall include all persons who fit the foregoing description, including Levandowski and his separate counsel. The accounting may exclude, for only the time period after the commencement of this civil action, the attorneys of record and their staff and experts employed for this litigation. The accounting shall not be limited to downloaded materials that happened to make their way into some due diligence report but shall cover any and all downloaded materials. The accounting shall also identify the complete chains of custodians for every copy of any downloaded materials or due diligence report referencing downloaded materials. Defendants must also use the full extent of their authority and influence to obtain cooperation with the foregoing procedure from all involved. For example, if a potential custodian refuses to cooperate, then defendants' accounting shall set forth the particulars, including all efforts made to obtain cooperation. The accounting must be filed and served by JUNE 23 AT NOON. The accounting may be filed

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under seal *only* to the extent that it quotes or appends downloaded materials.

- 5. Also by JUNE 23 AT NOON, defendants shall provide Waymo's counsel and the Court with a complete and chronologically organized log of all oral and written communications — including, without limitation, conferences, meetings, phone calls, one-on-one conversations, texts, emails, letters, memos, and voicemails — wherein Anthony Levandowski mentioned LiDAR to any officer, director, employee, agent, supplier, or consultant of defendants. The log shall identify for each such communication the time, place (if applicable), mode, all persons involved, and subjects discussed, as well as any and all notes or records referencing the communication.
- 6. Waymo is hereby granted further expedited discovery in aid of possible further provisional relief. Subject to the protective order, and upon reasonable notice, Waymo's counsel and one expert may inspect any and all aspects of defendants' ongoing work involving LiDAR — including, without limitation, schematics, work orders, source code, notes, and emails whether or not said work resulted in any prototype or device. With respect to its trade secret misappropriation claims only, Waymo may take seven further depositions on seven calendar days notice, may propound 28 reasonably narrow document requests for which the response time is reduced to 14 calendar days, and may propound 28 reasonably narrow interrogatories for which the response time is also reduced to 14 calendar days. If Waymo moves for further provisional relief before trial, then all its declarants in support of such motion must sit for depositions on an

expedited basis. Otherwise, defendants may take only normal, unexpedited discovery. After Waymo has exhausted its expedited discovery, it may continue with normal discovery.

7. Defendants shall keep complete and accurate records of their compliance with all of the foregoing requirements, including directives given to Anthony Levandowski and others. The special master shall monitor and verify said compliance. To that end, the special master shall promptly develop proposed monitoring and verification protocols with the parties' input and then submit the proposed protocols to the Court for approval. The protocols shall provide for the special master to visit defendants' facilities and monitor communications as necessary to ensure that Anthony Levandowski remains sealed off from LiDAR activities.

The foregoing provisional relief shall become effective upon the posting by Waymo of a bond or other security in the amount of **FIVE MILLION DOLLARS**.

### **CONCLUSION**

For the foregoing reasons, plaintiff's motion is **GRANTED** to the extent stated above and **DENIED** in all other respects.

IT IS SO ORDERED.

Dated: May 11, 2017.

WILLIAMALSUP UNITED STATES DISTRICT JUDGE