UNITED STATES DISTRICT COURT WESTERN DISTRICT OF TEXAS WACO DIVISION

JENS H. S. NYGAARD

Plaintiff,

v.

FÉDÉRATION INTERNATIONALE DE L'AUTOMOBILE, FORMULA ONE MANAGEMENT LTD., FORMULA ONE WORLD CHAMPIONSHIP, MERCEDES BENZ GRAND PRIX LTD., DAIMLER AG, LEWIS HAMILTON, RED BULL TECHNOLOGY LTD., RED BULL RACING LTD., FERRARI S.P.A., CHARLES LECLERC, AND DALLARA AUTOMOBILI S.P.A, Civil Action No. 6:20-cv-00234-ADA

JURY TRIAL DEMANDED

Defendants.

SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

I. INTRODUCTION

1. Plaintiff Jens H. S. Nygaard ("Nygaard") files this First Amended Complaint for infringement of his United States Patent No. **7,494,178** ("the '178 patent") in violation of Sections 271(a), (b), (c) and (f) of Title 35 of the United States Code, by Fédération Internationale de l'Automobile ("FIA"), Formula One Management Ltd. ("F1"), Formula One World Championship Ltd. ("FOWC"), Mercedes-Benz Grand Prix Ltd. ("Mercedes"), Daimler AG ("Daimler"), Lewis Hamilton ("Hamilton"), Red Bull Technology Ltd. ("RBT"), Red Bull Racing Ltd. ("RBR"), Ferrari S.p.A. ("Ferrari"), Charles Leclerc ("Leclerc"), and Dallara Automobili S.p.A. ("Dallara") (collectively "Defendants"), by making, using, selling, offering for sale or importing the "Halo" and "Aeroscreen" devices in the United States for implementation in cars in the United States, causing to be supplied substantial components of the vehicles implementing the

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Halo and Aeroscreen from the U.S. for assembly abroad in a manner that would infringe the patent, and/or indirectly causing others to do so. The patented inventions are in structures to protect the heads and necks of drivers in the U.S. Grand Prix, the U.S. ePrix,¹ and Formula 3 events in the United States, and their U.S. based teams, and the NTT IndyCar 500 Series, other Indy Circuits, and also their U.S. based teams. Plaintiff alleges as follows:

2. The Halo is a device that is integrated into Formula 1, Formula E, and other "Formula" cars. It is designed to protect the drivers' heads and necks in collisions as well as from debris. The Halo is credited with saving at least three drivers in Formula events from death or injury, including Mr. Leclerc (a serious collision with another car in the 2018 Belgian Grand Prix).

3. The Aeroscreen is a safety device deployed in cars competing in the NTT IndyCar 500 Circuit and other IndyCar Circuits. Although only first deployed in the 2020 NTT IndyCar 500 this season, it appears to have saved three drivers from death or serious injury in a major accident in a race in Iowa on July 18, 2020 and another in an accident on August 27, 2020.

4. In or around 2011 there was concern in Formula racing and IndyCar racing about driver safety in light of driver deaths and injuries in 2009 and 2011. The FIA and/or the FIA Institute for Motor Sport Safety and Sustainability ("FIA Institute"),² undertook a project to develop solutions to address the risks to drivers' necks and heads in open cockpit (e.g. Formula) cars. IndyCar also wanted to develop safety measures to address these same risks in its open cockpit racing. Upon information and belief, FIA and FIA Institute garnered cooperation from F1

¹ Formula E refers to Formula racing with electronic cars.

² FIA formed the FIA Foundation in 2001 as its charitable arm, and these organizations formed the FIA Institute for Motor Sport Safety and Sustainability (FIA Institute) in 2004. FIA closed the FIA Institute at the end of 2016 and took over the "Halo" development effective January 1, 2017.

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Grand Prix teams and others, including IndyCar for a their safety project ("the Project"). Both the Halo and the Aeroscreen have their genesis in the Project.

5. The Halo (including the Halo structure in the Aeroscreen) was developed from discussion and study of Nygaard's patented inventions at a meeting on March 27, 2013 at FIA Headquarters in Paris, France among him, the FIA Institute for Motor Sport Safety and Sustainability ("FIA Institute"),³ and Dallara. Mr. Nygaard sent a letter to FIA offering to license his patents for safety devices. In response to his letter, Mr. Nygaard was asked to a meeting with FIA Institute's administration in London on or about April 5, 2013. At that meeting, the FIA Institute demanded that Mr. Nygaard give over his patent rights with no guarantee of payment of any kind.

6. On May 31, 2013, the FIA Institute informed Mr. Nygaard by letter that it would not negotiate with him unless, among other things, he committed to give it control of his '178 patent for motor sports (e.g., Grand Prix, Formula E, 2, 3, 4, and other circuits) and agreed he would receive no compensation unless and until it had successfully commercialized the patent (but with no obligation it do so).

7. The Halo was developed for, or alternatively with, the FIA Institute, Dallara, and later at least Mercedes and Ferrari, for use in Formula racing, including the Grand Prix Racing Circuit during the Project. RBT became involved in the Project, and developed a competing safety device called the "Aeroscreen".

³ FIA formed the FIA Foundation in 2001 as its charitable arm, and these organizations formed the FIA Institute for Motor Sport Safety and Sustainability (FIA Institute) in 2004. FIA closed the FIA Institute at the end of 2016 and took over the "Halo" development effective January 1, 2017.

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8. Despite Mr. Nygaard's personal involvement in developing the Halo, and their knowledge of his patent rights, neither FIA, F1, FOWC, Mercedes, Daimler, Ferrari, RBT, RBR, Dallara nor any teams have taken a license or paid him a royalty.

9. The F1 Strategy Group adopts rules for F1 Grand Prix Racing. The rules it adopts then must be ratified by the F1 Commission, and then are implemented in the regulations by the F1A. The F1 Strategy Group has five permanent members, F1, FIA, Mercedes, Ferrari, RBR, Williams, McLaren, and potentially a sixth member from the other teams. In 2016 the FIA with the support of the drivers proposed adoption of the Halo for F1 Grand Prix racing. The F1 Strategy Group, however, did not like the aesthetics of the Halo and was concerned about how fans would react to it. The F1 Strategy Group voted to delay consideration of adoption of the Halo for a year to explore other alternatives.

10. Liberty Media purchased F1 as of January 2017. The "new" F1 has now been able to eliminate the F1 Strategy Group for its new contract cycle that begins at the end of 2020. In 2017, F1 started to bring changes to the F1 Strategy Group by getting all the other teams access to meetings as observers.

11. The Halo rule was adopted at an F1 Strategy Group meeting in July 2017 with the "new" F1 participating and the other teams present. The Halo rule was then ratified by the F1 Commission. After the Halo rule was proposed and adopted by the F1 Strategy Group, and later

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ratified by the F1 Commission, that it was then implemented by FIA for F1 Grand Prix and other Formula Racing.⁴

12. FIA describes itself as "the governing body for world motor sport and the federation of the world's leading motoring organisations." It is a non-profit making association based in France. It is a membership organization under French law. FIA is the "governing body" for Formula 1, F3 Americas, Formula 4, and World Endurance Racing. FIA is the sanctioning authority for the U.S. Grand Prix held at the Circuit of the Americas in Dell Valle, Travis County, Texas ("COTA"), the U.S. ePrix on New York City roads, the F3 Americas circuit, among other racing in this country.

13. Upon information and belief, FIA was paid substantial fees by COTA to host the 2018 and 2019 Grand Prix events (approximately \$30 million in 2019 alone, all or mostly all of the annual fees are reimbursed by the State of Texas).

14. Upon information and belief, FIA, F1 and others have been working to bring another F1 race to the U.S., for 2021 in Miami, Florida.

15. Liberty Media purchased Formula One effective January 2017 for about \$4.6 billion. F1 and FOWC are the Liberty Media entities that manage and commercialize Formula One Grand Prix racing, including the 2018 and 2019 U.S. Grand Prix events at COTA. Upon information and belief, F1 and FOWC are among the successors in interest to the original Formula

⁴ "The sport's regulations are currently set by a procedure involving the F1 strategy group, the F1 commission and the World Motor Sport Council. The strategy group, consists of five permanent members, Red Bull, Mercedes, Ferrari, McLaren and Williams plus the highest non-qualifying team (Force India) and Ecclestone, representing FOM, and Todt the FIA, where each party has equal weight." "FIA should take greater role in F1 governance, says Jean Todt", The Guardian, US Edition, Formula 1 2016, last visited on September 7, 2020, at https://www.theguardian.com/sport/2016/jun/23/fia-should-take-greater-role-in-f1-governance-

<u>says-jean-todt.</u> Mr. Todt is quoted in the article as saying, "The governing body [FIA] has not enough power, or influence to have the final say on the rules," as quoted.

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One company and Delta Topco, Ltd., founded by Bernie Ecclestone to exploit media and other commercial aspects of Formula One Grand Prix racing.

16. F1, FIA and then F1 teams (including Mercedes, Ferrari and RBR) have contracts among them that provide for governance of F1 Grand Prix racing and also allocate revenues among them.

17. Delta was the original entity that owned the license from FIA to exploit rights regarding the Formula One Grand Prix series. Mr. Nygaard communicated with Formula One and Mr. Ecclestone (and through them, Delta) regarding his intellectual property by 2006. Upon information and belief, Delta transferred its license and rights to commercialize Formula One Grand Prix racing to FOWC in or after January 10, 2017. Delta remains an indirect subsidiary of Liberty.

18. Mercedes is the racing arm of Daimler AG ("Daimler"). Mercedes was a member of the F1 Strategy Group that adopted the Halo in 2017 as a safety measure for Grand Prix racing. Mercedes actively worked on the Halo as part of the Project, and produced an early prototype for it. Mercedes competed in the 2018 and 2019 U.S. Grand Prix with cars implementing the Halo. Mercedes estimated in its most recent financial statement that it creates about \$5 billion in advertising and brand value for Daimler AG.

19. Mr. Paddy Lowe was executive director (technical) for Mercedes from 2013 to 2017, during the time when Halo was in development and Mercedes produced a prototype Halo. In or around late 2012, shortly before Mr. Lowe started at Mercedes, Mr. Lowe had an in person meeting with Mr. Nygaard and discussed his patent and inventions with him.

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20. Daimler is the parent company of Mercedes. It is a German company that trades securities on the New York Stock Exchange. It is one of the largest corporations in the world, and is the controlling party for the Mercedes-Benz brand and companies.

21. Upon information and belief, Daimler controls Mercedes. Daimler has actively directed Mercedes business, taken started and took direct control of its Formula E operations, and heavily subsidized Mercedes through purchase of services and goods, and interest-free loans and other mechanisms.

a) The contracts currently governing F1 Grand Prix racing expire at the end of 2020.
There was substantial doubt as to whether Mercedes would continue in F1, and it was
Daimler that announced last spring that Mercedes would continue to participate.

b) Mr. Hamilton's contract with Mercedes expires this year. There has also been speculation that Mercedes would discontinue its contract with its other driver, Mr. Bottas. Daimler's Chairman and CEO announced in July 2020, that Mercedes Grand Prix Racing would stick with its current drivers, Mr. Bottas and Mr. Hamilton, in the coming years.

c) Mercedes generates over \$5 billion in advertising and brand building value for Daimler's brands, and the Mercedes Formula E team is an integral part of Daimler's efforts to advertise and build its brand for its electronic vehicles. Daimler exercises control over Mercedes actively by such things as making key decisions on its drivers for it, and launching and running a Formula E racing team for Mercedes. Daimler's board representatives for Mercedes have come from its "C-Suite" and other top-most executives.

d) Mercedes was insolvent as of 2018, and its accountants only passed on issuing a "going concern" letter because its board assured them that Daimler would support interest-free, unsecured credit for Mercedes (worth about \$50-\$100,000,000). In its report for

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2019, Daimler has switched its purchases of services and goods from itself to its Mercedes-Benz AG subsidiary and continues to support interest-free, unsecured credit for Mercedes (again worth about \$50-\$100,000,000) to keep it as a going concern.

e) Daimler launched the Mercedes Formula E racing program independent of Mercedes' management: it contracted with HWA AG ("HWA") to develop a Formula E car and establish a team for Mercedes in 2018, "HWA Racelab". Daimler then converted this team into Mercedes' Formula E team for the 2019-2020 season, having HWA provide infrastructure, vehicles and support for the team. Daimler appointed two new principals for the Formula E team so that its then existing team principals were not given authority over the Formula E team. This Formula E team shares the "EQ" branding Daimler has adopted for its electronic vehicle development and is an important part of its strategy to promote its brand for electronic vehicles.

Mercedes is the agent or otherwise indistinct from Daimler for the purposes of Grand Prix and Formula E racing. Mercedes is the agent or otherwise indistinct from Daimler for the purposes of Grand Prix and Formula E racing.

22. Daimler corresponded with Mr. Nygaard regarding his patent in 2011. Daimler had Mr. Nygaard meet with engineers in Germany in 2015 regarding his patented safety inventions.

23. Mr. Lewis Hamilton ("Hamilton") is the most successful driver currently active in Formula One and dominates Grand Prix racing today. He is currently under contract to Mercedes through the end of the 2020 season. He directly infringed the patent-in-suit by driving one of the infringing Mercedes vehicles in each of the 2018 and 2019 U.S. Grand Prix in Austin, Texas in vehicles that implemented the Halo. Hamilton's victory in the U.S. Grand Prix in Austin, Texas in 2019 clinched his sixth driver's crown win for the 2019 season, much to his benefit, and also

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that of Mercedes and Daimler.⁵ Mr. Hamilton is paid tens of millions of dollars by Mercedes each season.

24. Ferrari is a manufacturer of automobiles, races in F1 Grand Prix events through its Scuderia Ferrari racing division, arranges for customer racing, and also operates the Ferrari Driver Academy to train Formula Circuit drivers. Ferrari has an extensive business licensing its trademarks. Ferrari's image and brand depend on the past, present and future historical success of Scuderia Ferrari.

25. Ferrari is a member of the F1 Strategy Group, and upon information and belief has veto power over its decisions. Ferrari was part of the F1 Strategy Group that adopted the Halo in 2017. Ferrari was the first team to publically test the Halo when in the spring of 2016 it had an F1 car with a Halo drive laps in events around the Spanish Grand Prix. Its Scuderia Ferrari team competed in the 2018 and 2019 U.S. Grand Prix with cars implementing Halo. On June 7, 2019, Ferrari filed an information disclosure statement informing the U.S. Patent & Trademark Office (U.S.P.T.O.) the Nygaard patent pre-dated and was relevant to its own patent application for improvements to vehicle safety. (Obviously Ferrari had notice of Mr. Nygaard's patent at some point prior to its U.S.P.T.O. filing). Among other things, Ferrari's application appears to attempt to adapt and combine Nygaard's inventions for improved vehicle safety with its vehicles.

26. Charles Leclerc ("Leclerc") drove a Ferrari vehicle with a Halo in the 2019 U.S. Prix, and he is currently under contract to Ferrari. Mr. Leclerc drove a vehicle with a Halo for Alfa Romeo Sauber F1, an Austrian team, in the 2018 U.S. Grand Prix. Mr. Leclerc is an emerging

⁵ Defendants in their motions to dismiss allege that claims 1 and 4 require a physical windscreen structure. These claims do not require a physical structure but use the windscreen language only in terms of a placement reference. But if a windscreen is required, Mercedes and Mr. Hamilton used their famous "jagged windscreen" in the 2018 and 2019 U.S. Grand Prix events.

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star in Grand Prix racing, his 2019 contract with Ferrari was a multi-million dollar deal and he has endorsement or similar deals with Giorgio Armani and Twitch. On information and belief, Mr. Leclerc was the first Formula One driver to have been saved from death or serious injury by the Halo (in the 2018 Belgian Grand Prix). Mr. Leclerc was also saved by the Halo from injuries in the 2020 Italian Grand Prix where he drove into a safety barrier at or near racing speed, resulting in a "big crash", with material falling over Mr. Leclerc's Halo.

27. RBT is a technology company for the automobile industry and also owns and operates RBR. RBT is an indirect subsidiary of Red Bull GmbH. RBT developed the Aeroscreen as an alternative to Halo during the Project. RBR was part of the F1 Strategy Group that voted in April 2016 to delay the Halo and look for alternatives. Shortly after that meeting, RBR demonstrated the Aeroscreen on an F1 car in events around the 2016 Russian Grand Prix.

28. In 2018 and 2019 RBT worked with IndyCar and Dallara to reconfigure the Aeroscreen for IndyCar. Dallara suggested adding the Halo to the Aeroscreen for strength. Today RBT and Dallara supply Aeroscreen (which includes Halo) to the U.S. for implementation in cars competing in IndyCar Circuits, including racing at COTA and Texas Motor Speedway.

29. RBR is owned by RBT. In 2017, it was a member of the F1 Strategy Group that adopted Halo. RBR competed in the 2018 and 2019.

30. RBR competes in the Formula One Grand Prix series. In 2018 and 2019, RBR had a "sister team" also owned indirectly by Red Bull GmbH, or sometimes called its "junior team," Scuderia Alpha Tauri, formerly called Scuderia Torro Rosso (owned by a different Red Bull entity), which also competed in the same F1 Grand Prix events, including the 2018 and 2019 U.S. Grand Prix in cars implementing Halo.

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31. RBT and RBR joined forces with Aston Martin for F1 Grand Prix racing for the 2018 season. Aston Martin is not merely a sponsor of RBR but RBT and RBR engineers have actively collaborated on Aston Martin vehicle engineering. Mr. Nygaard had made presentations about this patent to Aston Martin, and upon information and belief, RBT and RBR knew of Mr. Nygaard's patent from Aston Martin or Dallara or F1A or F1 Strategy Group prior to the 2018 U.S. Grand Prix.⁶

32. Dallara is an Italian manufacturer and assembler of automobile chassis, upgrade and safety kits, as well as parts, for motor sports, including Formula 1, Formula E, Formula 3, and IndyCar Circuits, among others. Dallara collaborates with RBT on the Aeroscreen. Dallara collaborates with Haas on its F1 Grand Prix vehicles and racing program. Dallara engineering (including Luca Pignacca and Didier Perrin) met with Mr. Nygaard on or about March 27, 2013 at FIA headquarters in Paris as part of the project that resulted in Halo being chosen by FIA for driver safety in July 2017. In or around 2018, Dallara suggested to RBT and IndyCar that the Halo be added to the Aeroscreen to enhance its strength. Dallara makes and supplies Aeroscreen components for U.S. IndyCar teams, including for their use in racing at COTA and Texas Motor Speedway. Dallara also collaborated on Haas' F1 Grand Prix cars outfitted with the Halo in 2018 and 2019 for competition in Grand Prix racing, including the U.S. Grand Prix races at the U.S. Grand Prix at COTA. Haas is the only U.S. based team in F1, and the U.S. Grand Prix at COTA is its "home race".

⁶ RBT and RBR deny presuit knowledge of the patent but there is substantial circumstantial evidence to the contrary that passes the plausibility standard for pleading knowledge, and Plaintiff is entitled to plead and discover facts based on these circumstances.

II. FACTUAL BACKGROUND

33. On March 29, 2004, Mr. Nygaard's original patent application for his inventions for vehicle safety was filed in Great Britain. Among other things, Mr. Nygaard's inventions protect people from accidents caused by collisions, flying objects, and roll-overs.

34. The original application, subsequent filings in the U.S.P.T.O, filings in other jurisdictions and the issued '178 patent itself, included drawings that illustrated many examples of embodiments of his inventions, including cars with what Defendants now refer to as the "Halo." The Aeroscreen is essentially a "tear-off" "jet cockpit" windscreen combined with a Halo.

35. Shown below from left to right are figure 68 from the '178 patent, a depiction from FIA regulations of the Halo, and the Halo of the car driven by Charles Leclerc in the 2018 Belgium Grand Prix. The marks on the Halo of Mr. Leclerc's car were caused by the tire of another F1 car that launched into the air in a multi-car accident during the race. The Halo received worldwide praise for saving Mr. Leclerc's life.



36. Mr. Nygaard contacted manufacturers, government regulators, FIA, Delta, Formula One and others in the automobile industry to improve safety with his patent pending inventions. He reached out to the FIA by 2005 to improve safety in motor sports. Over the following years He discussed his inventions, and also consulted with, major car manufacturers, including, among others, Aston Martin, Audi, Bentley, Daimler, Jaguar, Lotus, Magna Styr, Nissan, Rolls Royce and Volvo, as well as consultants, government and others in the automobile industry. Mr. Nygaard directly contacted Mr. Bernie Ecclestone of Delta and Formula One in

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2006 about his patent applications to bring his safety inventions to Formula One Grand Prix events. Mr. Nygaard also met with auto manufacturers and consultants at or around the annual Geneva, Switzerland Auto Shows.

37. Upon information and belief, Mr. Nygaard believes that through his correspondence and meetings with the FIA, FIA Institute, and Dallara as well as his discussions about his safety research, innovations and patents with manufacturers and consultants in the automobile industry, intertwined engineering staff among some of the Defendants, and the collaboration among members of the F1 Strategy Group, as well research projects among them for the Halo and the Aeroscreen, that his patents were known to F1, FOWC, FIA, Mercedes, Daimler, Ferrari, RBT, RBR, and Dallara before infringement of the '178 patent in this country.

38. Upon information and belief, Delta transferred its rights and license for commercialization of the Grand Prix series, including media rights, to FOWC. Delta's license was first commercialized by the original Formula One company run by Bernie Ecclestone. Liberty Media Company acquired the Delta and the Grand Prix/Formula One business in 2016. F1 and FOWC are the Liberty entities that have run Grand Prix/Formula One commercial operations and media since at least 2018 or earlier.⁷

39. Despite Mr. Nygaard's call for improved driver safety in 2005 and 2006, FIA, Formula One and Delta declined to discuss his inventions with him at that time. But in 2009, Henry Surtees died driving in a Formula 2 event when he was struck in the head by flying debris.

⁷ The contracts between Delta and FIA and also between FIA and its member teams, as well as contracts between F1, FOWC and Delta, are not publicly available. Any contracts between any Liberty Media Company or Delta or F1 or FOWC and/or any of their subsidiaries and affiliates regarding Formula racing or any Grand Prix race or team are not publicly available. Since Plaintiff has no access to any of these contracts, Plaintiff will amend if needed on relevant issues, if any. Plaintiff will amend as needed to correct (add or drop) parties if and as appropriate.

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Had Mr. Nygaard's inventions been deployed when he brought them to the attention of FIA and others, Mr. Surtees might still be driving. Driver Felipe Massa suffered a serious head injury when he was hit by flying debris in the 2009 F1 Hungarian Grand Prix, and Mr. Nygaard's inventions very likely would have spared him from injury.

40. After Mr. Surtees' untimely death and Mr. Massa's injury, FIA Institute focused on finding a solution for protection of the heads and necks of drivers in FIA administered Formula motor sports, which became the Project. The FIA Institute conducted years of study and testing of multiple different safety devices. Upon information and belief, Mercedes, Ferrari and RBT became involved in this work and/or were monitoring it from early stages. (FIA took control of FIA Institute's safety research when FIA Institute was dissolved at the end of 2016).

41. FIA Institute conducted a series of tests on different devices for driver head and neck protection in 2011. The testing showed the devices it had studied were not suitable for Formula racings' purposes for driver head and neck safety.

42. In 2011, Dan Wheldon, a popular driver who competed in IndyCar, Daytona Endurance and other racing, was killed. He died in an accident during the championship race of the IndyCar season on October 16, 2011, at the Las Vegas Motor Speedway. Dan Wheldon's death heightened the urgency of, and further demonstrated the need for, the Project. Dallara named its 2012 model chassis in his honor, which is known as the Dallara DW12.

43. In or around 2011, IndyCar began investigating improvements for driver safety. IndyCar monitored, and also provided data, for the Project: IndyCar at least informally consulted with RBT and/or RBR during this time.

44. Having failed in its attempts to find a suitable safety device, FIA and/or FIA Institute met in late 2012 with Mr. Nygaard to consult on the Project. On March 27, 2013, Mr.

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Nygaard met with Dallara, and FIA Institute at FIA's Paris Headquarters to implement his inventions for Formula racing.

45. In 2014, Jules Bianchi suffered mortal head and neck injuries in an accident at the 2014 Formula 1 Japanese Grand Prix, and later died in 2015. In 2015, driver Justin Wilson died of head and neck injuries in an IndyCar race at the Pocono Motor Speedway.

46. Up through 2015, Mr. Nygaard met with automobile companies (including some with Grand Prix teams) regarding his safety research, inventions and patents, including, Aston Martin, Bentley, BMW, Daimler, Jaguar Land Rover, Lotus, Magna-Str, McLaren, Nissan, Rolls-Royce and Volvo. Mr. Nygaard also met with automotive consulting firms and communicated with government agencies. Mr. Nygaard evangelized his safety innovations in England in meetings and work involving Aston Martin, Lotus, McLaren, Nissan, Jaguar Land Rover, Bentley and Rolls Royce, as well as consulting firms.

47. In late 2015 and early 2016, the Grand Prix Drivers' Association Ltd. ("GPDA") petitioned for improved driver safety protection. In 2015, elements of the F1 Grand Prix series fan base and press were urging Formula One and FIA to take measures to prevent any more driver deaths. In 2016, both the GPDA and FIA urged the F1 Strategy Group to adopt the Halo for F1 Grand Prix racing.

48. Mercedes showed its prototype Halo in 2015. Ferrari implemented a Halo on a Grand Prix car in early 2016, and tested the Halo during the 2016 Spanish Grand Prix events.

49. On information and belief, safety devices for Formula racing that covered (e.g., canopy) or partially blocked the view of the driver (e.g., Halo) were controversial with F1 teams and fans who felt these types of modifications violated the spirit of open cockpit racing, which many feel is at the heart of Formula racing. Nonetheless, by 2015, there was substantial pressure

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from significant parts of the fan base, publications and racing personalities, as well as the drivers themselves, to improve driver safety by modification of cockpit protections.

50. The F1 Strategy Group makes the rules for Grand Prix racing, which the FIA then implements. In spring of 2016, it appeared that Halo was the only effective measure to protect Formula drivers' heads and necks. Nonetheless, despite lobbying by the drivers, there was substantial division among the F1 Strategy Group over whether to adopt the Halo because of its aesthetics. Further, the F1 Strategy Group did not want to adopt a canopy or closed cockpit solution because it would have eviscerated Grand Prix racing's open cockpit format and tradition. At a 2016 meeting, the F1 Strategy Group delayed consideration of the Halo in order to explore other alternatives, including development of a device known as the "shield."

51. RBT demonstrated its Aeroscreen at the 2016 Russian Grand Prix shortly after an April 2016 meeting of the F1 Strategy Group where Halo was discussed, putting its product in competition with Halo.

52. The "shield," was made out of "jet fighter glass" and bent around the driver leaving an opening at the top. Ferrari agreed to further develop and test the "shield". Ferrari ultimately tested the shield on an F1 car at events around the 2017 British Grand Prix at Silverstone. Ferrari driver Sebastian Vettel drove the Ferrari test on July 14, 2017, but aborted it after one lap, reporting that the curvature of the shield made it difficult to see, especially in looking forward. He also reported the shield made him dizzy. Although the shield was scheduled for another test in September 2017 at the Italian Grand Prix, further testing stopped after the unsuccessful run in England.

53. Liberty Media had taken over F1 in early 2017, opened up F1 Strategy Group meetings for observation by all teams, and had all teams present for the July 2017 meeting where

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the Halo was to be voted on and adopted by the F1 Strategy Group. Having been unable to develop or find an alternative to Halo by July 2017, the F1 Strategy Group adopted the Halo for Grand Prix racing for 2018. Upon information and belief, when the Halo rule was adopted, the F1 Strategy Group knew about Mr. Nygaard's patent: Mercedes knew about Mr. Nygaard's patents through Paddy Lowe and/or the Project and/or Daimler. Further, Formula One (and its successor in interest F1) knew of the patent through prior correspondence with Mr. Nygaard and upon information and belief, the F1 Strategy Group. Ferrari, upon information and belief, learned about the '178 patent from one or more of its collaborators at FIA Institute, Mercedes and/or Dallara, and/or through its involvement in the F1 Strategy Group, as well as its own patenting activities. Upon information and belief, RBR and RBT knew about Mr. Nygaard's patent through monitoring the Project for IndyCar, its work with the Project in developing the Aeroscreen, and/or its participation in the F1 Strategy Group, and/or Mr. Nygaard's promotion of his invention among F1 teams and auto companies in England. (Later, in September 2017, Aston Martin and RBT and RBR began a collaboration that included engineering cross-over, at which time RBT and RBR should have learned about Mr. Nygaard's patent from Aston Martin).

54. Following the F1 Strategy Group's adoption of Halo, FIA promulgated rule changes in late July 2017. At a press conference on July 27, 2017, the FIA made a detailed presentation explaining only the Halo had passed all benchmarks set for driver head and safety protection in the Project.

55. The Halo was implemented in F1 Grand Prix racing in the 2018 season at tremendous expense to the teams (some estimates are around \$1,000,000 or more). Halo was first used at Grand Prix events in the U.S. at the U.S. Grand Prix in late 2018 in Austin, Texas. Halo was also used in the 2019 Formula ePrix in New York City and 2019 U.S. Grand Prix at COTA.

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The Halo was used at the F3 Americas event at COTA in 2018. Upon information and belief, Halo was implemented in Haas Grand Prix vehicles built and tested in North Carolina in 2018, 2019 and 2020.

56. The Halo infringes claim 1 and 2 of Mr. Nygaard's patent, and when combined with a Grand Prix car infringes claim 4 Mr. Nygaard's '178 patent. The Halo is a custom-made component that has no substantial non-infringing use other than in the inventions in claim 4 of the '178 patent and is a substantial portion of the inventions.

57. Dallara made the chassis for IndyCars, as well as kits for those chassis to improve aerodynamics and safety, among other things. Dallara collaborated with the Haas Grand Prix racing team to implement the Halo on its F1 cars.

58. Dallara had a collaboration with Spark Racing Technology, the official vendor for Formula E cars, and has designed and manufactured chasses used by all cars in Formula E, and other equipment, for Formula E cars.

59. Dallara collaborated with RBT to import custom Aeroscreen components into the U.S. for IndyCar racing and to make and use it in the United States. On information and belief, Dallara has made and imported Aeroscreen parts or kits as custom components with no substantial non-infringing use except in the inventions in claims 1 and 2 ("strengthening member"), as well as a road vehicle with strengthening members infringe claim 4. Dallara imported these parts knowing that they would be used and vetted by teams at the NTT IndyCar 500 official practices in February 2020 at COTA and Texas Motor Speedway. Upon information and belief, Dallara collaborated with RBT in preparing IndyCars for these Texas practices, which RBT attended and reported on to Dallara. Dallara also knew in collaborating on the IndyCar Aeroscreen that they would be used in IndyCar racing at COTA and Texas Motor Speedway. Upon information and belief, Dallara

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belief, based on driver comments and other information learned from these events, Dallara made modifications to the Aeroscreen components.

60. Spark Racing Technology was chosen to build all cars for Formula E for all teams. Spark contracted with Dallara to do the work on the chasses and as well as other tasks for the cars. For the 2018-2019 Formula E season, Spark sold the Spark Gen2 to Formula E teams. The Spark Gen2 has a Halo incorporated into it. For the 2020-2021 season, Spark is selling the Spark Gen2EVO, which likewise includes a Halo. Dallara designed and built the vehicle chasses and Halo for these vehicles.

61. In or about late 2018 and 2019, there was further communication between Mr. Nygaard and FIA about the '178 patent, and Mr. Nygaard's claim for royalties for the Halo. Ultimately, Jean Baptiste Pinton responded for the FIA in March 2019 with an email, and copied multiple people on his response, including those with F1 and/or FOWC. Further, upon information and belief, Mr. Nygaard's claim for royalties would have been made known to the F1 Strategy Group, if not all F1 teams.

62. Halo was implemented in the F1 Grand Prix Circuit in 2018, and all Formula circuits by 2019. All vehicles competing in the 2018 and 2019 U.S. Grand Prix at COTA and in the 2019 ePrix on New York City roads implemented the Halo. F3 Americas cars implemented the Halo in 2018, including at the F3 Americas World Championship at COTA in fall 2018.

63. Vehicles and their components were supplied from the U.S. to other countries following the U.S. Grand Prix events for assembly into the invention abroad. Upon information and belief, F1 teams disassemble their vehicles down to their component parts for shipment, and transport their vehicle chasses with the Halo as a separately packaged component from others, including power units, windscreens, steering wheels, racing tires, among others. F1 and FOWC

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facilitate the movement of teams and their equipment between races, and induced and caused to be supplied the components that make up substantially all of the invention, as well as components that have no substantial non-infringing use (that is, the vehicle chasses with the Halo), which if assembled in the U.S. would infringe the '178 patent.

64. About nine teams also supplied their vehicles and components to other countries following the 2019 U.S. ePrix events, including Daimler's HWA Racelab team. Upon information and belief these teams would have shipped their vehicle chasses implementing the Halo as a separately from at least some other parts of their cars.

65. Upon information and belief, Haas Racing LLC drove vehicles implementing the inventions (Halo) on roads in or near its facility in the U.S., and also caused to be supplied abroad components of the invention, including components with no substantial non-infringing use (that is, the vehicle chasses with Halo), which would infringe if assembled here.⁸

66. There are two U.S. based Formula E teams, and both were required to use Spark Gen2 cars that incorporate Halo for the 2019 U.S. ePrix and other ePrix races that season, BMW Andretti Motorsport and Geox Dragon. Dallara built the chasses implementing Halo for these cars. Upon information and belief, these teams used their cars on U.S. roads in preparation for and during the 2018-2019 and 2019-2020 Formula E seasons (with chassis built by Dallara).

67. Formula E teams supplied or caused to be supplied components that make up all or substantially all of the invention, including their vehicle chasses with Halo, and other custom components with no substantial non-infringing use but for use in a Spark Gen2 car, from the U.S. abroad for ePrix racing after the July 2019 U.S. ePrix, which would infringe the '178 patent if assembled in the U.S.

⁸ The first racing events for the Grand Prix Series in 2017-2020 were at the Australian Grand Prix.

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68. FIA regulations implemented the Halo in Formula 3 events. Accordingly, the patent was likewise directly infringed by teams and drivers on teams competing in F3 Americas Circuit events, including the F3 Americas Championship in 2018 at U.S. COTA.

69. Since Halo's adoption in July 2017, FIA has implemented production standards, specifications, and testing of all Halos used in F1 and Formula E events by designating approved manufacturers for the Halo, and requiring all Halos be shipped to the provider it designated for testing of the Halos prior to shipment to the teams. Each Halo supplied to F1 had to come from a manufacturer approved and been tested by a contractor designated by FIA.

70. Even though Mr. Nygaard again asked FIA in 2018 to compensate him for his patent rights, FIA flatly refused to do so. FIA did not even make an offer to license. Neither F1, FOWC, Mercedes, Daimler, Ferrari, RBT, RBR, Dallara nor others sought a license, even though they knew the Halo would be deployed as implemented in cars in the U.S. Grand Prix at COTA, the U.S. ePrix on New York City roads, by F1's U.S. based F1 team (Haas Racing), and by BMW Andretti and Geox Dragon Formula E teams based in the U.S., among other times and places in this country. They also knew that many F1 Grand Prix vehicles with the Halo would be supplied from the U.S. abroad disassembled into their custom components that make up all or substantial all of the invention including the vehicle chasses with Halo, that have no substantial non-infringing use, other than for assembly into the invention. Defendants also knew that Formula E teams would ship their Spark Gen2 cars with Halo disassembled so that the vehicle chasses implementing Halo is a custom component, together with other components that if assembled in the U.S. would infringe the patent.

71. IndyCar was working with other collaborators on its own safety project, as well as monitoring the Project. IndyCar had developed a "shield" cockpit protection device with PPG.

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Although this device supposedly overcame the vision and other issues that a version of the shield developed for the F1 Strategy Group, suffered from, it ultimately was not strong enough to provide safety for the driver's head and neck according to the benchmarks used by IndyCar.

72. At some point in or around 2018, IndyCar went to RBT and asked it to collaborate on the IndyCar driver safety device. RBT and IndyCar included Dallara in the redesign effort. Dallara suggested the Halo be incorporated in the Aeroscreen for strength. They redesigned IndyCar's Aeroscreen to incorporate the Halo. Ultimately, RBT collaborated with Dallara as well as PPG and Pankyl to create the Aeroscreen. IndyCar tested the Aeroscreen in 2019, and late that year adopted it for professional IndyCar racing for 2020.

73. It is significant that the original Aeroscreen design was not able to pass the FIA's 2017 strength tests, nor was IndyCar's shield, but again only Halo provided the strength needed to protect driver's heads and necks in collisions and flying objects. IndyCar adopted the Aeroscreen for use starting in the 2020 Circuits, starting with the NTT IndyCar 500 official practices at COTA and Texas Motor Speedway the week of February 10, 2020.

74. Below is a diagram of the Aeroscreen as completed for IndyCar racing circuits shown on a Dallara DW12 chassis.



75. Dallara assembled Aeroscreen components at its facilities in Italy and rushed to import them into the U.S. so that they could be assembled and installed in preparation for testing

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in racing conditions at the NTT IndyCar 500 official practices the week of February 10, 2020 at COTA and Texas Motor Speedway.

76. The first, and as of the filing of the Original Complaint, only public, ticketed IndyCar event where all teams participated with the Aeroscreen was the 2020 NTT IndyCar Series Official Practice on February 11, 2020 at COTA. The Aeroscreen was used at subsequent closed practices later that week at COTA and Texas Motor Speedway, and since that time in multiple IndyCar practices and events since June 2020. There was a problem with water leaking into the cars during the February 11 test. In addition, there was a problem with heat building up in the cockpit behind the Aeroscreen. After these tests, RBT and Dallara worked on the Aeroscreen to improve it before it was deployed in competition. Among other things, upon information and belief, Dallara made changes to the air ducts after studying the feedback from the Texas testing sessions.

77. The first NTT Indy500 Circuit Race that deployed the Aeroscreens was at the Texas Motor Speedway in June 2020.

78. At least four IndyCar drivers have been spared death or serious injury due to the Aeroscreen in July and August 2020. Other drivers in F1, F2 and F3 have been saved death or serious injury due to Halo.

79. The patent attached as Exhibit A and the illustrative claim charts attached as Exhibit B show how claims 1 and 2 apply to the Halo and Aeroscreen, and also how vehicles incorporating the Halo or Aeroscreen infringe claim 4 (as well as claims 1 and 2).

a) Defendants have all taken the position that a race car is not a road vehicle. In doing so, they chiefly rely on language in the specification that they say distinguishes "normal road vehicles" from "race cars." But the language in claims 1 and 4 require a "road vehicle"

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not a "normal road vehicle." "Normal" means common, average, or "run of the mill" or the like, even though a race car is not a common, average or "run of the mill" road vehicle, it is nonetheless a "road vehicle" because it is a vehicle that drives on a road (whether a city street, road track, over track or other road). The patent includes figures 63-74 showing the inventions in race cars of the type used in Formula and IndyCar racing.

b) Claim 2 only requires a vehicle, and a race car is a vehicle.

c) Defendants have also taken the position that the use of the words "front windscreen" in claims 1 and 4 require a physical windscreen. Defendants are wrong because the invention does not require it to be integrated with a windscreen. Further, the windscreen is only a reference point for binocular vision aspect of the claims, and as such need not be a physical structure. The specification in its detailed discussion of figures 63-74, which depict race cars, never mentions the windscreen, which shows "windscreen" is not a structural limitation. Col. 20, 14-57. Nonetheless, even if Defendants are correct in their construction of windscreen then Mercedes used its vehicles with Halo and "jagged windscreens" in the 2018 and 2019 U.S. Grand Prix. Upon information and belief, Plaintiff alleges that Haas Racing Team and also Racing Point Racing Team ran vehicles in the U.S. in preparation for or at either or both of the 2018 and 2019 U.S. Grand Prix that likewise used "jagged windscreens". In addition, all Aeroscreens have windscreens. Finally, the placement of the Halo on the vehicles used in Formula racing are achieving the same result in the same way using the same structure as is in claims 1, 2, and 4, and upon information and belief must be using some other reference point in place of the windscreen, thereby meeting this limitation by doctrine of equivalents.

d) Moreover, claim1 is to the strengthening member itself, not to the road vehicle, so neither a "road vehicle" nor a "front windscreen" are limitations in claim 1.

e) Claim 2 only requires a vehicle and has no limitation as to the "front windscreen".

III. PARTIES AND SERVICE OF PROCESS

80. Mr. Nygaard is a citizen of Norway domiciled in Glomfjord, Norway.

81. FIA is a French non-profit association. It is successor in interest to the FIA Institute

for Motor Sport and Sustainability. It has waived service of summons under Fed. R. Civ. P. 4., and appeared in this case.

82. F1 is a UK company located at No. 2 St. James's Market, London, United Kingdom,

SW1Y 4AH, has waived service of the summons and complaint, and appeared in this case.⁹ Sacha Jane Woodward Hill is the Secretary of this entity and also a director of multiple Formula One and other Liberty entities, which share the same office in London. These entities are all ultimately owned directly or indirectly by Liberty Media Corporation.¹⁰

⁹ LIBERTY MEDIA CORPORATION, UNITED STATES SECURITIES AND EXCHANGE COMMISSION FORM 10-K, FOR THE FISCAL YEAR ENDING DECEMBER 31, 2019, filed February 2020, at Part I, Item 1 "Business," Page I-1 ("Liberty Media Corporation ('Liberty', the 'Company', 'we', 'us' and 'our') owns interests in subsidiaries and other companies which are engaged in the global media and entertainment industries. Our principal businesses and assets include our consolidated subsidiaries Sirius XM Holdings (defined below), Formula 1, Braves Holdings, LLC ('Braves Holdings') and our equity affiliate Live Nation Entertainment, Inc. ('Live Nation')."). This report's discussion of Liberty Media's Formula 1 business illustrates the organizational complexity of Formula One Racing, especially when viewed in light of the chain of parent and subsidiary relationships from Formula One Management to Liberty Media Corporation as shown by public records from U.K. Company House. Mr. Nygaard believes by joining as Defendants Formula One Management Ltd., and Delta Topco Ltd., he has joined the correct entities, but reserves the right to join any other entity directly or indirectly controlled by Liberty Media Corporation as needed to ensure the correct Defendants are joined in this case. Courtesy copies of this complaint are being sent to Ms. Woodward Hall and Ms. Wilm to inform them and the Liberty GR, Liberty, Alpha and other Liberty Media Corporation entities about the lawsuit.

¹⁰ Liberty Media Corporation is not joined as a party, but it and its subsidiary and affiliates are now on notice of this lawsuit so that if any other or different entities should be joined as parties other than F1 or FOWC, they can be joined without delay of the case.

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83. FOWC is a UK company located at No. 2 St. James's Market, London, United Kingdom, SW1Y 4AH. Sacha Jane Woodward Hill is a director of this and multiple other Formula One and other Liberty entities, which share the same office in London. These entities are all ultimately owned directly or indirectly by Liberty. FOWC has waived service of the summons and complaint and appeared in this case.

84. Mercedes is a UK company. Daimler is its controlling entity. Mercedes, it has accepted service and appeared in this case.

85. Daimler owns and controls Mercedes. Daimler also contracted with HWA AG regarding matters relevant to this lawsuit. Daimler AG trades securities on the New York Stock Exchange. Daimler has informed Plaintiff's counsel that it has received formal service of process under the Hague Convention directed to it at its Stuttgart, Germany facility, and no further service is required. Daimler has appeared in this case.

86. Louis Hamilton is an individual, he has accepted service, and appeared in this case.

87. Ferrari S.p.A., is organized under the laws of Italy, with headquarters in Maranello, Italy, it has accepted service of process and appeared in this case.

88. Charles Leclerc is an individual, he has accepted service, and appeared in this case.

89. RBT and its subsidiary RBR are UK companies. They are indirect subsidiaries of Red Bull GmbH. RBT and RBR they have not contested service and have appeared in this case.

90. Dallara is an entity organized under the laws of Italy, with its headquarters at Via Provinciale 33 Varano de' Melegari, 43040 Italy. Dallara has acknowledged and accepted service and has appeared in this lawsuit.

IV. NATURE OF THE ACTION

91. This is a case for direct and indirect patent infringement, literally or under the doctrine of equivalents, against each of the Defendants of claims 1, 2, and 4 of U.S. Patent No. 7,494,178, titled "Vehicle And a Strengthening Member For a Vehicle," pursuant to Title 35 United States Code, Section 271(a)-(c) & (f)(1), (f)(2). The patent issued on February 24, 2009. Mr. Nygaard has always been the owner of all right, title, and interest in and to the '178 patent. This is an exceptional case as to Defendants FIA, F1, FOWC, Mercedes, Daimler, Ferrari, RBR, RBT and Dallara.

V. JURISDICTION AND VENUE

92. This action arises under the patent laws of the United States, Title 35 of the United States Code ("U.S.C.") § 101 *et seq*.

93. This Court has subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

94. This Court has personal jurisdiction over each Defendant under the Texas Long-Arm Statute, Tex. Civ. Prac. & Rem. Code §§ 17.041 *et seq.* because each of them has infringed the patent directly and/or indirectly in the State of Texas, and Fed. R. Civ. P. 4, as shown by the allegations above, and at least the following:

a) FIA, F1, FOWC, Mercedes, Daimler, Ferrari, RBT and RBR induced each F1 team and driver to directly infringe claims 1, 2, and 4 in connection with one or more of the 2018 and 2019 U.S. Grand Prix races, qualifying rounds, and practices at COTA, by making and using the inventions there, and by drivers using the inventions directly infringing claims 1, 2 and 4, including but not limited to Hamilton and Leclerc.

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b) Upon information and belief, F1, FOWC, and FIA induced all F1 teams to import their vehicles and parts to COTA for the 2018 and 2019 U.S. Grand Prix, including parts with no substantial non-infringing use (e.g., vehicle chasses with Halo), other than in the patented device, and to make the completed inventions directly infringing claim 4.

c) Following the 2018 U.S. Grand Prix at COTA, FIA, F1, and FOWC, caused custom components of the invention to be supply from Texas, including vehicle chasses with Halo, which make up substantially all of the invention, including components with no substantial non-infringing use, that if assembled in the U.S. would infringe the patent, outside the United States for the 2018 Mexican Grand Prix, infringing claim 4.

d) Following the 2019 U.S. Grand Prix at COTA, FIA, F1, and FOWC, caused the supply from Texas of vehicles and parts, including custom made F1 vehicle chasses implementing Halo, which components comprised substantially all of the invention, and components with no substantial non-infringing use (vehicle chasses with Halo), that if assembled in the U.S. would infringe claim 4 of the patent, outside the United States for the 2019 Brazilian Grand Prix.

e) Dallara collaborated on Haas Racing Team on its F1 cars that deployed Halo that raced in the 2018 and 2019 U.S. Grand Prix at COTA, inducing Haas and its drivers to directly infringe claims 1, 2, and 4 by using the inventions in those races and in or near its facilities in the U.S., as well as supply its cars disassembled into custom component parts including the vehicle chasses with Halo, which has no substantial non-infringing use, but for assembly in a manner that would infringe claim 4 if done in the U.S.

f) Dallara imported custom components of the Aeroscreen that have no substantial non-infringing use but in the manner in claim 4 of the '178 patent. Dallara imported these

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parts for the purpose of their being installed for use at the NTT IndyCar 500 Official Practices at COTA on February 11 and 12, and at Texas Motor Speedway on February 14, 2020, and at other events in Texas. Upon information and belief, Dallara's collaborator, RBT was present at the February practices and provided information to Dallara to deal with problems in the Aeroscreen after use in race-like conditions: E.g., leaking in rain, heat stagnating in the cockpit. Upon information and belief Dallara worked on modifications to the Aeroscreen using information collected from the February 2020 practices. Dallara's actions induced and also contributed to infringement by IndyCar teams and drivers who directly infringed by using the vehicles implementing Aeroscreen in the U.S.

g) Mercedes' driver Bottas won the 2019 U.S. Grand Prix at COTA using a car that infringed claim 4 of the '178 patent. Mr. Hamilton placed second in the race and clinched his sixth driver's championship driving a car that infringed claim 4 of the '178 patent. The first and second place finishes and Mr. Hamilton's sixth driver's championship were of substantial benefit to Mr. Hamilton, Mercedes and Daimler. Mr. Hamilton finished third in the 2018 U.S. Grand Prix at COTA, getting a podium and points for his placement. Mercedes' driver Bottas finished fifth in the 2018 U.S. Grand Prix, getting points for his placement. Mercedes, Daimler and Hamilton gained substantial benefit from these achievements. Mercedes directly infringed claims 1, 2 and 4 by making (assembling) and using its vehicles in the U.S. and induced Mr. Hamilton and Mr. Bottas to directly infringe claim 4 by using their vehicles with the Halo In 2018 and 2019. Daimler induced, Mercedes directly infringed claims 1, 2 and 4 of the patent at the U.S. Grand Prix and related events at COTA by directing its business operations and providing funding for it to be in the U.S. Grand Prix where it directly infringed claims 1, 2 and 4.

h) In 2018 and 2019, Mercedes imported the invention in claims 1 and 2 into Texas for U.S. Grand Prix events at COTA as well as custom components with no substantial non-infringing use but in claim 4 of the invention (that is, the vehicle chasses implementing Halo).

i) In 2018, Mercedes and Daimler supplied or caused to be supplied to Mercedes, substantial components of the infringing vehicles, including components with no substantial non-infringing use, such as the vehicle chasses with Halo, from Texas to Mexico for the 2018 Mexican Grand Prix and related events where such would infringe claim 4 of the patent if assembled for use in the U.S. In 2019, Mercedes and Daimler supplied or caused to be supplied to Mercedes its cars and components, including components with no substantial non-infringing use, from Texas to Brazil for the 2019 Brazilian Grand Prix and related events.

j) Daimler induced HWA to directly infringe the Nygaard patent by instructing it and paying for it to use a Formula E car with a Halo at the New York City 2019 ePrix by contracting for HWA to field a team in the race with a car that infringed claim 4 of the '178 patent by assembling (making) vehicles implementing claim 4 implementing the Halo, for use in that race.

k) Upon information and belief, Daimler conducts marketing activities for its businesses in regard to the 2018 and 2019 U.S. Grand Prix through VIP tickets, attendance by its executives, and its Silver Arrow lounge. Upon information and belief, Daimler also conducted marketing activities for its businesses in regard to the 2019 New York City ePrix.

1) 2018 and 2019, Ferrari directly infringed claims 1, 2 and 4 of the patent at the U.S. Grand Prix and related events at COTA by making and using the invention, and inducing its drivers, including Leclerc in 2019, to use the invention in claim 4 in those races. Ferrari got substantial benefit because, among other things, one of its drivers won the 2018 U.S Grand Prix, and Mr. Leclerc came in fourth in the 2019 U.S. Grand Prix. In 2018 and 2019, Ferrari imported the invention into Texas for U.S. Grand Prix events at COTA, including components with no substantial non-infringing use (that is, the vehicle chasses with the Halo) and made and used the inventions at those events, directly infringing claims 1, 2 and 4 of the patent. In 2018, Ferrari supplied or caused to be supplied to itself, cars and components, including components with no substantial non-infringing use (including the vehicle chasses), from Texas to Mexico for the 2018 Mexican Grand Prix and related events where such would infringe claim 4 of the patent if assembled for use in the U.S. In 2019, Ferrari supplied or caused to be supplied to itself its cars and components, including components with no substantial non-infringing use (e.g., the vehicle chasses with Halo), except assembly in a manner that would infringe claim 4 of the patent if assembled in the U.S. from Texas to Brazil for the 2019 Brazilian Grand Prix and related events. Ferrari also operates a racing program for its customers, which has held races and events at COTA. Upon information and belief, Ferrari also provides luxury amenities and seating for buyers of its cars at U.S. Grand Prix events to promote sales of its vehicles here and elsewhere.

m) FIA induced F3 Americas teams at COTA in 2018 to directly infringe by using cars implementing the Halo here and other places in the U.S.

n) Upon information and belief, COTA paid FIA and/or F1 substantial fees to host
U.S. Grand Prix events in 2018 and 2019 (\$30 million in 2019).

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o) FIA also caused to be supplied from New York components making up substantially all of the invention, and also components that have no substantial non-infringing use but for in the invention, that is the vehicle chasses with Halo, which if assembled in the U.S. would directly infringe claim 4, when assembled and used by foreign teams competing in the U.S. ePrix in 2019, to their headquarters in other countries.

p) Dallara induced infringement by collaborating with Haas Racing on F1 cars with Halos, knowing Haas would directly infringe claim 4 by making the invention (assembling the vehicles) at COTA and claims 1, 2 and 4 by using them in the U.S. Grand Prix events at COTA in 2018 and 2019. Upon information and belief, Dallara consulted with Haas before, during and after the 2018 and 2019 U.S. Grand Prix events regarding the performance of the vehicles outfitted with Halo. Dallara also induced infringement by IndyCar teams directly infringing claims 1, 2 and 4, by designing and promoting its Aeroscreens and chassis and other equipment for IndySeries vehicles for use at the COTA, Texas Motor Speedway and elsewhere in NTT IndyCar 500 events in 2020.

q) RBT and Dallara induced all teams participating in the 2020 IndyCar Series Official Practices at COTA and Texas Motor Speedway, and the opening race of the NTT Indy500 Circuit in June 2020 at the Texas Motor Speedway, to directly infringe claims 1, 2 and 4 by making and using the inventions in and for those events, by providing them infringing Aeroscreens: by importing them, knowing the Aeroscreen would be deployed there, and by providing support for them at those events. RBT also participated in a press conference in Austin, Texas on February 10, 2020 regarding the implementation of the Aeroscreen encouraging that direct infringement. Upon information and belief, RBT and Dallara consulted on improvements to the Aeroscreen or its installation in IndyCars from

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information gained during the practices in Texas which induced direct infringement of claims 1, 2 and 4 by making and using them in NTT IndyCar races since June 2020. For these same reasons, RBT and Dallara induced direct infringement of claim 4 by the drivers using the inventions when driving vehicles in those events.

r) Mr. Hamilton directly infringed claim 4 of the '178 patent when he used the invention by driving one of the Mercedes vehicles with the Halo in the U.S. Grand Prix events at COTA in 2018 and 2019, placing third in 2018 and second in 2019, earning "podiums" and points, and clinched his sixth driver's championship in 2019.

s) Mr. Leclerc directly infringed claim 4 the patent in 2018 by using the inventions when he drove a car outfitted with the Halo for the Alfa Romeo Sauber F1 team in the U.S. Grand Prix at COTA. He again directly infringed claim 4 of the patent when he used one of the Ferrari vehicles with the Halo in the U.S. Grand Prix events at COTA in 2019. Mr. Leclerc benefitted especially from his 2019 race because he finished fourth, gaining points for the season.

95. Venue is proper in this judicial district under 28 U.S.C. §§ 1391(c), 1400(b), because Defendants are not citizens of the United States and may be sued in any judicial district or any judicial district where they are subject to personal jurisdiction. As shown above, specific personal jurisdiction can be exercised over each Defendant based on the claims and acts in the complaint, including the fact that each of the Defendants has committed infringing acts in this District or induced direct infringement by others in this District in at least 2018, 2019 and/or 2020.

VI. <u>JOINDER</u>

96. Defendants may be joined in this action under Section 299 of Title 35, because Mr. Nygaard's claims result from their overlapping development of products that make-up or include

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the Halo and also uses of the Halo at COTA in Austin, Texas. Mr. Nygaard's claims are based on common and/or overlapping facts showing Defendants directly or indirectly infringed claims 1, 2 and 4 in regard to preparations for, events at, and acts following, the 2018 and 2019, U.S. Grand Prix; the 2019 U.S. ePrix; the 2020 NTT IndyCar Practice at COTA, Texas Motor Speedway, and races in 2020 in Texas and elsewhere; and other times and places in this Country as alleged herein:

a) Mr. Nygaard's right to relief is asserted against each Defendant acting together with multiple other Defendants, who infringed or induced infringement, or in the alternative, with respect to or arising out of the same transaction, occurrence, or series of transactions or occurrences relating to the making, using, selling, offering for sale, or importing into the U.S. the patented invention, as well as causing to be supplied from the U.S. components, including those that have no substantial non-infringing use, and would infringe if assembled in the U.S., and inducing others to do so.

- b) There are questions of fact common to all Defendants including at least:
 - i. Whether a vehicles that implement the Halo or the Aeroscreen based on the Halo infringe claims 1, 2 and 4 of the '178 patent, literally or under doctrine of equivalents?
 - ii. Whether the components exported from the U.S. by each F1 team from COTA abroad for other Grand Prix races constitute all or substantially all of the invention in claim 4 if they had been assembled in the U.S.
 - iii. Whether components of the invention with no substantial non-infringing use were exported from COTA abroad for other Grand Prix races such that is would infringe claim 4 if assembled in the U.S.

- Whether protecting the heads and necks of drivers in Formula and IndyCar races is important, especially in light of the deaths or injuries of drivers Surtees, Massa, Wheldon, Bianchi, Wilson and Wickens?
- v. Whether the Halo or Aeroscreen could have prevented Alonso Massa's or Richard Wickens' injuries, or any of the deaths of Surtees, Wheldon, Bianchi and Wilson?
- vi. Whether the Halo prevented substantial injuries to, or death of, Charles Leclerc at the 2018 Belgian Grand Prix, and other drivers in Formula racing in 2018 and 2019.
- vii. Whether the Aeroscreen saved drivers in the NTT Indy500 Circuit race in Iowa from death or injury.
- viii. Whether instituting closed canopy and eliminating open cockpit vehicles would have had a negative impact on revenues and/or growth and/or sponsors and/or fans for Grand Prix and other Formula racing.
- ix. Whether and to what extent RBR, RBT, Dallara, IndyCar, F1, FIA, Ferrari, Delta, Mercedes, Daimler and others shared information regarding the Halo, including but not limited to information about Mr. Nygaard and/or his patent?
- x. Dallara's, Mercedes, FIA's, RBT's, RBR's, Ferrari's and Nygaard's roles in developing the original Halo prototype, other work on the Halo and Aeroscreen, as well as the 2019-2020 RBT Aeroscreen kits for IndyCar, and other work on parts and equipment to adapt Dallara chasses for IndyCar and for Formula E, and Formula 3 to meet the strength requirements for both IndyCar and FIA?

- xi. Whether Mr. Nygaard's prior 2013 license offer to FIA/FIA Institute and 2018 offer to FIA, which were rejected, are probative of damages for infringement of the '178 patent?
- xii. Whether FIA/FIA Institute's prior conditions for licensing negotiations in May 2013 are admissible or probative of damages for infringement of the '178 patent?
- xiii. Whether and when FOWC, F1 and teams learned of Mr. Nygaard's licensing offers to FIA in 2013 and/or 2018.
- xiv. Whether FIA, F1, FOWC, Mercedes, Daimler, Ferrari, RBT, RBR, and Dallara willfully infringed Mr. Nygaard's patent rights at Formula Grand Prix events at COTA, Formula E, Formula 3 and 4 events, and the NTT IndyCar Series Official Practice at COTA, and other places in the United States, knowing before those events about the '178 patent, their direct or indirect infringement, literally or by doctrine of equivalents, and that they were not licensed?
- xv. Whether, and if so how, the revenues and other financial terms of the contracts among Delta, FIA, F1, FOWC, Mercedes, Ferrari, RBR, RBT and Dallara and others, evidence their actions, intent, motivations, willfulness, and damages owed to Mr. Nygaard?
- xvi. Whether the adoption of the Halo in July 2017 for the 2018 Grand Prix seasonby the F1 Strategy Group induced direct infringement in the U.S. of claims 1, 2and 4 of the '178 patent
- xvii. Whether, and if so how, the revenues and other financial terms of the contracts among RBT, Dallara, and also their IndyCar customers and others, evidence
Defendants' actions, intent, motivations, willfulness and damages owed to Mr. Nygaard?

- xviii. Whether FIA, F1, FOWC, RBT, RBR, Mercedes, Daimler, Ferrari and Dallara participation in, and/or monitoring of, the Project put them on notice of the '178 patent?
- xix. Whether FIA. F1, FOWC, RBT/RBR, Mercedes and Ferrari's involvement in the F1 Strategy Group put them on notice of Mr. Nygaard's patent?
- xx. Whether Defendants' participation in the Project and also participation in or role in one or more of 2018 and 2019 U.S. Grand Prix at COTA, or 2019 Formula E ePrix on New York roads, or making or using the invention by Haas Racing in the U.S., or Formula E teams in the U.S. (including HWA AG Formula E team), directly or indirectly infringe the '178 patent, literally or by doctrine of equivalents?
- xxi. The extent of any revenues resulting from making, using, selling, offering for sale in the U.S. or importing into the U.S. the infringing vehicles and components and/or components, including components with no substantial noninfringing use.
- xxii. The extent of any revenues resulting from supplying or causing to be supplied from the U.S., cars and/or components, including components with no noninfringing use, which would infringe the patent, literally or by doctrine of equivalents, if assembled in the U.S., or components with no non-substantial non-infringing use other than use in the invention.

- xxiii. Whether and how facts about the design, modification and costs of infringing open cockpit vehicles built for use in Formula 1, Formula E, and other Formula racing activities in the U.S. by car owners and by drivers during races and related events evidence infringement, willfulness and damages in this case.
- xxiv. Whether Defendants' contacts with Dallara for designing and making components to install and upgrade chasses for the Halo for Formula Events or Aeroscreen in IndyCar events, and afterward in one or more of the 2018 and 2019 U.S. Grand Prix at COTA, the 2020 NTT IndyCar Series Official Practices at COTA and Texas Motor Speedway, the 2020 opening NTT Indy500 Race in Texas and later races, or 2019 Formula E ePrix on New York roads, or making or using the invention by Haas Racing in the U.S., or Formula E teams in the U.S. (including Mercedes Formula E team), or Formula 3 and 4 teams constitute direct or indirect infringement of the '178 patent, literally or by doctrine of equivalents.
- xxv. Whether and when Defendants' obtained knowledge of the Ferrari patent applications regarding a design like the Halo deployed in a Ferrari sports car, which was published in 2019.
- xxvi. Facts about Dallara's chassis manufactured and sold for use in Formula E,
 Formula 3, Formula 4 and IndyCar circuits in the U.S., "kits" for those products,
 the upcoming replacement chassis for the DW12, and work or contacts among
 the other Defendants regarding those designs and products.
- xxvii. Whether a race car is a "road vehicle" as in Claim 4 of the patent?
- xxviii. Whether Claim 4 of the patent requires a physical front windscreen structure?

<u>COUNT I</u>

Infringement of the '178 patent by FIA

97. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

98. FIA has induced infringement of the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents in regard to vehicles implementing the Halo, and infringed claim 4 of the patent under Section 271(f). All allegations of infringement against FIA include literal infringement or alternatively, infringement under the doctrine of equivalents.

99. The elements of claim 1 of the '178 patent below, with limitations bold and underlined, are met literally or by doctrine of equivalents **by the Halo**, as shown below by the matters described in the bracketed material, see Exhibits A (the '178 patent) and B (charts illustrating the application of the claims):

<u>A strengthening member</u> [the Halo] <u>for use in a road vehicle¹¹</u> [Grand Prix, Formula E or Formula 3 car], <u>for fixing to a structure of the vehicle, and for</u> <u>extending in front of the driver's position</u> [the vertical member of the Halo is fixed to the car at a point in front of the cockpit], <u>the strengthening member being</u> <u>dimensioned so that, when in use, the strengthening member will not prevent</u> <u>the driver from seeing an object which is at least 2 m from the front</u>

¹¹ Defendants take the position that accused Grand Prix cars are not "road vehicles" as used in claims 1 and 4 because they contend the patent's specification distinguishes race cars from "normal road vehicles". The "normal" means average or common. The claim language is "road vehicle" which includes all road vehicles, not just those that are average or common. The claim language, specification and figures show that the inventions in claims 1 and 4 apply to race cars.

windscreen¹², [the driver can see objects, e.g., other cars, at this distance when the Halo is implemented on the vehicle] **when the driver uses binocular vision** [the driver uses binocular vision, e.g., drivers report that the vertical member of the Halo that extends in the front of the cockpit does not interfere with their vision when driving], and **without requiring the driver to move the driver's head** [the driver does not need to move his or her head to see objects when driving, e.g., other cars in front while driving], wherein the strengthening member has the form of a triangular prism which has been sheared in a vertical plane or **the form of a** triangular pyramid as formed by its angled vertical member in conjunction with the other angled portion].

100. Claim 2 of the '178 patent is infringed literally or by doctrine of equivalents by <u>the</u><u>Halo</u>, see Exhibits A and B:

A <u>strengthening member</u> [Halo] for mounting in a vehicle [Grand Prix, Formula E or Formula 3 car], formed <u>of at least three first linearly extending structural</u> <u>units placed in a triangular arrangement for extending from the front</u> <u>structure of the vehicle</u> [front portion of the Halo] and <u>second linearly extending</u> <u>structural unit joining the at least three first linearly extending units</u> [portion of the Halo extending around the cockpit], the second structural units being not

¹² Defendants mistakenly construe claims 1 and 4 as requiring a physical windscreen, but this is not a structural limitation, it is not referred to as a structure in the detailed explanation of the figures 63-74, but rather a point of reference, and a physical windscreen is not required. In any event, even if it were a structural limitations, Mercedes, and upon information and belief, Haas and Racing Point, used "jagged windscreens" in the 2018 and 2019 U.S. Grand Prix races and other teams' cars had equivalent features that perform the same function in the same way for the same result. The Aeroscreen has a windscreen.

horizontal, and **wherein the first linearly extending structural units of the strengthening member have a width not exceeding 65 mm** [front portion of the Halo equals or is less than 65mm] <u>the strengthening member having a</u> **connection for fixing the strengthening member to the vehicle** [the Halo is fixed to the vehicle], whereby, <u>when mounted in the vehicle</u>, the strengthening <u>member extends obliquely to the vertical direction of the vehicle</u>.[All angles on the Halo are oblique to the vertical direction of the vehicle].

101. Claim 4 of the '178 patent is infringed literally or by doctrine of equivalents **by** vehicles incorporating the Halo, see Exhibits A and B:

> <u>A road vehicle</u> [Grand Prix car, Formula E and Formula 3 cars] **comprising at least** one strengthening member [the Halo] <u>fixed to a structure of the vehicle</u> [the vertical member of the Halo is fixed to the front of the automobile chassis] and <u>extending in front of the driver's position</u> [the vertical member of the Halo extends in front of the cockpit], <u>wherein the strengthening member is</u> <u>dimensioned so that the strengthening member will not prevent the driver from</u> <u>seeing an object which is at least two meters from the front windscreen</u> [the driver can see objects, e.g., other cars, at this distance when the Halo is implemented on the vehicle], <u>when the driver uses binocular vision</u> [the driver uses binocular vision, e.g., drivers report that the vertical member of the Halo that extends in the front of the cockpit does not interfere with their vision when driving] and <u>without</u> <u>requiring the driver to move the driver's head</u>, [the driver does not need to move his or her head to see objects when driving, e.g., other vehicles in front while driving] wherein the strengthening member has the form of a triangular prism which has been

sheared in a vertical plane <u>or a truncated sheared triangular pyramid</u>. [Halo has the form of a truncated sheared triangular pyramid as formed by its angled vertical member in conjunction with the other angled portion].

102. Defendant FIA knew of the '178 patent no later than 2013, through Mr. Nygaard's direct involvement in the design of the Halo and his request that FIA license the '178 patent. It also knew that the design of the Halo was based on Mr. Nygaard's '178 patent or would nonetheless infringe it from their meetings and subsequent communications with him.

103. Defendant FIA, induced infringement of claims 1, 2, and 4 of the '178 patent in violation of Section 271(b) by participating in the F1 Strategy Group's adoption of the Halo requirement for all F1 vehicles used in Grand Prix races, and later implementing its rules, resulted in direct infringement by each of the ten teams making and using the inventions in claims 1, 2 and 4, and twenty drivers using the invention in claim 4 by participating in the U.S. Grand Prix events at COTA from October 19-21, 2018 and November 1-3, 2019 because the vehicles incorporated a Halo.

104. Defendant FIA also induced direct infringement of claims 1, 2, and 4 of the '178 patent in 2018 and 2019 by causing all ten teams to have imported their F1 vehicles with the Halo into the U.S. for the 2018 and 2019 U.S. Grand Prix.

105. Defendant FIA also infringed claim 4 of the '178 patent in 2018 and 2019 by causing all ten teams to have supplied the chasses of their F1 vehicles with the Halo and other components for assembly outside of the U.S. in a manner that actively induced the combination of such substantial portion of components outside the United States and in a manner that would infringe if combined in the U.S. in violation of Section 271(f)(1). Further, or in the alternative, causing to be supplied abroad the vehicles' chasses with Halo as custom components that were

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especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use, where such components were uncombined in whole or in part. Upon information and belief, FIA knew that the customized components were especially made and especially adapted for use in the patented '178 inventions, and intended that such components would be combined outside of the United States in a manner that would infringe the '178 patent if such combination occurred within the United States in violation of Section 271(f)(2):

- a) After the 2018 U.S. Grand Prix to Mexico for the Mexican Grand Prix.
- b) After the 2019 U.S. Grand Prix to Brazil for the Brazilian Grand Prix.

106. Defendant FIA induced the Haas racing team to directly infringe claims 1, 2, and 4 of the '178 patent by making and using vehicles with the Halo in and around Haas' facilities in the U.S. for the 2018, 2019 and 2020 Grand Prix seasons.

107. Defendant FIA also caused to be suppled from the U.S. a substantial portion of the components of the patented inventions, including vehicle chasses with Halo in claim 4 abroad for assembly into vehicles with Halo in a manner that actively induced the combination of such components outside the United States and in a manner that would infringe if combined in the U.S., for use in Grand Prix events outside of the U.S. in 2018, 2019, and 2020 in violation of Section 271(f)(1). Alternatively, or in addition, FIA caused to be supplied from the U.S. custom components [vehicle chasses with Halo] that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use, where such components were uncombined in whole or in part. Upon information and belief, FIA knew that the customized components were especially made and especially made and especially made

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would be combined outside of the United States in a manner that would infringe the '178 patent if such combination occurred within the United States, for the 2018, 2019 and 2020 Grand Prix events in violation of 271(f)(2).

108. Defendant FIA further induced direct infringement of claims 1, 2, and 4 by teams and drivers having used cars in the 2019 U.S. ePrix events in New York City events that implemented the Halo, see Exhibits A & B.

109. Defendant FIA also induced direct infringement of claims 1, 2, and 4 by all Formula E teams by requiring them to have imported their vehicles implementing Halo following the 2019 Swiss ePrix.

110. Defendant FIA also induced infringement of the U.S. based Formula E teams BMW Andretti Motor Sport and Geox Dragon to directly infringe claims 1, 2 and 4 by making and using cars implementing the Halo in the U.S. for the 2018-2019 and 2019-2020 Formula E seasons.

111. Defendant FIA also infringed claim 4 of the '178 patent when it caused to be supplied from the U.S. a substantial portion of the components of the invention in violation of Section 271(f)(1), that is the chasses with the Halo attached and other components, for assembly abroad in a manner that actively induced the combination of such components outside the United States and in a manner that would infringe if combined in the U.S. for the Formula E seasons in 2018-2019 and 2019-2020. In addition, or alternatively, FIA caused to be supplied from the U.S. the chasses of vehicles with the Halo as custom components that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use, where such components were uncombined in whole or in part. Upon information and belief, FIA knew that the customized components were especially made and especially adapted for use in the patented for use in the patented '178 inventions, and intended that

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such components would be combined outside of the United States in a manner that would infringe the '178 patent if such combination occurred within the United States in violation of Section 271(f)(2):

- a) By BMW Andretti Formula E team from the U.S. in 2018 and 2019 to Saudi
 Arabia for the 2018-2019 and 2019-2020 ePrix seasons.
- By Geox Dragon Formula E team from the U.S. in 2018 and 2019 to Saudi
 Arabia for the 2018-2019 and 2019-2020 ePrix seasons.
- c) By BMW Andretti Formula E team from the U.S. in 2020 for the Berlin ePrix.
- d) By Geox Dragon Formula E team from the U.S. in 2020 for the Berlin ePrix.
- e) By teams Envision Virgin, Nissan, Audi Sport, DS Techeetah, Mahindra Racing, NIO Formula E, Venturi Formula E Panasonic Jaguar, and HWA Racelab Formula E team from the U.S. in 2019 following the U.S. ePrix to their respective facilities in other countries.

112. Defendant FIA also induced all teams and drivers competing in the 2018 F3 Americas World Championship at COTA, and other races in 2018 and 2019 in the U.S. to directly infringe claims 1, 2, and 4, by using cars that implemented the Halo in those events.

113. Defendant FIA is liable for infringement of the '178 patent, directly or indirectly, literally or by doctrine of equivalents, and its infringement has been and continues to be willful in nature.

114. Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendant FIA because this is an exceptional case.

115. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendant FIA.

COUNT TWO

Infringement of the '178 Patent by F1 and FOWC

116. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

117. F1 and FOWC have infringed the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents. All allegations of infringement against F1 and FOWC include literal infringement or alternatively, infringement under the doctrine of equivalents.

118. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the Halo and also to the accused F1 cars implementing the Halo. The patent is attached as Exhibit A and the illustrative charts attached as Exhibit B.

119. Defendants F1 and FOWC knew of the '178 patent as early as 2006 through communications between Mr. Nygaard and their predecessors Formula One and Delta Topco through Bernie Eccelstone. Upon information and belief, they also knew about Mr. Nygaard's and FIA Institute's licensing discussions in 2013; also through their predecessor entities' participation in the F1 Strategy Group they would have known about the patent by 2016; and finally were informed by FIA of Mr. Nygaard's claims of infringement by FIA in late 2018 and early 2019.

120. Defendant F1 and FOWC induced direct infringement in violation of Section 271(b) by each requiring that each of the ten teams and twenty drivers participating in the U.S. Grand Prix events at COTA from October 19-21, 2018 and November 1-3, 2019, to have used

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vehicles implementing Halo in all races, practices and qualifying rounds each year, which caused them to directly infringe claims 1, 2, and 4 of the '178 patent.

121. Upon information and belief, Defendants F1 and/or FWOC assist with, subsidize, and/or support transportation and logistics of movement of teams, personnel and equipment between and among Grand Prix Circuit races.

122. Defendants F1 and FOWC also induced direct infringement of claims 1, 2, and 4 of the '178 patent in 2018 and 2019 by requiring all ten teams to import the chasses of their F1 vehicles with the Halo for the U.S. Grand Prix, which infringed claims 1 and 2 of the '178 patent, and assisting them with the transportation of their vehicles and equipment.

123. Defendants F1 and FOWC caused all ten F1 Grand Prix teams' vehicle chasses implementing the Halo and other substantial components of the invention to be supplied from the U.S. in each of 2018 and 2019 following the U.S. Grand Prix at COTA, for assembly abroad for use in subsequent races, infringing claim 4 in violation of Sections 271(f)(1). Alternatively, or in addition, the chasses with the Halo are custom components that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use, where such components were uncombined in whole or in part. Upon information and belief, F1 and FOWC knew that the customized components were especially made and especially adapted for use in the patented would be combined outside of the United States in a manner that would infringe claim 4 of the '178 patent if such combination occurred within the United States, and F1 and FOWC caused those components to be supplied from the U.S. for assembly abroad in a manner that would infringe if done in the U.S.:

a) In 2018 from COTA to Mexico for the Mexican Grand Prix.

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b) In 2019 from COTA to Brazil for the Brazilian Grand Prix.

124. Defendants F1 and FOWC induced the Haas racing team to infringe claims 1, 2, and 4 of the '178 patent by making and using vehicles with the Halo in and around Haas' facilities in the U.S. and at the 2018 and 2019 U.S. Grand Prix.

125. Defendants F1 and FOWC also infringed by causing Haas to supply from the U.S. substantial components of the inventions in claim 4 abroad for assembly into vehicles with Halo in a manner that would infringe if in the U.S., for use in foreign Grand Prix events in 2018, 2019, and 2020. Alternatively, or in addition, caused to be supplied from the U.S. custom components with no substantial non-infringing use but for the inventions, for assembly abroad, in a manner that would infringe claim 4 if, in the United States, for the 2018, 2019 and 2020 Grand Prix events. F1 and FOWC assisted in transportation of these materials for these purposes.

126. Alternatively, in the event all components were not assembled into an infringing configuration at the time of import for the 2018 and 2019 U.S. Grand Prix, then F1 and FOWC induced the teams to directly infringe claim 4 by assembling them into F1 cars that were to compete in the U.S. Grand Prix events in 2018 and 2019, and assisted in that transportation.

127. F1 caused supply from the U.S. Haas Racing's F1 cars in components with the Halo installed on the chasses for the 2018 and 2019 Grand Prix season, the start of which was the Australian Grand Prix in Australia, its export of F1 cars in components with the Halo installed on the chasses to Australia for the practices prior to the cancellation of the Australian Grand Prix, and its subsequent export in 2020 of its vehicles with the Halo installed in components for the "restart" of the 2020 Grand Prix season in Austria, and assisted in that transportation. These components are a substantial portion of the inventions and would infringe if assembled in the U.S., in violation of section 271(f)(1); and alternatively, or in addition, custom components that were especially

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made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use, where such components were uncombined in whole or in part. Upon information and belief, F1 knew that the customized components were especially made and especially adapted for use in the patented '178 inventions, and intended that such components would be combined outside of the United States in a manner that would infringe claim 4 of the '178 patent if such combination occurred within the United States in violation of 271(f)(2).

128. Defendants F1 and FOWC caused to be supplied from the U.S. substantial components that if assembled in the U.S. would infringe claim 4 of the '178 patent; or in addition or alternatively, custom components with no substantial non-infringing use other than assembly in a manner that would infringe if done in the U.S., by assisting in transportation of the vehicles and/or chasses with Halo for all ten teams as follows:

- a) In October 2018 from the United States following the U.S. Grand Prix at COTA to Mexico;
- b) In November 2019 from the United States following the U.S. Grand Prix atCOTA to Brazil.

129. 118. Defendants F1 and FOWC are liable for infringement of the '178 patent, directly or indirectly, literally or by doctrine of equivalents, and its infringement has been and continues to be willful in nature.

130. 119. Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendants F1 and FOWC because this is an exceptional case.

120. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendants infringement of the '178 Patent by F1 and FOWC.

COUNT THREE

Infringement of the '178 Patent Against Mercedes

131. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

132. Mercedes has infringed the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents. All allegations of infringement against Mercedes include literal infringement or alternatively, infringement under the doctrine of equivalents.

133. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the accused F1 cars, the patents attached as Exhibit A and the illustrative claim charts attached as Exhibit B.

134. Defendant Mercedes knew of the '178 patent by mid-2013 when Paddy Lowe became the technical director for the team. Mr. Nygaard had presented his technology and discussed his '178 patent with Mr. Lowe shortly before Mr. Lowe left McClaren so that he could become technical director at Mercedes. Among other things Mercedes hired Mr. Lowe for his experience and knowledge of racing technology gained most recently at McClaren, to improve its F1 Grand Prix vehicles. In addition, at the March 27, 2013 meeting at FIA with FIA Institute and Dallara, the FIA Institute and Dallara discussed bringing Mercedes into the Project, including for making a prototype of the Halo. Upon information and belief, FIA Institute and/or Dallara shared what was said and done at the March 27, 2013 meeting with Mercedes including discussion of the

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patent, or that Mercedes was otherwise informed of the patent during its involvement in the Project. Moreover, Mr. Nygaard had meetings with numerous Daimler employees in their facilities near Stuttgart, Germany in 2015 (and had previously corresponded with Daimler in 2011) which is notice to Mercedes given Daimler's control of and active involvement in Mercedes Grand Prix and Formula E racing teams. Further, Mercedes was part of the F1 Strategy Group that discussed the Halo in 2016 and adopted in in 2017 with other members of the group and upon information and belief the patent would have been discussed in these meetings. Accordingly, Mercedes knew about the '178 patent before it voted to adopt the Halo in the F1 Strategy Group in 2017. Finally, upon information and belief Mercedes was informed directly or as part of the F1 Strategy Group or participant about the licensing exchange between Mr. Nygaard and FIA in late 2018 and 2019.

135. Defendant Mercedes directly infringed and also induced direct infringement of claims 1, 2, and 4 of the '178 patent in violation of Section 271(b) by its drivers using cars implementing the Halo (as well as the "jagged windscreen")¹³, Mr. Bottas and Mr. Hamilton, in the 2018 and 2019 U.S. Grand Prix events.

136. Defendant Mercedes directly infringed claims 1, 2, and 4 by making the inventions in the U.S. when it assembled the component parts shipped to COTA for the 2018 and 2019 U.S. Grand Prix events, including the vehicle chasses implementing the Halo (and the "jagged windscreen").

137. Defendant Mercedes directly infringed claims 1, 2, and 4 by importing the chasses for its vehicles for the 2018 and 2019 U.S. Grand Prix implementing the Halo together with other

¹³ Defendants have taken the position in their Motions to Dismiss that claims 1 and 4 require a physical windscreen. This is not correct. However, if it were correct, then Mercedes vehicles would meet this limitation because they included windscreens in the 2018 and 2019 U.S. Grand Prix events.

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components for its F1 cars. Alternatively, Mercedes imported into the U.S. its vehicle chasses implementing Halo, which are custom parts made especially for the invention with no substantial non-infringing use. These acts of importation occurred in 2018 by transporting vehicles and components from the Japanese Grand Prix to COTA for the U.S. Grand Prix, and in 2019 by transporting vehicles and components from the Mexican Grand Prix to COTA for the U.S. Grand Prix.

138. Defendant Mercedes infringed under 271(f)(1) by causing a substantial portion of the components of the patented invention, including the vehicle chasses implementing the Halo, to be supplied to itself outside of the U.S. such that if the parts were assembled in the U.S. they would infringe claim 4 of the '178 patent, and in a manner that actively induced the combination of such components outside the United States. In addition, or alternatively, Mercedes infringed claim 4 under 271(f)(2) by causing custom components that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use to be supplied from the U.S. to itself, where such components were uncombined in whole or in part. Upon information and belief, Mercedes knew that the customized components were especially made and especially adapted for use in the patented '178 inventions, and intended that such components would be combined outside of the United States in a manner that would infringe the '178 patent if such combination occurred within the United States. These acts occurred in transporting its vehicles and components from the 2018 U.S. Grand Prix at COTA to Mexico for the Mexican Grand Prix, and from the 2019 U.S. Grand Prix at COTA to Brazil for the Brazilian Grand Prix.

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139. Defendant Mercedes is liable for infringement of the '178 patent, directly or indirectly, literally or by doctrine of equivalents, and its infringement has been and continues to be willful in nature.

140. Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendant Mercedes because this is an exceptional case.

141. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendant Mercedes.

COUNT FOUR

Infringement of the '178 Patent Against Ferrari

142. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

143. Ferrari has infringed the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents. All allegations of infringement against Ferrari include literal infringement or alternatively, infringement under the doctrine of equivalents.

144. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the accused F1 cars, the patents attached as Exhibit A and the illustrative claim charts attached as Exhibit B.

145. Ferrari became part of the Project by 2015, and tested an F1 car with a Halo in the Spring of 2016 in events around the Spanish Grand Prix as part of the Project. Ferrari was part of the F1 Strategy Group that discussed the Halo in 2016 and adopted it in 2017 and upon information and belief would have discussed the patent in those meetings. Ferrari also applied for an Italian

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Patent that incorporated the Halo design in 2018, and cited the Nygaard patent during prosecution of its U.S. counterpart patent on June 7, 2019. Upon information and belief, Ferrari knew about the Nygaard patent by 2016 through its involvement in the Project or the F1 Strategy Group or both, and in any event before June 7, 2019.

146. Defendant Ferrari induced direct infringement of claim 4 of the '178 patent in violation of Section 271(b) by its drivers using cars implementing the Halo, in the 2018 U.S. Grand Prix, Kimi Räikkönen (who won the race) and Sebastian Vettel (who placed fourth). Likewise, Ferrari induced direct infringement of claim 4 by use by its drivers in the 2019 U.S. Grand Prix events, Sebastian Vettel and Charles Leclerc (who placed fourth).

147. Defendant Ferrari directly infringed claim 4 by making the inventions in the U.S. when it assembled the component parts shipped to COTA for the 2018 and 2019 U.S. Grand Prix events, including the vehicle chasses implementing the Halo.

148. Defendant Ferrari directly infringed claims 1, 2, and 4 by importing the chasses for its vehicles for the 2018 and 2019 U.S. Grand Prix implementing the Halo together with other components for its F1 cars. Alternatively, Ferrari imported into the U.S. its vehicle chasses implementing Halo, which are custom parts made especially for the invention with no substantial non-infringing use. These acts of importation occurred in 2018 by transporting vehicles and components from the Japanese Grand Prix to COTA for the U.S. Grand Prix, and in 2019 by transporting vehicles and components from the Mexican Grand Prix to COTA for the U.S. Grand Prix.

149. Defendant Ferrari infringed under 271(f)(1) by causing a substantial portion of the components of the invention, including the vehicle chasses implementing the Halo, to be supplied to itself outside of the U.S. such that if the parts were assembled in the U.S. they would infringe

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claim 4 of the '178 patent, and in a manner that actively induced the combination of such components outside the United States. In addition, or alternatively, Ferrari infringed claim 4 under 271(f)(2) by causing custom components (e.g., vehicle chasses with Halo) that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use to be supplied from the U.S. to itself, where such components were uncombined in whole or in part. Upon information and belief, Ferrari knew that the customized components were especially made and especially adapted for use in the patented '178 inventions, and intended that such components would be combined outside of the United States in a manner that would infringe the '178 patent if such combination occurred within the United States. These acts occurred in transporting its vehicles and components from the 2018 U.S. Grand Prix at COTA to Mexico for the Mexican Grand Prix, and from the 2019 U.S. Grand Prix at COTA to Brazil for the Brazilian Grand Prix.

150. Defendant Ferrari also directly infringed claims 1, 2, and 4 of the '178 patent by using vehicles implementing Halo in the 2018 and 2019 U.S. Grand Prix events at COTA.

151. Defendant Ferrari is liable for infringement of the '178 patent, directly or indirectly, literally or by doctrine of equivalents, and its infringement has been and continues to be willful in nature.

152. Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendant Ferrari because this is an exceptional case.

153. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendant Ferrari.

COUNT FIVE

Infringement of the '178 Patent Against RBR and RBT

154. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

155. RBR and RBT have infringed the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents. All allegations of infringement against RBR and RBT include literal infringement or alternatively, infringement under the doctrine of equivalents.

156. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the accused F1 cars and the Halo, the patents attached as Exhibit A and the illustrative claim charts attached as Exhibit B.

157. RBT monitored the Project with IndyCar from about 2011. RBT developed an alternative to the Halo design during the Project, the Aeroscreen. RBT tested its Aeroscreen in 2016 in events surrounding the Russian Grand Prix.

158. RBR was part of the F1 Strategy Group that discussed the Halo in 2016 and adopted it in 2017. In addition, RBT worked on development of the Aeroscreen as part of the Project and proposed it as a solution to the F1 Strategy Group and FIA.

159. In September 2017, Aston Martin and RBT and RBR announced a collaboration where Aston Martin would become a name sponsor of the team. RBT, including its Chief Technical Officer Adrian Newey, would also collaborate on Aston Martin car design, and Aston Martin would share technical information with RBT and RBR. Mr. Nygaard had made presentations to Aston Martin and it was aware of his '178 patent prior to the collaboration. Upon information and belief, the '178 patent would have been noted as between Aston Martin and RBT in their collaboration.

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160. At some point around 2018, RBT and Dallara entered into a collaboration to further develop, test and bring to market the current version of the Aeroscreen for IndyCars. Dallara was fully informed about Mr. Nygaard's '178 patent from its past in-person dealings with him. Upon information and belief, Dallara would have notified RBT of Mr. Nygaard's patent from its past work on the Halo with Mr. Nygaard. The modifications of the Aeroscreen adopted the Halo as depicted in Mr. Nygaard's patent.

161. In December 2019, the racing press publicized a Ferrari published patent application, whose prosecution history included the Nygaard patent.

162. Further, FIA received in late 2018 a royalty demand from Mr. Nygaard on the '178 patent, and FIA responded to Mr. Nygaard refusing a license, copying F1 and FOWC: Upon information and belief these events would have been shared with the F1 Strategy Group.¹⁴

163. Upon information and belief, RBT's and RBR's infringing acts in the U.S. prior to suit were done with knowledge of Mr. Nygaard's patent. Alternatively, all acts by RBT and RBR after it received notice of the lawsuit (likely early April 2020), were done with knowledge of the '178 patent. RBT and RBR have acted in willful disregard of Mr. Nygaard's rights.

<u>Halo</u>

164. Defendant RBR induced direct infringement of claim 4 of the '178 patent in violation of Section 271(b) by its drivers using cars implementing the Halo, in the 2018 U.S. Grand Prix, Max Verstappen (finished second) and Daniel Riccardo. Likewise, RBR induced direct

¹⁴ RBR and RBT have taken the position at this time that they did not have notice of the '178 patent prior to being sued. However, the circumstantial evidence that RBR and RBT would have gotten notice through these events makes *at least* a plausible case for notice, and Plaintiff should have discovery on the issue of notice. (Indeed, it hardly seems plausible that RBR and RBT would not have heard of the '178 patent in these circumstances). Regardless, however, RBT had notice of the patent and infringement before the first race in the 2020 NTT IndyCar 500 season.

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infringement of claim 4 of the '178 by its drivers using vehicles implementing the Halo in the 2019 U.S. Grand Prix events, Max Verstappen (finished third) and Alexander Albon (finished fifth).

165. Defendant RBR directly infringed claim 4 by making the inventions in the U.S. when it assembled the component parts shipped to COTA for the 2018 and 2019 U.S. Grand Prix events, including the vehicle chasses implementing the Halo.

166. Defendant RBR directly infringed claims 1, 2, and 4 by importing the chasses for its vehicles for the 2018 and 2019 U.S. Grand Prix implementing the Halo together with other components for its F1 cars. Alternatively, RBR imported into the U.S. its vehicle chasses implementing Halo, which are custom parts made especially for the invention with no substantial non-infringing use, infringing claim 4 of the '178 patent. These acts of importation occurred in 2018 by transporting vehicles and components from the Japanese Grand Prix to COTA for the U.S. Grand Prix, and in 2019 by transporting vehicles and components from the Mexican Grand Prix to COTA for the U.S. Grand Prix.

167. Defendant RBR infringed under 271(f)(1) by causing a substantial portion of the components of the invention, including the vehicle chasses implementing the Halo, to be supplied to itself outside of the U.S. such that if the parts were assembled in the U.S. they would infringe claim 4 of the '178 patent, and in a manner that actively induced the combination of such components outside the United States. In addition, or alternatively, RBR infringed under 271(f)(2) by causing custom components that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use to be supplied from the U.S. to itself, where such components were uncombined in whole or in part. Upon information and belief, RBR knew that the customized components were especially made and especially adapted for use in the patented '178 inventions, and intended

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that such components would be combined outside of the United States in a manner that would infringe claim 4 of the '178 patent if such combination occurred within the United States. These acts occurred in transporting its vehicles and components from the 2018 U.S. Grand Prix at COTA to Mexico for the Mexican Grand Prix, and from the 2019 U.S. Grand Prix at COTA to Brazil for the Brazilian Grand Prix.

168. Defendant RBR also directly infringed claims 1, 2, and 4 of the '178 patent by making (assembling) and using vehicles implementing Halo in the 2018 and 2019 U.S. Grand Prix events at COTA.

<u>Aeroscreen</u>

169. The Aeroscreen infringes claims 1 and 2 of the '178 patent literally or by doctrine of equivalents as set forth below. Vehicles implementing the Aeroscreen infringe claims 1, 2, and 4 of the '178 patent. The patent is attached as Exhibit A and claim charts illustrating infringement are attached as Exhibit B.

A <u>strengthening member</u> [the Halo in the Aeroscreen] for use in a road vehicle [E.g., IndyCar, Dallara DW12, Dallara IR22 or similar open cockpit car], <u>for fixing</u> to a structure of the vehicle, and for extending in front of the driver's position [the vertical center member of the Halo portion of the Aeroscreen is fixed to the car at a point in front of the cockpit], <u>the strengthening member being dimensioned</u> so that, when in use, the strengthening member will not prevent the driver from seeing an object which is at least 2 m from the front windscreen,¹⁵ [the driver can see objects, e.g., other cars, at this distance when the Aeroscreen is implemented on the vehicle] <u>when the driver uses binocular vision</u> [the driver

¹⁵ The Aeroscreen has a windscreen if such is required as argued by Defendants.

uses binocular vision, e.g., drivers reported no vision issues with the Aeroscreen], and <u>without requiring the driver to move the driver's head</u> [the driver does not need to move his or her head to see objects when driving, e.g., other cars in front while driving], wherein the strengthening member has the form of a triangular prism which has been sheared in a vertical plane or <u>the form of a truncated</u> <u>sheared triangular pyramid</u>. [Aeroscreen has the form of a truncated sheared triangular pyramid as formed by its angled vertical member in conjunction with the other angled portion].

170. Claim 2 of the '178 patent is infringed literally or by doctrine of equivalents by the Aeroscreen, see Exhibits A and B:

<u>A strengthening member</u> [Halo portion of the Aeroscreen] for mounting in a <u>vehicle</u> [an IndyCar open cockpit vehicle, e.g., DW12 or IR22], <u>formed of at least</u> <u>three first linearly extending structural units placed in a triangular</u> <u>arrangement for extending from the front structure of the vehicl</u>e [the front and side members downward extending members are in this arrangement] and second linearly extending structural unit joining the at least three first linearly extending units [portion of the Aeroscreen extending around the cockpit], the <u>second structural units</u> being not horizontal [Aeroscreen units are not horizontal], and wherein <u>the first linearly extending 65 mm</u> [downward extending members of the Aeroscreen equal to or are less than 65mm] <u>the strengthening member have a width not exceeding 65 mm</u> [downward extending member having a connection for fixing the strengthening member to the vehicle [the Aeroscreen is fixed to the vehicle], whereby, when mounted in the vehicle, <u>the strengthening</u>

member extends obliquely to the vertical direction of the vehicle. [All angles on the Aeroscreen are oblique to the vertical direction of the vehicle].

171. Claim 4 of the '178 patent is infringed literally or by doctrine of equivalents by vehicles incorporating the Aeroscreen, see Exhibits A and B:

A road vehicle [e.g., IndyCar, such as DW12, IR22] comprising at least one strengthening member [the Aeroscreen] fixed to a structure of the vehicle [the a member of the Aeroscreen is fixed to the front of the automobile chassis] and extending in front of the driver's position [the a member of the Aeroscreen extends in front of the cockpit], wherein the strengthening member is dimensioned so that the strengthening member will not prevent the driver from seeing an object which is at least two meters from the front windscreen [the driver can see objects, e.g., other cars, at this distance when the Aeroscreen is implemented on the vehicle], when the driver uses binocular vision [the driver uses binocular vision, e.g., drivers report that the front member of the Aeroscreen that extends in the front of the cockpit does not interfere with their vision when driving] and without requiring the driver to move the driver's head, [the driver does not need to move his or her head to see objects when driving, e.g., other vehicles in front while driving] wherein the strengthening member has the form of a triangular prism which has been sheared in a vertical plane or a truncated sheared triangular pyramid. [Aeroscreen has the form of a truncated sheared triangular pyramid as formed by its angled vertical member in conjunction with the other angled portion].

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172. Defendant RBT and Defendant Dallara and others developed an Aeroscreen that combined a Halo made by Pankyl, "tear-off" "jet cockpit type" windscreens by PPG, assembled with structural components from Dallara that connected the Aeroscreen to the Dallara chasses used in all IndyCars. This Aeroscreen was especially designed for and its parts made for combination with the Dallara chasses used in IndyCar, the DW12.

173. The first test for the Aeroscreen in a racing environment with all teams was planned for February 11, 2020 at COTA. Dallara is reported to have struggled to ship sufficient Aeroscreen kits in time for the February 11, 2020 COTA open practice. (The February 11, 2020 open practice would be the first ticketed event for the public of the 2020 NTT IndyCar 500 Season). Additional days of testing were set for February 12 at COTA and February 14, 2020 at the Texas Motor Speedway near Ft. Worth. At least one technical person from RBT attended the practices at COTA. This representative also held a press conference in Austin on February 10, 2020. It rained periodically during the first day of testing, and it was learned by RBT and Dallara that the Aeroscreen leaked in the rain. They also got feedback from the teams and the drivers on other aspects of the design, and in particular the heat build-up caused by the windscreen almost enclosing the cockpit. Upon information and belief, as a result of the testing in Texas, the Aeroscreen was fine-tuned to resolve the leaks and did research to develop and implement options to deal with the heat.

174. The start of the 2020 NTT IndyCar 500 circuit was delayed, with the opening races in Florida being cancelled due to the covid-19 pandemic. The first race of the 2020 season was in June 2020 at Texas Motor Speedway outside of Ft. Worth, Texas. Since then there have been other races, including a July 2020 race in Iowa where the Aeroscreen is credited with having saved three drivers involved from death or serious injury. On August 27, 2020, driver James Davison

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credited the Aeroscreen with saving him from injury from debris, flames, smoke and fumes, following serious malfunctioning of his car (master brake cylinder).

175. RBT and Dallara induced direct infringement of claims 1, 2, and 4 of the '178 patent by NTT Indy500 teams in violation of Section 271(b) by providing parts, consultation, improvements, and information about the installation and use of the Aeroscreen, including options to deal with heat issues, up to and after the practices in Texas in February 2020, and also in preparation for the first race of the season in June 2020 at the Texas Motor Speedway, as well as subsequent races in the U.S., and the teams directly infringed claims 1, 2, and 4 by making and using vehicles implementing Aeroscreens in those events. The drivers directly infringed claim 4 because they used the inventions when they drove vehicles in IndyCar practices and races and other events in the U.S. and when otherwise operating vehicles with the Aeroscreen in the U.S.

176. RBT contributed to direct infringement of claims 1, 2 and 4 of the '178 patent by the teams by collaborating with Dallara in the importation into the U.S. of the customized Aeroscreen parts that constitute material components of the patented '178 inventions and have no substantial non-infringing use, which were then combined in the U.S. to make and use the inventions here. Upon information and belief, RBT knew the customized Aeroscreen parts were especially made and especially adapted for infringing use of claims 1, 2 and 4 of the '178 patent, and were not a staple article or commodity of commerce suitable for substantial non-infringing use.

177. RBT and Dallara have directly infringed claims 1 and 2 of the '178 patent by importing, offering for sale and selling the Aeroscreen in the U.S. to IndyCar teams.

178. IndyCar racing in the U.S. is continuing and RBT's and Dallara's continued support for the Aeroscreen is inducement of direct infringement of claims 1, 2, and 4 by the IndyCar teams

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making (assembling) vehicles at race locations by use of vehicles implementing the Aeroscreen, as well as direct infringement of claim 4 by drivers using vehicles with Aeroscreen in regard to their driving in the U.S. at IndyCar events and otherwise.

As to both Halo and Aeroscreen

179. Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendants RBT and RBR because this is an exceptional case.

180. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendants RBT and RBR.

COUNT SIX

Infringement of the '178 Patent Against Dallara

181. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

182. Dallara has infringed the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents. All allegations of infringement against Dallara include literal infringement or alternatively, infringement under the doctrine of equivalents.

183. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the accused Halos and F1 cars, and paragraphs 169 to 171, which explain how the claims apply to the accused Aeroscreens and IndyCars with the patents attached as Exhibit A and the illustrative claim charts attached as Exhibit B.

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184. Dallara participated in the Project with the FIA Institute at least since the March 27, 2013 meeting among its Chief of Design, Luca Pignacca, and GP technical director Didier Perrin, Mr. Nygaard, and FIA Institute at FIA headquarters in Paris. Dallara's Pignacca and Perrin were told by Mr. Nygaard that his technology was protected by his patents at that meeting. Designs that came from figures 64 and 68 of the '178 patent were discussed at the meeting. The strengthening member that emerged from the meeting, later called the Halo, is based on figure 68 of the patent (among others), and infringes claims 1 and 2 of the '178 patent, and when implemented in a race car also claim 4 of the '178 patent.

185. The Project's work implementing Mr. Nygaard's inventions into the Halo continued with addition of Mercedes and Ferrari, which made prototypes and tested the Halo. RBT monitored the Project with IndyCar but decided to work on an alternative to the Halo, its Aeroscreen. In 2016, the F1 Strategy Group considered adoption of the Halo for F1, but delayed the decision for one year to look for alternatives. Finding none that were acceptable, in 2017 the F1 Strategy Group adopted the Halo for F1, and FIA then implemented it.

<u>Halo</u>

186. Dallara knew at the time of the March 27, 2013 meeting with Mr. Nygaard, that one of the most significant races on the Grand Prix Circuit is the U.S. Grand Prix at COTA.

187. Dallara entered into a collaboration with Haas when Haas entered F1 racing, to develop Haas' cars and to collaborate on preparation for and racing in Grand Prix events. Dallara designed the chasses for Haas cars for implementing the Halo for use in the 2018 and 2019 Grand Prix seasons knowing that the one race in the U.S., the U.S. Grand Prix, for the one team based in the U.S., Haas, would be held in Texas at COTA in each of those years. On information and belief, Dallara directly infringed claims 1, 2, and 4 of the '178 patent by collaborating with Haas to make

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and use cars implementing the Halo. This direct infringement was U.S. Grand Prix events in 2018 and 2019 and at or around Haas' facility is in North Carolina from about 2017 through 2020.

188. Alternatively, Dallara induced direct infringement by Haas of claims 1, 2 and 4 of the patent by making F1 vehicles implementing the Halo and by using them to participate in the U.S. Grand Prix as well as other places around its U.S. headquarters.

189. An August 30, 2016 article on Haas' website credits Dallara with jump starting its entry into F1, writing, "famed racecar builder Dallara has Haas F1 Team's design staff embedded in its Parma headquarters." Guenther Steiner, Haas Team Principal at the time, is quoted in the article as saying "Dallara is a big part of our team. They were there at the beginning of our team and they still are. With time, the relationship has gotten better and easier." He was also quoted as saying, "We sub-contract a team of engineers from their [Dallara] pool of engineers to work for us."

190. Dallara induced direct infringement by Haas of claims 1, 2, and 4 of the '178 patent by designing, contributing to, supporting and encouraging Haas to make and use the inventions, and also inducing Haas' drivers to directly infringe by using Haas vehicles with Halo in 2018 and 2019 U.S. Grand Prix races at COTA., and also at Haas' facilities in the U.S. for the 2020 Grand Prix season.

191. Dallara has further induced direct infringement of claims 1, 2, and 4 of the '178 patent by designing, contributing to, supporting and encouraging all Formula E teams to drive in the 2019 U.S. ePrix in New York City with Spark Gen2 cars that implemented the Halo. Dallara designed and produced the chasses for those cars, the Spark Gen 2, which was made to accommodate and include the Halo, for the 2018-2019 Formula E Season. All teams and drivers

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directly infringed claim 4 when they used the Spark Gen 2 implementing Halo in the 2019 U.S. ePrix in New York City.

192. Dallara also induced direct infringement of claims 1, 2 and 4 by BMW Andretti and Geox Dragon, U.S. based teams by their making (assembling) and using vehicles with the Halo.

193. Dallara also induced direct infringement by Spark Racing Technology in that it offered for sale and sold in this country the Spark Gen2 and Spark Gen2 EVO cars, with chasses that include the Halo. Dallara designed and made these chasses with Halo.

<u>Aeroscreen</u>

194. At some point, Dallara worked on development of the Aeroscreen with RBT. RBT and Dallara entered into a collaboration to further develop a shield type device by IndyCar or to revise RBT's past version of the Aeroscreen at some point in or prior to 2019, Dallara was fully informed about Mr. Nygaard's '178 patent from its past in-person dealings with him. Dallara suggested to RBT in or around 2018 that the Halo be incorporated into the Aeroscreen for strength, and it was then made part of the Aeroscreen.

195. Dallara was aware that there were multiple IndyCar events at the COTA and Texas Motor Speedway during its work on the Aeroscreen.

196. The first test for the Aeroscreen in a racing environment with all teams was February 11, 2020 at COTA. Dallara is reported to have struggled to ship sufficient Aeroscreen kits to IndyCar teams in time for the February 11, 2020 COTA open practice. (The February 11, 2020 open practice would be the first ticketed event for the public of the 2020 NTT IndyCar 500 Season). Additional days of testing were set for February 12 at COTA and February 14, 2020 at the Texas Motor Speedway near Ft. Worth. At least one technical person from RBT attended the practices at COTA. The RBT representative also held a press conference in Austin on February

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10, 2020. It rained periodically during the first day of testing, and it was learned by RBT and Dallara that the Aeroscreen leaked in the rain. They also got feedback from the teams and the drivers on other aspects of the design, and in particular the heat build-up caused by the windscreen (which almost encloses the cockpit). Upon information and belief, as a result of the testing in Texas, and information provided to it, Dallara made modifications to the Aeroscreen to resolve the leaks and research was done to find options to deal with them.

197. The start of the 2000 NTT IndyCar 500 circuit was delayed, with the opening races in Florida being cancelled due to the covid-19 pandemic. The first race of the 2020 season was in June 2020 at Texas Motor Speedway outside of Ft. Worth, Texas. Since then there have been other races in the U.S., including a July 2020 race in Iowa where the Aeroscreen is credited with having saved three drivers involved in a big accident from death or serious injury. On August 27, 2020, driver James Davison credited the Aeroscreen with saving him from injury from debris, flames, smoke and fumes, following serious malfunctioning of his car (master brake cylinder).

198. Dallara induced direct infringement of claims 1, 2, and 4 of the '178 patent by NTT Indy500 teams making (assembling) and using their vehicles with Aeroscreen in 2020 events in violation of Section 271(b) by providing parts, consultation, improvements, and information about the installation and use of the Aeroscreen. Likewise, Dallara induced direct infringement of claim 4 by drivers using these cars in the U.S.

199. Dallara induced and also contributed to direct infringement of claims 1, 2, and 4 of the '178 patent by teams and drivers in IndyCar circuits by its the importation into the U.S. of the customized Aeroscreen parts that constitute material components of the patented '178 inventions and have no substantial non-infringing use, which were then combined in the U.S. to make and use the inventions here. Upon information and belief, Dallara knew the customized Aeroscreen

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parts were especially made and especially adapted for infringing use of the '178 patent, and were not a staple article or commodity of commerce suitable for substantial non-infringing use. Dallara also is liable for contributory infringement for offering for sale and selling such components.

200. RBT and Dallara have directly infringed claims 1 and 2 of the '178 patent by importing, offering for sale and selling the Aeroscreen in the U.S. to IndyCar teams.

201. IndyCar racing in the U.S. is continuing and RBT's and Dallara's continued support for the Aeroscreen is inducement of direct infringement of claims 1, 2 and 4 by the IndyCar teams who make (assemble) and use vehicles with the Aeroscreen. Likewise RBT and Dallara are also inducing direct infringement of claim 4 by the drivers at these events and other times and places in the U.S.

As to both Halo and Aeroscreen

186. COTA is the only place in the U.S. that hosts both IndyCar and F1 Grand Prix events. It is one of the most important locations for motor sports in the U.S. COTA has received benefits from state and local governments to support its operation and success, including at least some reimbursement of locations fees for F1 races. COTA and its events are of enormous importance to the State of Texas and also local governments.

Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendant Dallara because this is an exceptional case.

202. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendant Dallara.

COUNT SEVEN

Allegations Against Daimler AG

203. Mr. Nygaard incorporates by reference each and every allegation in the preceding paragraphs.

204. Daimler AG has induced infringement of the '178 patent claims 1, 2, and 4 literally or alternatively by equivalents by Mercedes and HWA AG at FIA sanctioned races in the U.S. in 2018 and 2019. All allegations of infringement include literal infringement or alternatively, infringement under the doctrine of equivalents.

205. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the accused F1 and Formula E cars, the patents attached as Exhibit A and the illustrative claim charts attached as Exhibit B.

206. Mercedes is the agent for Daimler for Grand Prix and Formula E racing, and its acts are those of Daimler's for these events. Mercedes is an indirect subsidiary of Daimler, with Daimler as its ultimate controlling party. Three of the five board members of Mercedes are top Daimler executives: Daimler's COO, Head of Marketing and Sales, and Director of Cooperation and Innovation. Daimler's current Chairman of the Board and CEO was a member of the board until 2019 when he assumed his current roles. In Mercedes' December 2018 financial statement, its auditors would have issued a going concern warning but for assurances from the Daimler executives that Daimler would support Mercedes. In 2018, Daimler put approximately 90,000,000 GBP into Mercedes and also carried over 73,000,000 GBP of interest-free debt for it. Daimler controlled whether Mercedes would continue in F1 when the current contract expires at the end of this year: In the past year its Chairman and CEO has stated Daimler would keep Mercedes in F1. Daimler also designated Mercedes Grand Prix drivers for 2021, when Daimler's CEO stated in

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July 2020, stated that it would continue with its two current drivers, Mr. Bottas and Mr. Hamilton. And it is common-sense that Daimler would actively control and subsidize Mercedes' operations, since Mercedes' F1 team generates over \$5 billion dollars in positive advertising and brand building for the Daimler Group.

207. Daimler made the decision to start a Formula E team for Mercedes, and did so by contracting with HWA AG to field the HWA Racelab Team to develop a car and establish a foundation in the 2018-2019 season to facilitate Mercedes' entry into Formula E in 2019-2020. Mercedes entered Formula E in late 2019 for the 2019-2020 season as planned. Daimler installed different team principals from its F1 team, and Mercedes' financial report as of December 31, 2019 makes no mention at all of its new Formula E venture. Upon information and belief, Daimler directly runs the day to day operations as well as sets the direction of Mercedes Formula E team. HWA appears to be providing the infrastructure for the Mercedes Formula E team, upon information and belief Daimler manages and pay for this support. Mercedes most recent filed financial statement, as if December 31, 2019, show it is dependent on Daimler's funding, including its interest-free cash resources. Alternatively, Daimler and Mercedes should be considered as a single enterprise and its corporate distinctions ignored for the purpose of this case.

208. Daimler knew about the '178 patent upon being contacted by Mr. Nygaard in 2011. Defendant Mercedes knew of the '178 patent by mid-2013 when Paddy Lowe became the technical director for the team. Mr. Nygaard had presented his technology and discussed his '178 patent with Mr. Lowe shortly before Mr. Lowe left McClaren so that he could become technical director at Mercedes. Mercedes hired Mr. Lowe for his experience and knowledge of racing technology to improve its vehicles and their performance. In addition, at the March 27, 2013 meeting at FIA with FIA Institute and Dallara, the FIA Institute and Dallara discussed bringing Mercedes into the

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project to make a prototype of the Halo. Further, Mercedes later did develop a prototype of the Halo. Upon information and belief, Mercedes was told about Mr. Nygaard's patent from the Project. Moreover, Mr. Nygaard had meetings with numerous Daimler employees in their facilities near Stuttgart, Germany in 2015. Further, Mercedes was part of the F1 Strategy Group that discussed the Halo in 2016 and adopted it in 2017. Accordingly, Mercedes knew about the '178 patent before it voted to adopt the Halo in the F1 Strategy Group in 2017. Daimler likewise knew about the '178 patent when it created the HWA Racelab team to compete in Formula E using Spark Gen2 and Spark Gen2EVO vehicles that implement the Halo.

209. Defendant Daimler induced direct infringement of claims 1, 2, and 4 of the '178 patent in violation of Section 271(b) by engaging HWA WG to directly infringe by importing the Formula E vehicles into the U.S. for the 2019 U.S. ePrix, making (assembling) its vehicles upon arrival in the U.S. for that event, and using vehicles that implement the Halo in the 2019 U.S. ePrix in New York City. Further, upon information and belief, Formula E cars are shipped as components and the vehicle chasses implementing the Halo is a custom component with no substantial non-infringing use, but to be assembled into a vehicle implementing the Halo, and HWA infringed claims 1, 2, and 4 by making the inventions when assembling the components of its car for the 2019 U.S. Grand Prix.

210. Defendant Daimler violated Section 271(f)(1) by causing a substantial portion of the components of the invention, including Formula E vehicle chasses implementing the Halo, to be supplied to HWA outside of the U.S. such that if the parts were assembled in the U.S. they would infringe claim 4 of the '178 patent, and in a manner that actively induced the combination of such components outside the United States. In addition, or alternatively, Daimler infringed under 271(f)(2) by causing custom components (vehicle chasses implementing Halo) that were
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especially made and especially adapted for use in the claim 4 of the '178 invention, which are not a staple article or commodity of commerce suitable for substantial non-infringing use to be supplied from the U.S. to HWA abroad, where such components were uncombined in whole or in part. Upon information and belief, Daimler knew that the customized components were especially made and especially adapted for use in the patent, and intended that such components would be combined outside of the United States in a manner that would infringe claim 4 of the '178 patent if such combination occurred within the United States.

211. Because Mercedes' activities are directed by Daimler and funded by Daimler, Defendant Daimler also induced Mercedes to directly infringe claims 1, 2 and 4 of the '178 patent by importing the inventions in claims 1 and 2. Further, Daimler also induced Mercedes to directly infringe claims 1, 2 and 4 by making and using vehicles implementing Halo (and "jagged windscreens") in the 2018 and 2019 U.S. Grand Prix events at COTA by subsidizing and directing its operations.

212. Defendant Daimler violated Section 271(f)(1) by causing a substantial portion of the components of the invention, including Formula 1 vehicle chasses implementing the Halo, to be supplied to Mercedes outside of the U.S. such that if the parts were assembled in the U.S. they would infringe claim 4 of the '178 patent, and in a manner that actively induced the combination of such components outside the United States. In addition, or alternatively, Daimler infringed under 271(f)(2) by causing custom components that were especially made and especially adapted for use in the patented '178 inventions and not a staple article or commodity of commerce suitable for substantial non-infringing use to be supplied from the U.S. to Mercedes, where such components were uncombined in whole or in part. Upon information and belief, Daimler knew that the customized components were especially made and especially adapted for use in the

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patented '178 inventions, and intended that such components would be combined outside of the United States in a manner that would infringe claim 4 of the '178 patent if such combination occurred within the United States. Daimler caused each respective act of supply following the 2018 and 2019 U.S. Grand Prix respectively (Mexico in 2018, Brazil in 2019).

213. Defendant Daimler is liable for infringement of the '178 patent, directly or indirectly, literally or by doctrine of equivalents, and its infringement has been and continues to be willful in nature.

214. Mr. Nygaard is entitled to actual and enhanced damages for this willful infringement pursuant to § 284, and attorneys' fees and costs under 35 U.S.C. § 285 as a result of the infringement of the '178 patent from Defendant Daimler because this is an exceptional case.

215. Therefore, Mr. Nygaard is entitled to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees, and costs and any other relief to which he is entitled to receive from Defendant Daimler.

<u>COUNT XII</u>

Infringement by Charles Leclerc

216. Mr. Nygaard incorporates by reference the preceding paragraphs.

217. Mr. Leclerc contracted to race in 2018 in F1 for Alfa Romeo Sauber F1, including at the U.S. Grand Prix at COTA.

218. Mr. Leclerc directly infringed claim 4 in the 2018 U.S. Grand Prix events at COTA by using a vehicle with a Halo when he drove for the Alfa Romeo Sauber F1 team there. The specific comparison of Claims 1, 2, and 4 that appears at paragraphs 99 to 101, are reasserted and incorporated by reference here, as are the patent (Exhibit A) and the illustrative claim charts (Exhibit B).

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219. Mr. Leclerc directly infringed claim 4 in the 2019 U.S. Grand Prix events at COTA by using a vehicle Halo when he drove for Defendant Ferrari there. Paragraphs 99 to 101, showing how Claims 1, 2, and 4 apply to the Halo are incorporated by reference as are the patent (Exhibit A), and the illustrative claim charts (Exhibit B).

220. When Mr. Leclerc accepted his driving position with the team he knew he would be racing in the 2019 U.S. Grand Prix at COTA in Austin, Texas. Upon information and belief, Mr. Leclerc's 2019 contract with Ferrari paid him millions of dollars for the 2019 F1 Grand Prix season so that he received substantial compensation for racing at the U.S. COTA in 2019.

221. Mr. Leclerc infringed claims 4 by driving a Ferrari car implementing a Halo at the 2019 U.S. Grand Prix events at COTA. Mr. Leclerc also received substantial benefits because, among other things, he placed "in the points" by finishing in fourth position. The detailed comparison of how claims 1, 2, and 4 apply to a car implementing a Halo in paragraphs 99 to 101, and also the patent (Exhibit A) and illustrative claim charts (Exhibit B) are incorporated by reference.

222. Upon a finding that Mr. Leclerc infringed the '178 patent he should be enjoined from using a car implementing a Halo (in its original form or as part of an Aeroscreen) in the U.S. for the duration of the patent. Mr. Leclerc is liable to Mr. Nygaard for a reasonable royalty for his past infringement.

COUNT XIII

Infringement by Lewis Hamilton

223. Mr. Nygaard incorporates the preceding paragraphs here.

224. Lewis Hamilton directly infringed claim 4 in the 2018 U.S. Grand Prix events at COTA by using a vehicle implementing a Halo for Defendant Mercedes. Mr. Hamilton placed

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third in the race. Upon information and belief, on a pro rata basis, Mr. Hamilton would have been paid approximately 2.5 - 4 million for this U.S. Grand Prix event.

225. Lewis Hamilton directly infringed claim 4 in the 2019 U.S. Grand Prix at COTA by driving a vehicle implementing a Halo for Defendant Mercedes. Mr. Hamilton came in second in the race, but clinched his 6th annual driver's championship by the points won in the race. Upon information and belief, on a pro rata basis, Mr. Hamilton would have been paid approximately \$2.5 - 4 million for the U.S. Grand Prix event.

226. Mr. Nygaard incorporates by reference paragraphs 99 to 101, which explain how the claims apply to the accused F1 and Formula E cars, the patents attached as Exhibit A and the illustrative claim charts attached as Exhibit B.

227. Upon a finding that Mr. Hamilton infringed the '178 patent he should be enjoined from using a car implementing a Halo (in its original form or as part of an Aeroscreen) in the U.S. for the duration of the patent. Mr. Hamilton is liable to Mr. Nygaard for a reasonable royalty for his past infringement.

VII. <u>PRAYER FOR RELIEF</u>

228. In consideration of the foregoing, Mr. Nygaard respectfully requests that this Court enter an Order granting the following relief:

a) Enter judgment in favor of Plaintiff Jens H. S. Nygaard, that Defendants Fédération Internationale de l'Automobile, Formula One Management Ltd., Formula One World Championship Ltd., Mercedes-Benz Grand Prix Ltd., Daimler AG, Ferrari S.p.A., Red Bull Technology Ltd., Red Bull Racing, Ltd. and Dallara Automobilli S.p.A., have each infringed and each continue to infringe U.S. Patent No. 7,494,178, and finding that such infringement is willful as plead above, making this case exceptional as to each of them.

- b) Judgment that Lewis Hamilton and Charles Leclerc have each directly infringed the '178 patent.
- c) Enjoin future making, offering for sale, selling, using or importing the Halo and Aeroscreen devices and those not colorably different from them in the U.S. unless they obtain a license.
- Award Plaintiff Jens H. S. Nygaard all monetary relief available under the patent laws of the United States, including but not limited to actual and/or compensatory damages, reasonable royalties, pre-judgment and post-judgment interest, enhanced damages, attorneys' fees and costs pursuant to 35 U.S.C. §§ 284, 285;
- e) Declare this case exceptional and award Plaintiff Jens H. S. Nygaard his reasonable attorney fees pursuant to 35 U.S.C. § 285; and
- f) Grant Plaintiff Jens H. S. Nygaard such additional, other, or further relief as the Court deems just and proper.

VIII. <u>DEMAND FOR JURY TRIAL</u>

229. Mr. Nygaard demands trial by jury on all issues so triable.

Dated: September 11, 2020

Respectfully submitted,

By: <u>/s/ Danielle J. Healey</u>

Danielle J. Healey Attorney in Charge Texas Bar No. 09327980 healey@fr.com FISH & RICHARDSON P.C. 1221 McKinney Street, Suite 2800 Houston, Texas 77010

Telephone: (713) 654-5300 Facsimile: (713) 652-0109

Tommy Jacks

Texas Bar No. 10452000 jacks@fr.com **FISH & RICHARDSON P.C.** 111 Congress Avenue, Suite 810 Austin, Texas 78701 Telephone: (512) 472-5070 Facsimile: (512) 320-8935

Ahmed J. Davis (*pro hac vice* admitted) Washington D.C. Bar No. 472321 adavis@fr.com FISH & RICHARDSON P.C. 1000 Maine Ave SW Washington, D.C. 20024 Telephone: (202) 783-5070 Facsimile: (202) 783-2331

COUNSEL FOR PLAINTIFF JENS H. S. NYGAARD

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a true and correct copy of the above document was served on September 11, 2020 to all counsel of record via ECF.

/s/ Danielle J. Healey Danielle J. Healey