IP BULLETIN

Vol. IV Issue 2, JULY-DEC., 2023, Pg. 37-48

INTELLECTUAL PROPERTY RIGHTS AS COACH FOR FORMULA ONE

Hallaciyanathan[1]

ABSTRACT

The absolute legal provisions of Formula one as an organization and F1 as a sport is quite ambiguous as to the status of protection provided to the design and manufacture of the car parts that are kith and kin of the sport. Even though the car parts are technical and mechanical in nature, the nature of the manufacturing process requires protection of intangible assets through intellectual property law. The need for such protection and how the breach of the protection is regulated by the governing body of the motorsport is discussed in a brief and descriptive manner. The paper deals with formula one as a sport and deals with intellectual property law being spinal cord for the nature of the sport. In simple understanding, the nature of the sport requires the protection of design and manufacturing parts without infringing the intellectual property rights of other teams in F1. Usually the designs, manufacture and testing are dealt under the provisions of trade secrets, while patenting, trademark and copyright are used for commercial purposes of the same sport. The outcome of manufacture and production is reiterated for each season to produce a race car specifically designed to participate for racing and winning in this format. There are instances where breach of intellectual property rights occurred; it is mostly dealt with internally in Federation Internationale De l'Automobile, the governing body generally spoken as FIA.

Keywords

Formula one; protection; design; intellectual property rights; trade secrets.

[1] Vth year, BBA. LLB Hons School of Excellence in Law The Tamil Nadu Dr Ambedkar Law University Chennai, Tamil Nadu, India.

INTRODUCTION

"It is lap eight. Williamson's car suddenly shoots off the track on a fast, but otherwise unproblematic stretch of the circuit. Subsequent investigations reveal marks on the concrete which suggest suspension trouble, but it could just as easily have been a tyre defect; driver error can effectively be ruled out. The car smashes into the guard-rail, is hurled back across the track, somersaulting several times. It comes to rest upside down against the safety barrier opposite."[2]

The words of Niki Lauda describing F1 driver Roger Williamson's tragic fire accident while driving his second Formula One race at Dutch Grand Prix Zandvoort Circuit on 29th July, 1973. Unfortunately, Williamson did not make it out of his car, March 731 when the fuel tank caught fire.[3] There have been many tragic accidents in Formula 1 races that transpired due to mechanical failure in their cars. The disheartening moment is to watch the drivers hit the safety barrier and lose their soul. As of 2022, fifty two drivers of Formula 1 have had fatal accidents and never survived.[4] When a catastrophic incident occurs in a team's car, the engineers' efforts and money put behind it by the sponsors also becomes futile.

A Formula 1 car, approximately contains 14,500 parts dancing synonymously to perform better than their rivals in the Formula 1 grid.[5] Each part, designed and manufactured by the teams specifically to perform well and to be protected as an intellectual property. Even though an F1 car comes under tangible assets, the mere innovation of the work comes from a man's mind. Accordingly, it is considerate to say that F1 weighs upon the Intellectual Property rights to protect any kind of infringement against (i) designs of their innovative works, (ii) trademark or any marks related to the Formula One Management Limited, and (iii) copyrighted works and merchandises.

The Spygate investigation and a patent infringement case by Jens Nygaard against FIA (Federation Internationale De l'Automobile) (also known as The Halo Case) are amongst the important cases which discusses the Intellectual property rights in Formula One. There is a need to understand the mechanism of an F1 car and history of the sport to chronicle the remedies provided against the IP infringement in Formula One.

---

[2] Niki Lauda, To Hell and Back : An Autobiography <https://books.google.co.in/books?id=ltuDwAAQBAJ&lpg=PP1&pg=PT20#v=onepage&q&f=false> accessed 16 December 2022.

[3] Formula-1 Dictionary available at <https://www.formula1-dictionary.net/roger_williamson.html>

[4] List of Formula One fatalities available at <https://en.wikipedia.org/wiki/List_of_Formula_One_fatalities#:~:text=Fifty%20two%20drivers%20have%20died,being%20the%20first%20in%201952>

[5] Motorsport.com Insider's guide: How is an F1 car made? <https://us.motorsport.com/f1/news/how-is-an-f1-car-made/7626324/>

Each part of an F1 car goes against various levels of testing to withstand the amount of pressure during the races.[6] Initially, the process of building the car happens throughout a year. The Formula One World Championship is held from the month of March to November of every year to decide the Drivers' Championship and to nominate the Constructors' Championship Titles. Due to this tight and continuous schedule of races, the teams eventually comprise multiple groups individually working to develop and test the car for the next season. The process of patenting the designs of an F1 car internationally will consume more time. Since an F1 car is built and developed each season, the designs tend to be changed within a short range of period. Thus the process of applying for a patent and then making changes in the design and manufacturing becomes impractical. Thus the existence of Trade secrets came into existence in Formula One.

Building an F1 car begins from design and development and concludes with shakedown and testing of the car in the race tracks. Once an idea of how the car should be made is finalized, then the teams continue to produce hundreds of 3D drawings of parts per day in CAD (computer aided design).[7] Then the best design is further made as a prototype to be built as a model for testing the aerodynamics and composite design of the car. The blueprint of designing and manufacturing of an F1 car is necessary to deduce how important it is to protect the design of car parts and other Intellectual property rights.

A FORMULA ONE RACE CAR

The cost and manpower behind an F1 car is huge and expensive. Building a complete Formula 1 race car requires three significant steps.

(1) Design and Development

(2) Manufacturing the parts

(3) Assembly and Testing.[8]

In the design and development stage, a prototype is built based on the feedback given by the drivers during the current season and is assessed to build the car for the next season. Computer aided design software is used to develop multiple 3D drawing designs of the car. The parts used by each team must be standard and prescribed parts[9] as per the regulations imposed by FIA (Federation Internationale De l'Automobile). Then the team moves on to making the prototype and testing the design virtually in CFD (Computational Fluid Dynamics) to decide which design is optimal to enter the wind tunnel testing. After testing in the wind tunnel, the

[6] Id.
[7] Id.
[8] Id.
[9] Id.

design enters the manufacturing stage. In the manufacturing stage, the parts are produced delicately by the team or outsourced to other specific manufacturers. After manufacturing the required parts, it proceeds to the assembly and testing stage, in which the car is assembled and tested in the tracks before the start of the next season.[10]

DESIGN AND DEVELOPMENT

The cars are supposed to run with certain standard and prescribed parts as in the given set design. When a Formula 1 car is made, the teams are bound to follow the technical regulations specifying certain dimensions, no go areas, weight limits and material specs.[11] The reason for building the car with standard and prescribed parts is to keep the cost down. But the FIA also allows the teams to buy and sell some transferable parts (such as gearboxes and clutches) in between teams. Only the transferable parts are allowed to be exchanged in between the teams, whereas other parts should be designed individually by each team in their preferable manners, Any theft of design or illegal transfer of parts is investigated by the FIA to take necessary actions, provide remedy and to prevent any such thing from happening in the future. The Spygate investigation reveals such an incident that occurred between the Ferrari team and the Mclaren team in 2006.

Each team produces 3D designs of multiple parts through CAD software individually and are used to unravel the design that can be produced as an F1 car. The teams focus on various aspects of a car.

Transmission, Electronics, Mechanical designs, Aerodynamics, and Composite design are the aspects by which four wheels and a chassis body are put behind an F1 grid by the teams. More efforts are seeded in aerodynamics to make sure that the car does not behave abnormal while going above the speed of 300 km/hr and to withstand any amount of external pressures while balancing the car at that speed.

To test which car design can perform well in the wind tunnel testing, CFD (computational fluid dynamics) is used to measure the designs' performances and are comparatively analyzed to produce a rapid prototype of a design that performed well. After testing the design of the prototype virtually, the teams move to the Wind Tunnel testing. Due to technical regulations, each team is allowed only for a certain period of time in the CFD and Wind tunnels. Wind tunnel is a space where the car is placed in a belt with sensors and a huge fan flows up to a maximum speed of 300 km/hr. In this testing, existence of limitation reduces the availability

[10] Id.
[11] Id.

of wind tunnels to only one location per team and up to a speed of 180 km/hr.[12]

MANUFACTURING THE PARTS

Before beginning the manufacturing process, a giant roll of carbon strands coated with resin is bought and stored in a cool place to preserve it in pristine condition. An F1 car can structurally be divided into parts such as (i) Monocoque chassis (ii) Front wings (iii) Rear wings. The materials in the components of the car's structure are mostly carbon fiber material. It is lightweight and has more strength compared to other materials. The quality of an F1 car must be ensured to sustain races and to survive fatal crashes. The halo became an important component of an F1 car, it is the only part that goes above the drivers' head and provides head support in case the machinery flips or crashes upside down.

Around 80% of the car is made from composites and pre-preg carbon fiber. The epoxy component is first cut with precision of 0.05mm each using five-axis milling machines with the help of the CAD data.[13] Then the epoxy patterns are utilized to manufacture the female mould which takes form as final parts. The procedure for manufacturing and producing the mould parts is supposed to happen in a very hygienic and clinical environment. It is of such nature that any minute particles can affect the process and lead to failure. The parts are supposed to be packed in tight and protective covers and people working in the place are required to wear protective overalls. At this level, the carbon fiber matting is cut into specific shapes as per the design of the parts. Even Though most materials used are a mixture of carbon fiber and resins, a part's strength is proportionate to the amount of layers stacked.

The part layup is done by hand to ensure that the car is built as per the required flexibility and strength for the team to succeed. Part layup is a process by which the processed carbon fiber matting is stacked giving thickness and providing strength to the parts. Each team alters the layers of the parts to the demand of strength and flexibility that they need. Usually the layers in some areas of the front wings will be weaker to facilitate proper balance to go at higher speed and can flex under load.[14] Even at this stage, the cars are allowed to race if they pass the static load tests.

After the process of part layup is complete, the carbon fiber moulds created are placed inside vacuum bags and are placed in an autoclave to be cooked under pressure. Due to the high temperature of the autoclave, the resin coating melts in between the carbon fiber making the mould parts hard and strong. The hardness of the final parts depends on the frequency of the autoclave stage.

[12] Id.
[13] Id.
[14] Id.

The carbon fiber parts finally put together are usually categorized as top and bottom parts of the monocoque chassis, front wings and rear wings.[15]

TESTING OF PARTS

All 14,500 parts of an F1 car must be inspected and signed off before it is assembled into the car. The materials of every part are literally placed under a microscope to verify the authenticity. The parts undergo non-destructive testing using x-ray or ultrasound techniques to evaluate the condition of bonding between the joints, laminate conditions, firmness checks, visual checks and thorough cleaning.[16]

Using the computer based coordinate measuring machines (CMM) and hand-held laser devices, the dimensions and micron-level accuracy are measured to perfectly fit and for legality.

Every manufactured part is given mileage based on their expected life up to which they can last. The parts must be removed and replaced after the life of the part is exhausted. The safety critical parts are tested three to four times to ensure the ability to endure. All sub-assemblies and assemblies are put together to see the track action on dynamic rigs.

Before the power unit is connected to the car, it must undergo FIA crash tests for the car to certify. The crash test is cataclysmic in nature. Front impact, rear impact, side impact and rollover tests are mandatory for the car to be certified and used in the race events. After passing the crash tests, for the first time, the power unit, fuel system, hydraulics, transmission and cooling system are all attached to the chassis and are connected, tackling all difficulties. This is the first fire-up of the car.

The working condition of the car is almost in raw condition at this stage. After all the parts are manufactured, it takes a week to completely build the car including the paint job in the race bay. The sub-assemblies are fastened to the chassis monocoque which is the central section of the car. In the shakedown and testing stage, the cars are run in track at a speed less than 100 km/hr to make sure that the car is assembled properly and can stay together as one part.

THE COST TO DEVELOP AND CAP LIMIT ALLOWED

Value of an F1 car cannot be determined specifically. But the FIA regulates the spending limit on how much a team can spend entirely per season. This regulation is to suit all the teams to have a fair chance on dealing with the cars and to keep the entertainment going. The teams were allowed a cap limit of $140 million (₹1159.06 crores) in 2022 covering all the car

[15] Id.

[16] Motorsport.com Insider's guide: How is an F1 car made? <https://us.motorsport.com/f1/news/how-is-an-f1-car-made/7626324/>

performance costs. This cap limit does not include the drivers' salaries, marketing costs and three expensive team members' salaries. For the 2023 season, the FIA has reduced the cap limit compared to the 2022 season from $140 million to $135 million (₹1117.66 crores).[17]

F1 COST CAP BREACH BY RED BULL AND ASTON MARTIN

In the first year of implementing this regulation (2021), the FIA proclaimed cost cap breach by Aston Martin F1 team and Red Bull F1 team. The teams were allowed to enter an Accepted Breach Agreement (ABA) to settle deals with the FIA.

Aston Martin had some procedural breach compared to the minor overspend and procedural breach committed by the Red Bull team. The Red Bull team claims to have had some tax issue and budget overspend on catering services and sick pay provided to employees who did not come under the cap which is believed to be in the region of $1.8 million (₹14.9 crores). The Red Bull team were given both financial and sporting penalties.

Financial penalty usually means to pay a sum of money as fine to the FIA. Sporting penalty includes reduction in the time spent by the team's car in the wind tunnel and CFD.[18]

HOW ARE DESIGNS PROTECTED IN F1?

"I'm not interested with the whole thing (halo). If you give me a chainsaw I would take it off. I think we need to look after the drivers' safety but what we have implemented is aesthetically not appealing. We need to come up with a solution that simply looks better. It's a massive weight on the top of the car; you screw up the center of gravity massively with that thing. As much as it's impressive to look at the statistic that you could put a bus on top (of it), this is a Formula One car."[19]

Mercedes team chief Toto Wolff was completely disappointed when the FIA made it mandatory for all F1 cars to be designed with the halo on top of the driver's head for the 2018 season. The halo is a device made from Grade 5 Titanium which is known for being lightweight whilst providing great strength and is coated with carbon fiber.[20]

The need to protect the designs of Formula 1 arose when the cars were designed by the teams to compete in the championship series. A team cannot simply copy the designs used by

[17] Id.

[18] Autosport: Red Bull, Aston Martin agree F1 cost cap breach deals with FIA <https://www.autosport.com/f1/news/red-bull-aston-martin-agree-f1-cost-cap-breach-deals-with-fia/10391173/?continueflag=09893b9b2b388dcce38f0d0199cd963d>

[19] Fox News : F1 drivers don't like the halo, but have gotten used to it <https://www.foxnews.com/auto/f1-drivers-dont-like-the-halo-but-have-gotten-used-to-it>

[20] F1 Beat : The Halo explained <https://f1beat.com/the-halo-explained/>

another team to build the car. There will not be a difference, and it defeats the whole purpose of the sport. When a design is involved in any other industry they are protected either as industrial designs or as patent protection internationally, but F1 lacks patents. There could be various reasons as to why the FIA prohibits the protection of design through patent protection in F1. But one of the important reasons being, F1 as a sport is where 20 drivers compete in a series of races to decide the championship. If one team or individual is allowed to patent the design of a car, then it gives monopoly rights over the design, and other teams cannot potentially be competitors in the sport. FIA has regulated that the patented technology would be ruled illegal if an F1 team were to try and enforce a patent.[21]

Even in case FIA allows patenting, the time taken for processing the approval of the patent is not applicable to F1's level of changes in designs. Another new season might fire up while the patent protection for the previous gets approved. The time for application is not available for the teams to consider patenting their designs.

THE HALO CASE

"I wasn't for the halo some years ago but I think it's the greatest thing we brought to Formula 1 and without it I wouldn't be able to speak to you today."[22]

Any auto enthusiast will know the brutal accident Romain Grosjean went through in the Bahrain Grand Prix, November 2020. Romain Grosjean's Haas F1 car was cut into two pieces crashing at a trackside barrier at 140 mph (225 kmph) and catching fire. Romain Grosjean was on fire, upside down in the single seater for 27 seconds, the halo protecting his head from contact with the ground. After which he pushed himself out and survived. The halo has played an important role in saving many lives including this incident. The FIA were taken to court in the United States after being accused of a patent infringement relating to the halo design.[23]

Norwegian inventor Jens Nygaard regards the halo design as his invention and has patented it. He alleges to have requested the Formula One management to add his design in the Formula One cars as a safety device. The management included the halo design in the F1 cars as a mandatory safety device, but Jens Nygaard was not compensated for the addition of his patented design. Consequently, Nygaard sued the Formula One management, the FIA, racing drivers, and the teams in F1 entirely. The US District Court for the Western District of Texas

[21] IPleaders : What is the driving force behind Intellectual Property of Formula 1 <https://blog.ipleaders.in/driving-force-behind-intellectual-property-formula-1/>

[22] Fox News : Formula One's Romain Grosjean says 'halo' saved his life in fiery crash <https://www.foxnews.com/auto/formula-ones-romain-grosjean-halo-crash>

[23] Express : FIA president Ben Sulayem lifts lid on court case and £16m issue he inherited <https://www.express.co.uk/sport/f1-autosport/1705967/FIA-Ben-Sulayem>

striked out many unrelated defendants as they were all under the protection of customer-suit exception. The customer-suit exception protects the end-product consumers who are mere users of the patented device, but not related to any aspect of infringement of the patent. After releasing the drivers such as Lewis Hamilton, and Charles Leclerc, the teams and companies such as Scuderia Ferrari and Daimler were also released from the suit.[24]

TRADE SECRET IN F1

The selection of patent protection is inaccessible for the teams in F1. Due to this situation, the designs can be exploited by any unauthorized dealers or users. To prevent theft and infringements of IPs in Formula One. The FIA allowed the teams to curb the designs as Trade secrets.

Trade secrets are intellectual property (IP) rights on confidential information which may be sold or licensed.[25] Trade secrets are considered to be protection to an intellectual property which cannot be disclosed to the public in any manner. The trade secrets have value of being exploited and misused if not taken care of.

There are specific essentials that an intellectual property must possess, to be protected under trade secrets:

(i) The confidential information must have a commercial value in the market.

(ii) The complete details of the intellectual property must be known only to a narrow group of persons.

(iii) The rightful holder of the information must have taken necessary steps to prevent the leakage of the intellectual property.[26]

There is a history of innovations being used in F1 cars and are kept as trade secrets. The usage of paddle-shift gearboxes began in Formula One before making its way into commercial vehicles. The paddle-shift gearboxes can be seen in Ferrari cars designed, manufactured and marketed by Scuderia Ferrari. A trade secret in a sport had gradually evolved to be an industrial design. Adaptive suspension and traction control are also commercially exploited in the automotive industry. Mercedes cars are known for having extraordinary suspension control in their commercial vehicles.[27]

---

[24] WIPR : Daimler, Ferrari escape Formula One Halo suit <https://www.worldipreview.com/news/daimler-ferrari-escape-formula-one-halo-suit-21068>

[25] WIPO : Trade Secrets <https://www.wipo.int/tradesecrets/en/>

[26] Id.

[27] The engineer : F1 IP demonstrates value of trade secrets <https://www.theengineer.co.uk/content/opinion/f1-ip-demonstrates-value-of-trade-secrets#:~:text=There%20is%20a%20long%20list,available%20in%20the%20automotive%20industry>

The struggle with trade secrets is the vulnerability of being stolen and exploited. If the trade secret is misappropriated, then the rightful holder can sue the liable person to claim damages and to receive proper remedy. Infringement of trade secrets is considered to be a violation of trade secret protection which is among the intellectual property law. The laws of trade secrets are not codified in India.

There are cases of infringement and theft of designs in Formula One. 2007's Spygate controversy is a dispute of design theft that happened between Ferrari and Mclaren teams.

SPYGATE CONTROVERSY

"It was the sporting scandal that had everything. Vengeance, vindictiveness and ambition. Blackmail, secrecy, and the offence that gave it its name - spying."[28]

Many F1 fans will call the 2000s one of the significant decades to have existed with Michael Schumacher, Kimi Raikkonen in the Ferrari F1 team and Fernando Alonso claiming two consecutive titles breaking Schumacher's spell in the sport. The stage in which the team Mclaren plummeted to the ground to build back again. The story of rivalries on-track and off-track resulted in the Spygate controversy and Mclaren receiving a fine of $100 million (₹827 crores). This is the price Mclaren paid for an employee mishandling a complete report of an F1 car that the Ferrari team designed for the next season.

Fernando Alonso was the main driver and Lewis Hamilton was a rookie for the team at that stage. During this time, there was an enmity in the Ferrari team group. Nigel Stepney was a chief mechanic in Ferrari when Michael Schumacher reigned as the world champion. Nigel Stepney was promised the position of team principal while working. But, to his disappointment, he was not made the principal of the team. Dissatisfied with the team, Nigel Stepney decided to extract 780 pages of confidential information related to the 2007 F1 Ferrari car that the Ferrari team held secretly. Furthermore, Nigel provided the disclosed report of 780 pages to his friend in the Mclaren, Mike Coughlan who was working as chief designer at that time. The report is alleged to contain information related to the blueprints and designs that the Ferrari was working on. Unfortunately, the plan of Mike Coughlan and Nigel Stepney became an utter failure, when Mike Coughlan's wife went to photocopy the report in a local photocopy shop. Astonishingly, the local photoshop owner was a Ferrari fan, and looking at all the designs and blueprints, he emailed the Ferrari team.[29] Even Though, the story seems quite unintelligent, the journals state it as fact.

This was a plan between two friends Nigel Stepney and Mike Coughlan and the first

[28] BBC : F1 'spygate': Fifteen years on from the sporting scandal that had everything <https://www.bbc.com/sport/formula1/63575321>

[29] Id.

investigation was held by the FIA. During this investigation Mclaren team was considered to be innocent as no other team members knew about the confidential information. While this incident was going on, the on-track rivalry began interfering into the investigation matters. Apparently, Fernando Alonso who grew tired of working with Lewis Hamilton threatened the Mclaren team principal Ron Dennis that he possesses emails related to the spygate scandal that might end bad for the team. Immediately after this incident, the then FIA President Max Mosley was informed. And the second investigation began piercing into the espionage.

Max Mosley and Ron Dennis have had a history of off-track rivalry for more than 30 years. Due to this, Ron Dennis and the Mclaren alleged to have received the penalty of $100 million and thrown out of the constructors' championship that year.

MERCEDES AMG HPP VS. BENJAMIN HOYLE[30]

In this case, Mercedes AMG sued Benjamin Hoyle claiming him to have committed high-level theft of confidential information relating to their F1 car. Benjamin Hoyle was working under contract for the Mercedes F1 team until 31 December 2015. It was in Mercedes team's knowledge that Benjamin Hoyle will be heading to their direct competitor Ferrari team after the termination of the contract. The Mercedes team declared that they had due diligence while protecting the trade secrets related to the designs and other confidential information. Even after taking due diligence, the team alleges that Benjamin Hoyle stole important confidential information and to have deleted the same in the team's system, so no suspicions arise.

After the knowledge about Benjamin Hoyle joining Ferrari team after terminating the contract in Mercedes. The Mercedes had served Benjamin a new laptop completely wiped off the F1 data and a new email address so that he does not receive any confidential information. Mercedes alleges that Benjamin Hoyle stole details of race reports, data related to the damages in F1 and engine files containing the codes to decrypt the raw race data files.

BRAKE DUCT DESIGN CASE

As the name suggests, the brake duct design related to F1 cars was legally in transfer between the Mercedes team and Racing Point team (currently Aston Martin) beginning from the year 2018. The Racing Point team received CAD designs and blueprints for the brake duct of the following year Mercedes' W10 F1 car. The Racing Point had even photographed the designs

[30] Orrick available at <https://s3.amazonaws.com/cdn.orrick.com/files/mercedes-amg-high-performance-powertrains-limited-v-benjamin-hoyle-novembe-2015.pdf>

of the W10 to copy as best as possible.[31]

In early 2019, the FIA announced the brake ducts as listed parts and were not allowed to be transferred. But the Racing Point team had already used the front brake duct design and was embedded into the DNA of the RP19 car. The FIA decided in this issue, that the design was incorporated into the car when it was legal, thus it was considered valid. During that season, Mercedes performed well in the races. So, the Racing Point team was alleged to have considered incorporating the W10 car's rear brake duct design into their RP20 car.

Even Though the Racing Point team claimed to have no similarity between their rear brake duct design and W10 brake duct design. The FIA was in denial. The FIA considered this a minor problem and the fine was for the advantage they gained over other teams by using the blueprints that they possessed. The Racing Point team was awarded a fine of $429,292 (₹3.5 crores) and 15 point reduction in the constructors' championship.

CONCLUSION

The involvement of Intellectual Property Rights in Formula 1 is inevitable. The sport impressively includes the use of both tangible and intangible properties that makes the protection of the properties quite difficult. The protection of a specific part or equipment in the car can become a difficult process if it involves the process of patenting the products for the use in Formula 1. Since the process of patenting a product consumes more time, quick sport such as Formula 1 follows the use of trade secrets to reduce the consumption of time as well as provides protection equal to that of Patents. The F1 teams' hold the duty of preventing the leak of information and considers important information as trade secret and infringement of the same by any other teams can lead to infringement of trade secrets. The cases discussed above disclose the wide relation of Formula 1 to Intellectual Property Law.

****

[31] Motorsport magazine : What Racing Point did wrong: brake duct penalty explained <https://www.motorsportmagazine.com/articles/single-seaters/f1/what-racing-point-did-wrong-brake-duct-penalty-explained?v=c86ee0d9d7ed>