“We Don't Want Our Competitors to See It:” Protecting Race Car Engines as a Trade Secret

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KERRI CEBULA*

INTRODUCTION

In 2017, McLaren, a mainstay in Formula One, and its driver Fernando Alonso announced that Alonso would be forgoing the Monaco Grand Prix to run the Indianapolis 500.¹ McLaren partnered with IndyCar powerhouse Andretti Autosport to enter Alonso in the race.² McLaren Chief Executive Officer Zak Brown and Andretti Autosport owner Michael Andretti have a partnership in the Australian Super Car series and Andretti Autosport supports Brown’s United Autosport team in the IMSA WeatherTech Challenge series, so it seemed a natural fit.³ Alonso made the race and led twenty-seven laps before his engine failed on lap 179 of the scheduled 200 laps.⁴ In 2019, Alonso and McLaren made a second attempt at the 500, this time partnering with Carlin Racing and their Chevrolet engines.⁵ None of the Carlin entries, including Alonso, made the race.⁶

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2. Id.
6. Id. To be fair to Chevrolet, the engine was not the only issue McLaren had in the run up to
If the 2017 attempt was, absent the engine failure, a success, why the change in partnerships? It all comes down to engine suppliers. In 2017, McLaren’s Formula One team used Honda engines and so did Andretti Autosport.⁷ Due to reliability issues with the Honda engines in Formula One, McLaren switched engine suppliers to Renault in 2018.⁸ Andretti Autosport continues to use Honda engines. Honda remained in Formula One, suppling engines to Red Bull Racing and its partner team Alpha Tauri.⁹ Many believe that Honda refusing to partner with McLaren for the 2019 Indianapolis 500 was a result of the disastrous 2017 Formula One campaign and Alonso’s season long complaining about the Honda engines; this was the excuse given by Honda.¹⁰ But was it really Honda attempting to protect its engine from falling into the hands of a rival Formula One engine manufacturer?¹¹

Motorsport is the only sport where it is possible to have and keep secrets. The working components of the cars or the bikes, namely the chassis and the engine, are protected from view by the bodywork. To underscore how important these secrets are, writer Mark Hughes, describing the difference between driver ability and car ability in Formula One, stated:

The difference in raw driving ability between the fastest and the slowest driver is unlikely to be more than one second per lap. The difference between the fastest and slowest car is perhaps three or even four seconds per lap. So the fastest driver in the slowest car would still be nowhere, whereas the slowest driver

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⁹. See id.


¹¹. Perhaps not. When McLaren began discussing entering the IndyCar series in 2018, it pursued a partnership with Andretti Autosport. It was believed at the time that McLaren’s Formula One split with Honda would not be a hinderance to the partnership. See Pruett, supra note 3. Or perhaps it was. When McLaren entered the IndyCar series in 2020, it partnered with Arrow Schmidt Peterson Motorsport, which gave up their Honda engine partnership and Arrow McLaren SP Motorsport partnered with Chevrolet. See Jim Ayello, Arrow SPM Splits with Honda, Partners with McLaren, Chevrolet, INDYSTAR (Aug. 9, 2019, 7:57 am), https://www.indystar.com/story/sports/motor/2019/08/09/mclaren-arrives-indycar-arrow-schmidt-peterson-motorsports-partnership/1958555001/.

See Jenna Fryer, McLaren’s Failed Indy 500 Effort was a Comedy of Errors, AP NEWS (May 20, 2019), https://apnews.com/article/a8653967a9714ac7a9a3ba576f712fff for a full explanation of everything that went wrong.
in the fastest car would be quite successful.\textsuperscript{12}

This paper will attempt to answer the question of if race car engines and their designs are protectable trade secrets in the United States or if they are just secrets with no legal protection. Part I discusses the two biggest scandals in motorsports that involved the theft of secrets. Part II looks at both the Restatements and the Uniform Trade Secrets Act, as well as trade secret law in California, Florida, Indiana, Michigan, and North Carolina. These states were chosen as they all host various parts of the auto racing industry in the United States. Part III discusses whether or not motorsport secrets are trade secrets focusing on the National Association for Stock Car Auto Racing (NASCAR), the IndyCar Series (IndyCar), and Formula One.\textsuperscript{13}

I. HISTORY OF TRADE SECRET SCANDALS IN MOTORSPORT

Two of the biggest scandals in motorsports involved secrets. One involved smuggling engine parts from behind the Iron Curtain during a daring defection and the other involved a disgruntled employee, car sabotage, and a copy shop on an industrial estate in Surrey, England.

A. Ernst Denger Defects

Up until the 1950s, the dominate engine in Grand Prix motorcycle racing was the two-stroke engine.\textsuperscript{14} At the end of World War II, the FIM banned supercharging the engine for cost control reasons.\textsuperscript{15} Because of the complexity of the two-stroke engine, supercharging the engine was necessary for the engine to run.\textsuperscript{16} This ban made the four-stroke engine the dominate engine and the perceived engine of the future.\textsuperscript{17}

East German engineer Walter Kaaden used technology he developed for Hitler’s secret weapons program to develop a two-stroke engine that could run without supercharging.\textsuperscript{18} By the late 1950s, the two-stroke engine developed by

\textsuperscript{12} Mark Se\textsuperscript{a}l, \textit{Inside the Scandal that Rocked the Formula One Racing World}, WIRED (May 9, 2008, 12:00 pm), https://www.wired.com/2008/05/ff-formulaone.

\textsuperscript{13} Formula One and Formula 1 are used interchangeably by the sport. This paper will use Formula One.

\textsuperscript{14} See generally Mat Oxley, \textit{Stealing Speed} (2009)(ebook).

\textsuperscript{15} Id. at loc. 424.

\textsuperscript{16} Id. at loc. 414.

\textsuperscript{17} Id.

Kaaden and used by Motorenwerke Zschopau (MZ) was defeating the four stroke engines in competition and by 1961 was competing for a championship with fellow East German driver Ernst Denger.19 Japanese motorcycle company Suzuki entered Grand Prix racing in 1960 with a two-stroke engine that could not withstand the pressures of racing.20

By 1961, Denger was desperate to defect to the west and MZ’s rivals, especially Suzuki, were desperate to find out MZ’s engine secrets.21 In 1961 Denger signed a contract with Suzuki; they would help him defect, sign him to a driver’s contract for 1962, and give him £10,000 if he brought Kaaden’s secrets with him.22 After the Swedish Grand Prix, Denger smuggled MZ engine parts out of the hotel in his suitcase, gave them to Suzuki, and defected to the west. Those stolen engine parts and the secrets that Denger brought with him allowed Suzuki to win the championship in 1962.23 The two-stroke engine became the dominate engine, winning every championship from 1976 until a rule change in 2002 made the two-stroke engine obsolete.24


One of the biggest scandals in Formula One occurred throughout the 2007 season. Before the season even began, Ferrari Chief Mechanic Nigel Stepney went public with his displeasure at the team after Ferrari did not name him Technical Director.25 Stepney had worked with McLaren’s Chief Designer Michael Coughlan at several teams, including Ferrari.26 Before the opening race of the season, the Australian Grand Prix, Stepney reached out to Coughlan to let him know that Ferrari may have breached the Technical Regulations.27 McLaren turned this information over to the FIA, who did find that Ferrari breached the Technical Regulations, but did not take action against Ferrari.28

19. See generally Oxley, supra note 14.
20. Oxley, Denger’s Fast Stroke, supra note 18; Oxley, 50 Years Ago: The Ernst Denger Story, supra note 18.
21. See generally Oxley, supra note 14; Oxley, Denger’s Fast Stroke, supra note 18; Oxley, 50 Years Ago: The Ernst Denger Story, supra note 18.
22. See generally Oxley, supra note 14.
23. Id. at loc. 118.
24. Oxley, Denger’s Fast Stroke, supra note 18; Oxley, 50 Years Ago: The Ernst Denger Story, supra note 18.
Stepney and Coughlan continued their conversations and at a restaurant in Barcelona in April, Stepney passed 780 pages worth of technical documents from Ferrari on to Coughlan. In May, at the Monaco Grand Prix, Stepney, who was still Ferrari’s Chief Mechanic, was caught sabotaging Ferrari’s cars. In June, Coughlan’s wife went to a local copy shop where she asked the clerk to scan the 780 pages of Ferrari documents onto two compact discs. Unfortunately for the Coughlans, the clerk was a Ferrari fan and when he realized that the documents were from Ferrari, he emailed the team’s Sporting Director Stefano Domenicali about the documents and where they came from. Ferrari filed a formal complaint with the Modena, Italy district attorney against Stepney and an unnamed (in Ferrari’s statement) McLaren engineer. Coughlan was immediately suspended by McLaren. Ferrari also brought a case against McLaren to the World Motor Sports Council. In a hearing in July, the World Motor Sports Council found that Coughlan received the information, but since no one else at McLaren had access to the information, McLaren did not breach the rules.

That, however, was not the end of the story. Throughout the 2007 season, McLaren’s two drivers were locked in a contentious battle. Two time World Driver’s Champion Fernando Alonso had come to McLaren expecting to be the number one driver and get preferential treatment, but teammate rookie Lewis Hamilton was putting up a fight and both drivers were fighting Ferrari’s two drivers for the World Championship. Things came to a head at the Hungarian Grand Prix when Hamilton refused to allow Alonso to pass during qualifying runs. With the two teammates battling for pole position, Alonso held up Hamilton in the pits, ensuring that Hamilton could not attempt a final qualifying lap; Alonso took pole position. Before the race the next day, Alonso and McLaren boss Ron Dennis were seen arguing; Alonso threatened Dennis that if he was not given the number one driver status, he would tell the FIA that more

29. Id.
30. Id. Stepney put a powdered substance into to gas tanks of Ferrari cars. He seen on surveillance cameras near the car when the powder was put in the engines and was caught with the substance in his pants by the Monaco police.
31. Id.
32. Id.
33. Wingate, supra note 25.
34. Seal, supra note 12.
35. Extraordinary Meeting of the World Motor Sport Council, supra note 27, at 79.
37. Id.
38. Id.
than just Coughlan had access to the Ferrari technical information.\textsuperscript{39} Dennis called Max Mosely, President of the FIA to let him know of Alonso’s threats. Mosley contacted the three McLaren drivers (Alonso, Hamilton, and test driver Pedro de la Rosa) ordering they turn over any confidential technical information from Ferrari they had.\textsuperscript{40}

The information proved to be damning. It showed that many more McLaren employees, including the drivers, had access to the Ferrari technical information.\textsuperscript{41} In a second hearing that September, the World Motor Sports Council fined McLaren $100 million and stripped them of all Constructor’s Championship points.\textsuperscript{42} Stepney was convicted of corporate espionage in Italy over the affair and was sentenced to 20 months in prison.\textsuperscript{43} Ferrari also pursued legal action against McLaren before withdrawing the suit after McLaren apologized and reimbursed Ferrari for their costs and expenses.\textsuperscript{44}

II. TRADE SECRETS DEFINED

Trade secrets are recognized in the United States as a separate and distinct intellectual property right. While the subject matter of a trade secret may be similar to those that are protected as a patent or a copyright, they differ from each in a significant way. Unlike patents, to be a trade secret the secret does not need to be new, novel, or non-obvious.\textsuperscript{45} Further, the Supreme Court in\textit{Kewanee Oil Co. v. Bicron Corp.}, 416 U.S. 470 (1974), stated “[n]ovelty, in the patent sense, is not required for a trade secret.”\textsuperscript{46} Unlike copyrights, secrets do not need to be original.\textsuperscript{47} These two differences allow trade secrets to cover information such as customer lists, which would not be protected under copyrights, or a manufacturing process, which would not be covered under patents. So, what exactly is a trade secret?


\textsuperscript{41} Seal, supra note 12.


\textsuperscript{43} Seal, supra note 12.


\textsuperscript{46} \textit{Kewanee Oil Co. v. Bicron Corp.}, 416 U.S. 470, 476 (1974).

\textsuperscript{47} Michael Risch, \textit{Why Do We Have Trade Secrets?}, 11 MARQ. INTELL. PROP. L. REV. 1, 13 (2007).
A. Restatements

The original definition of a trade secret came from the comments to § 757 of the Restatement (First) of Torts, which states, “a trade secret may consist of any formula, pattern, device, or compilation of information which is used in one’s business, and which gives him an opportunity to obtain an advantage over competitors who do know or use it.”

The comment goes on to further define secrecy, stating, “the subject matter of a trade secret must be secret. Matters of public knowledge or of general knowledge in an industry cannot be appropriated by one as his secret.”

Under this definition, there are two distinct requirements for a secret to be a trade secret: the secret gives an advantage over competitors and the secret is a secret. The comments went on to give six factors to determine if a secret is a trade secret. These include:

(1) the extent to which the information is known outside of his business, (2) the extent to which it is known by employees or others involved in his business, (3) the extent measures taken by him to guard the secrecy of the information, (4) the value of the information to him and to his competitors, (5) the amount of effort or money expended by him in developing the information, (6) the ease or difficulty with which the information could be properly acquired or duplicated by others.

Until states passed legislation giving them a statutory definition of trade secrets, courts used these six factors to determine if the information in question was a trade secret.

The definition of trade secrets was removed from the Restatement (Second) of Torts and trade secrets now appear in the Restatement (Third) of Unfair Competition with a new definition. A trade secret is now: “… any information that can be used in the operation of a business or other enterprise and that is sufficiently valuable and secret to afford an actual or potential economic advantage over others.”

48. Id. at 7 (quoting Restatement (First) of Torts § 757 cmt. b (1939)).
49. Id. at 8.
50. Id.
52. UNIF. TRADE SECRETS ACT, Prefatory Note (UNIF. L. COMM’N 1985).
The two distinct requirements that the secret must be to be protected are somewhat the same. The secret must still be a secret, but now the secret must be sufficiently valuable.\textsuperscript{54} In order for the secret to be sufficiently valuable, it must provide an economic advantage, whether actual or potential, over someone who does not have the secret.\textsuperscript{55} This advantage needs to be more than trivial but does not need to be great.\textsuperscript{56} For the secret to be a trade secret, it must be secret, but the secrecy need not be absolute.\textsuperscript{57} For example, it may be possible, but costly, for another to figure out the information contained in the secret. This provides an economic advantage; the holder of the secret does not need to spend the money, which is enough for it to be considered a secret.\textsuperscript{58}

\textbf{B. Uniform Trade Secrets Act}

Seeing a need for states to codify trade secret protection into legislation, the National Conference of Commissioners on Uniform State Laws drafted the Uniform Trade Secrets Act (UTSA) in 1979 and amended it in 1985.\textsuperscript{59} As of October 2020, it has been enacted in 48 states, the District of Columbia, Puerto Rico, and the U.S. Virgin Islands.\textsuperscript{60} The UTSA defines a trade secret as:

\begin{quote}
...[I]nformation, including a formula, pattern, compilation, program, device, method, technique, or process, that:
\begin{itemize}
  \item[(i)] derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and
  \item[(ii)] is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.
\end{itemize}
\end{quote}

California, Florida, Indiana, and Michigan have all enacted the UTSA. Florida, Indiana, and Michigan implemented the UTSA as written with no changes in their enacting legislation.\textsuperscript{62} California made a slight change in its

\textsuperscript{54} \textit{Restatement (Third) of Unfair Competition} § 39, cmt. e, f (A.L.I. 1995).
\textsuperscript{55} \textit{Id.}
\textsuperscript{56} \textit{Id.}
\textsuperscript{57} \textit{Id.}
\textsuperscript{58} \textit{Id.}
\textsuperscript{59} \textit{Unif. Trade Secrets Act} (Unif. L. Comm’n 1985).
\textsuperscript{61} \textit{Unif. Trade Secrets Act} § 1 (Unif. L. Comm’n 1985).
implementing legislation; part (i) reads, “...derives independent economic value, actual or potential, from not being generally known to the public or other persons who can obtain economic value.”\textsuperscript{63} (emphasis added). This does not fundamentally alter the definition of a trade secret. California courts have read the statutory definition to include two requirements: first that the secret is “valuable because it is unknown” and “that the owner has attempted to keep secret.”\textsuperscript{64} In Indiana, the courts have read the statutory definition to include four general characteristics, which include: “(1) information, (2) deriving independent economic value, (3) not generally known or readily ascertainable by proper means by others who can obtain economic value from its disclosure or use, and (4) the subject of efforts, reasonable under the circumstances to maintain it secrecy.”\textsuperscript{65} 

While Michigan did not change the definition of a trade secret when enacting the UTSA, there appears to be a split in the way the courts determine what is a trade secret under Michigan law. Prior to the passage of the UTSA, Michigan courts used the six factors from the Restatement (First) of Torts to determine what was a trade secret.\textsuperscript{66} Michigan adopted the UTSA and the enacting legislation became effective in October 1998.\textsuperscript{67} In 1999, the US District Court for the Eastern District of Michigan in \textit{Compuware Corp. v. Serena Software Intern., Inc.}, 77 F. Supp. 2d 816 (1999), again used the six factors from the Restatement (First) of Torts to determine what was a trade secret rather than the statutory definition.\textsuperscript{68} Other cases heard by the federal courts in Michigan have applied the statutory definition to determine what was a trade secret.\textsuperscript{69} Finally, in some cases, both the statutory definition and the six factors were used to determine what was a trade secret.\textsuperscript{70} State courts in Michigan do not appear to have decided a case based on trade secrets since the passage of the trade secret legislation.

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\item \textsuperscript{63} \textit{Cal. CIV. CODE} § 3426.1 (West 2012).
\item \textsuperscript{64} \textit{Amgen Inc. v. Health Care Servs.}, 47 Cal. App. 5th 716, 734 (2020) (quoting DVD Copy Control Assn., Inc. v. Bunner, 116 Cal. App. 4th 241, 251 (2004)).
\item \textsuperscript{65} \textit{Burk v. Heritage Food Serv. Equip.}, Inc., 737 N.E.2d 803, 813 (Ind. Ct. App. 2000).
\item \textsuperscript{67} \textit{See Stromback v. New Line Cinema}, 384 F.3d 283 (6th Cir. 2004).
\item \textsuperscript{68} \textit{Compuware Corp.}, 77 F. Supp. 2d at 821.
\item \textsuperscript{69} \textit{See Stromback v. New Line Cinema}, 384 F.3d. 283, 305 (6th Cir. 2004) (using the statutory definition to determine if the plot line of a play was a trade secret). \textit{See also Glasson Aerospace Sci., Inc. v. RCO Eng’g, Inc.}, 680 F. Supp. 2d 803 (E.D. Mich. 2010).
\end{itemize}
\end{footnotesize}
C. North Carolina

North Carolina is one of two states that has not enacted the UTSA instead choosing to pass their own legislation, the North Carolina Trade Secrets Protection Act (NCTSPA). The definition of a trade secret in the NCTSPA is similar to the UTSA and states that a trade secret is:

…business or technical information, including but not limited to a formula, pattern, program, device, compilation of information, method, technique, or process that:

a. Derives independent actual or potential commercial value from not being generally known or readily ascertainable through independent development or reverse engineering by persons who can obtain economic value from its disclosure or use; and

b. Is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.\(^{71}\)

Prior to the passage of the NCTSPA, North Carolina courts did not have common law on what was a trade secret.\(^{72}\) After the passage of the Act in 1981, North Carolina courts used the statutory definition of trade secrets in determining if a secret was a trade secret.\(^{73}\) But, in 1997, the North Carolina Court of Appeals in *Wilmington Star-News, Inc. v. New Hanover Regional Medical Center, Inc.*, 480 S.E.2d 53 (N.C. Ct. App. 1997), used both the statutory definition and the six factors to determine if a price list was a trade secret.\(^{74}\) Subsequent cases have followed suit.\(^{75}\)

\(^{71}\) N.C. GEN. STAT. ANN. § 66-152 (West 1981).

\(^{72}\) Christopher A. Moore, Comment, *Redefining Trade Secrets in North Carolina*, 40 CAMPBELL L. REV. 643, 651-52 (2018) (explaining that North Carolina courts looked to other states and their definition of trade secrets, while a district court in Texas used the six factors to determine if information was a trade secret in North Carolina).


\(^{74}\) *See* Wells Fargo Ins. Services USA, Inc. v. Link, 827 S.E.2d 458 (N.C. 2019); TSG Finishing, LLC v. Bollinger, 767 S.E.2d 870 (N.C. Ct. App. 2014). *But see* Griffith v. Glen Wood Co., Inc., 646 S.E.2d 550 (N.C. Ct. App. 2007) (where the court only used the statutory definition because it was determined that the part in question was readily ascertainable through reverse engineering and therefore not a trade secret without needing to use the six factors).
III. CAN RACE CAR ENGINES BE PROTECTED AS TRADE SECRETS?

A. Trade Secrets vs. Patents

The first question generally asked of this author when discussing using trade secrets to protect race car engines is why not use patents to protect the secrets? There are two reasons for this.

The first reason is that race car engines are not novel. Under the United States Code, a patent is available for new inventions or discoveries that are not readily available to the public. Race car engines fail this test. NASCAR teams run a 5.8 litre V8 engine. Road cars such as the Chevrolet Camaro, the Ford Mustang, and the Lexus LC 500 use a V8 engine. Both the IndyCar Series and Formula One run turbo charged V6 engines; IndyCar runs a 2.2 litre and Formula One runs a 1.6 litre. V6 engines are relatively standard on road cars, including cars manufactured by Chevrolet, Honda, Mercedes, Ferrari, and Renault.

The second reason is that the patent process takes time. It can take upwards of thirty months for a patent to be granted in the United States. Regulations in racing, especially Formula One, change too quickly. Plus, as patent applications are published and available to the public, an engine manufacturer would lose a competitive advantage if their rivals knew what they were doing.

B. Can Race Car Engines Be Protected?

Before proceeding to the analysis of whether or not a race car engine can be protected as a trade secret, it is important to understand that motorsport is not just race team versus race team. It is also engine manufacturer versus engine manufacturer.
manufacturer. So, it is not just Joe Gibbs Racing versus Penske Racing, it is Toyota versus Ford. It is not just Arrow McLaren SP Motorsports against Andretti Autosport, it is Chevrolet versus Honda. It is slightly different in Formula One as both Mercedes and Ferrari are engine manufacturers, it is still Mercedes versus Ferrari.83

The definition of a trade secret under the UTSA and the six factors from the Restatement (First) of Torts are similar and can be combined into three main elements of a trade secret: (1) economic value; (2) not generally known or readily ascertainable; and (3) efforts made to maintain secrecy. The remainder of this section will use these three elements to determine whether a race car engine can be protected as a trade secret.

1. Economic Value

Engines are not free, and in fact, are a significant cost in racing. And rightfully so, the car needs an engine to go. Because NASCAR and IndyCar engine manufacturers are private companies, they do not release information on the cost of research and development for their engines. Companies registered in the United Kingdom are required to report to the Companies House, a government agency, an annual report and financial statements.84 This information is then made public. Mercedes’ in house engine builder, Mercedes AMG High Performance Powertrains, Ltd. (Mercedes HPP), reported spending £155 million on research and development of Formula One and Formula E engines in 2019.85

In order to understand why teams are willing to spend so much on developing an engine, one needs to understand the economics of racing. Unlike in other professional sports, the financial health of a race team is dependent upon how well the team runs on the track. The better the team does on the track, the more prize money they win, the more sponsors they can bring in and the cycle repeats itself. They do not have ticket sales or broadcasting rights to fall back on to bring in the revenue in a bad season.86

83. Mercedes and Ferrari also supply engines to customer teams; Mercedes to Aston Martin, McLaren, and Williams and Ferrari to Alfa Romeo and Haas. In the past engine suppliers could, in theory, get away with supplying a lesser engine to its customer teams, but a rule change by the FIA ended the practice. See Adam Cooper, FIA in New Push to Prevent Formula 1 Customer Engine Inequality, AUTOSPORT (Feb. 23, 2018, 6:43 am), https://www.autosport.com/f1/news/fia-in-new-push-to-prevent-formula-1-customer-engine-inequality-5322779/5322779/.


86. See Craig Slater & Matt Morlidge, Claire Williams on Why 2020 Races Are ‘Critical’, and F1
NASCAR and IndyCar are private companies and therefore do not make their financials public, including the money given to teams and prize money for winning races. It is known that NASCAR does give a percentage of the television rights and licensing money to the teams. In both NASCAR and IndyCar, teams also earn prize money based on their place of finish in a given race but that money is divided between the driver and the team according to the driver’s contract. And the prize money is not a lot. The marquee race in IndyCar is the Indianapolis 500; in 2021 the total prize money shared between the thirty-three entrants was almost $8.9 million. Winner Helio Castroneves and Meyer Shank Racing took home just under $1.83 million. The prize money for the Daytona 500, NASCAR’s marquee race, was $23.6 million split amongst the forty entrants.

Formula One is different; there is no prize money on a per race basis. Instead, the money comes at the end of the season and is based on the team’s place in the season long Constructor’s Championship. In 2019, all Formula One teams received $35 million from Liberty Media, the commercial rights holder of Formula One. The teams then received an additional payment based on their place of finish in the 2018 Constructor’s Championship. Mercedes won the Constructor’s Championship and earned an additional $66 million for a partial total of $101 million. Williams finished last and earned an additional...
$15 million for a partial total of $50 million.\textsuperscript{96}

2. Not Generally Known or Readily Ascertainable

The second factor to determine if a race car engine is a trade secret is to discover if the engine design is not generally known or readily ascertainable by others. NASCAR does not make their rule book public, so it is difficult from the outside to know what information is available to their engine designers and manufacturers.

In the comments to the UTSA, the NCCUSL states that if the ones who could benefit from the alleged trade secrets are aware of the information, it cannot be protected as a trade secret.\textsuperscript{97} The Technical Regulations in Formula One give engine manufacturers certain parameters that their engines must meet. This includes certain specifications (e.g., six cylinders in a V formation), dimensions (e.g., the diameter of the valve stem), and the type of materials that can be used to build the engine (e.g., crankshaft must be made from an iron based alloy).\textsuperscript{98} But, in the publicly available information and based on comments made by teams, there appears to be quite a bit of leeway in the way engines are designed and built.\textsuperscript{99}

The IndyCar Series mandates that the engines run by its teams be a 2.2 litre turbo-charged V6 engine supplied by either Honda or Chevrolet.\textsuperscript{100} While the series does not make the rest of their engine specifications public, it is assumed there are additional specifications that Honda and Chevrolet have to follow, but it is unknown how specific those specifications are. They could be as broad as Formula One’s or they could be much more specific, but IndyCar’s director of engine development has stated that there are elements on the engine designers

\textsuperscript{96} Standing Team payment; Ferrari is the only team to compete in every Formula One championship season. Because of this bonus, Ferrari gets the most money from Liberty Media. See Motorsports News, supra note 94.

\textsuperscript{97} Unif. Trade Secrets Act § 1 (Unif. L. Comm’n 1985).


“can play with.”

Even if a court were to decide all engine manufacturers in a given series are aware of the information, meaning the specifications contained in the rule books, Comment F of section 39 of the Restatement (Third) of Unfair Competition (1995) states that while some, or even all, of the components of the trade secret are known, it “does not preclude protection for a secret combination, compilation, or integration of the individual elements.” In Formula One’s case, the engine design could be protected as a combination of individual parts. Even if Honda and Chevrolet must follow the same specifications, it is assumed that the inner workings of the engine are structured differently given the significant difference in engine performance at the Indianapolis 500. In the 2017 Indianapolis 500, Honda powered teams took four of the top five spots, including the win, and led 174 of the 200 laps. Chevrolet had their revenge in 2019 with Chevrolet powered teams taking three of the top five spots, including the win, and leading 155 of the 200 laps.

NASCAR is an interesting case when it comes to component parts and the compilation of the parts. In NASCAR, the corporate engine company (Chevrolet, Ford, Toyota) is responsible for getting NASCAR’s approval on the component parts. After that, the corporate engine company licenses others to build their race engines. Currently, Chevrolet has Hendrick Motorsports (Hendrick) and ECR Engines (ECR) build their race engines. Hendrick and ECR will take the component parts and put them together. While Hendrick nor ECR would have a trade secret in the component parts, each could claim a trade secret in the way the component parts are put together.

3. Efforts to Maintain Secrecy

The third factor to determine if a race car engine is a trade secret is to see if the engine manufacturer is taking reasonable precautions to maintain secrecy.


The NCCUSL stated in the comments that a company taking steps such as telling an employee that there is a trade secret, limiting knowledge of the secret to a need to know basis, or controlling access is making a reasonable effort to maintain their trade secret. Courts have further stated that requiring employees to sign a confidentiality agreement or that industry custom is to treat the information as confidential is also enough to show the company is taking steps to protect its secret. From the outside looking in, it is difficult to determine if a manufacturer is taking these steps.

In all three series, the engine manufacturers can control access to the building, the manufacturing area, or other sensitive areas. They can require their employees and their customers sign confidentiality agreements. But this is where the similarities end.

Formula One engine manufacturers have it the easiest when it comes to maintaining secrecy. Mercedes engines are built by its in-house manufacturer, Mercedes HPP. There are very few layers to who has access to the confidential information, making it easier for Mercedes to maintain secrecy.

It is also custom in Formula One to treat everything as confidential. Teams do not like to reveal secrets, even if it is not secret once the season gets underway. It is also standard for teams to phase out employees, including drivers, who are leaving to limit access to trade secrets.

The protection of secrets is also codified in the rules of Formula One. The 2021 Technical Regulations (Regulations) define what intellectual property is and includes the “rights to use, and protect the confidentiality of, trade secrets, know-how and confidential information…” The Regulations go on to forbid teams transferring their intellectual property to a competitor and forbids teams...

108. UNIF. TRADE SECRETS ACT § 1 (UNIF. L. COMM’N, 1985).
110. It is the same for Ferrari, Honda, and Renault. All are built in-house.
113. FIA, supra note 98, at Article 22.1.
from receiving this information from another competitor. The Regulations allow test facilities and equipment, such as an engine dynamometer, to be available to multiple competitors, but the Regulations state that “robust processes must be put into place to ensure there is no transfer of Intellectual Property through common personnel and that all data can only be accessed by the originator of the work.” Finally, the Regulations allow teams to transfer components (called transferrable components) to other teams, but only the parts. The supplying team must keep all the rights in the part. The Technical Regulations also require the FIA to keep information confidential.

IndyCar engine designers and manufacturers may find it as easy as Formula One as under IndyCar rules, only engines supplied by the engine manufacturer can be used. IndyCar seals the engines prior to installation in the car and does not allow modifications. However, there is nothing in the IndyCar rule book that states IndyCar will keep secrets.

Engine designers and manufacturers in NASCAR may find it more difficult to take reasonable precautions to maintain secrecy. Since the corporate engine manufacturers grant licenses to others to build the engines, they will need to have an agreement in place to keep the information a secret. The licensed engine builders will then need to have an agreement with their employees and their customer teams to keep both the Chevrolet component parts and the combination of those component parts confidential. As the chain gets longer, it will be more difficult for the corporate engine manufacturers to take reasonable precautions to maintain secrecy. The more difficult it is, the more likely the secret will get out and their secrets will not be considered secrets. And while it may be customary to keep the engine information a secret, engine changes have been known to happen in open garages in front of other competitors. It is unknown if NASCAR is required to keep information secret.

114. Id. at Article 22.2.6.
115. Id. at Article 22.2.9. This was likely in response to the case Force India Formula One Ltd. v. Aerolab SRL [2013] EWCA Civ 780. In this case, Force India claimed that Lotus (a rival team) stole confidential information surrounding wind tunnel models of Force India’s car.
116. Id. at Article 22.5.1-22.5.3.
117. Id. at Article 22.2.5. The full text of the regulation reads:

From time to time the FIA may request that a competitor shares certain information in connection with this Article 22 with the FIA (a) so that the FIA may share with the other competitors for safety reasons only, or (b) to assist the FIA in considering future amendments to the Technical Regulations, subject in each case to receiving the appropriate undertaking of confidentiality from the FIA.

Id. This was added after the fight between Ferrari and the other teams over the release of confidential information. Compare this statement to the 2020 Technical Regulations Issue 5, where this regulation does not exist.
119. Id. at 16.1.1-16.1.2.
CONCLUSION

In sports, very few things are secret. Football playbooks or soccer set pieces start out as secrets, but once the plays or pieces are run, especially during a game, they are no longer a secret. Baseball teams frequently change their signs so that rival teams cannot guess what they are going to do next. Because, once the signs are out in the open, they are no longer a secret. Motorsports is the only sport that has a chance at arguing protection under trade secrets, but only if they keep the information a secret.

120. As of the writing of this article, former Toronto Blue Jays pitcher Michael Bolsinger is suing the Houston Astros over their 2017 sign stealing scandal arguing that the Astros misappropriated his trade secrets, the signs telling him which pitch to throw. Chandler Rome, Believing Astros Sign Stealing Cost Him a Job, Ex-Blue Jays Pitcher Michael Bolsinger Re-Files Lawsuit, HOUSTON CHRONICLE (May 14, 2021, 12:11pm), https://www.houstonchronicle.com/texas-sports-nation/astros/article/ Believing-Astros-sign-stealing-cost-him-a-job-16175796.php. See also Samuel J. Horovitz, If You Ain’t Cheating You Ain’t Tryin: Spygate and the Implications of Trying Too Hard, 17 TEX. INTEL. PROP. L.J 305 (2009) for a discussion on the New England Patriots sign stealing scandal and whether or not signs are trade secrets.