IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

LG CHEM, LTD. and LG CHEM MICHIGAN INC., Plaintiffs, v. SK INNOVATION CO., LTD. and SK BATTERY AMERICA, INC., Defendants.	)	C.A. No. _____ **JURY TRIAL DEMANDED**

COMPLAINT

Plaintiffs LG Chem, Ltd. ("LG Chem") and LG Chem Michigan, Inc. ("LGCMI") (collectively "LGC" or "Plaintiffs"), by and through their undersigned counsel, hereby file the following Complaint for trade secret misappropriation under the Defend Trade Secrets Act under 18 U.S.C. § 1836, et seq. ("DTSA") and the Delaware Uniform Trade Secrets Act ("DUTSA"), tortious interference with a prospective business opportunity, unfair competition in violation of Delaware's Deceptive Trade Practices Act, 6 Del. C. §§ 2532 et seq., conversion, and unjust enrichment against Defendants SK Innovation Co., Ltd. ("SKI"), and SK Battery America, Inc. ("SKBA") (collectively "Defendants"), and allege as follows:

INTRODUCTION

1. Defendants have systematically stolen LGC's intellectual property and technology concerning LGC's lithium-ion batteries, battery cells, battery modules, and battery packs, including components thereof and related production and testing systems and processes therefor. These products, systems, and processes are used in the rapidly-growing and highly-competitive Electric Vehicle ("EV") industry. Through diligent work and heavy investment over the course of many years, LGC became a leading developer of EV batteries and related technologies. Defendants,

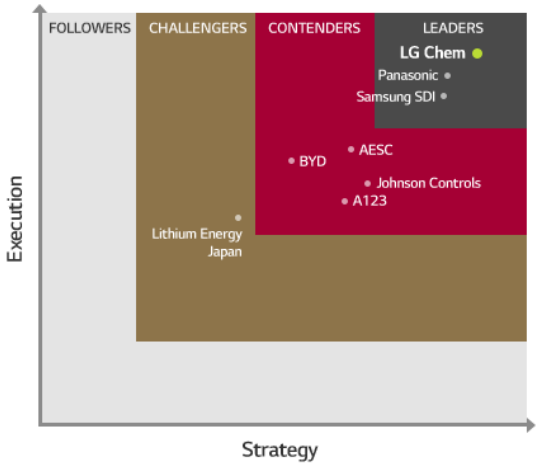
on the other hand, have avoided the arduous, time-consuming, and expensive process of developing their own EV battery technologies. Instead, Defendants have resorted to stealing LGC's trade secrets to overcome their lack of investment in cutting-edge technologies. Defendants accomplished this scheme by inducing scores of LGC's employees to leave LGC with the intent that they would bring LGC's most valuable trade secrets and confidential information to Defendants. Indeed, that is exactly what has transpired and, almost overnight, Defendants have gone from a non-player in the EV battery industry to securing contracts to supply billions of dollars' worth of EV batteries to automobile manufacturers. Defendants are unfairly and unlawfully exploiting LGC's valuable trade secrets, and this action seeks redress for Defendants' theft and misconduct.

2. EV batteries provide significant advancement over traditional powertrains in that they are more efficient, healthier for the environment, and designed to provide power over sustained periods of time. EV batteries are known for their high power-to-weight ratios and energy density. They are smaller and lighter to reduce the weight of the vehicle and improve its performance and reduce the costs associated with operation of the automobile.

3. The most common type of battery in electric vehicles today is a lithium-ion battery. This is because lithium-ion offers numerous advantages as compared to other battery technologies. For instance, lithium-ion batteries are excellent in retaining energy and they have excellent specific energy density, making them ideal for battery electric vehicles.

4. LGC is a global leader in a broad array of chemical, material, and energy technologies, and an industry leader in the research, design, development, manufacture, and sale of state-of-the-art lithium-ion batteries that are widely used in electronic and automotive applications

around the world. LGC was recently recognized by Navigant Research as an established leader in terms of execution and strategy in the EV battery market:[1]



According to Navigant Research(former Pike Research), LG Chem is an established leader of the market.

Of particular significance to this Complaint, through its development and protection of trade secret technologies and processes, LGC has become the industry leader and pioneering innovator of lithium-ion batteries in the EV industry, such as those used in the Chevrolet Bolt and Ford Focus EVs, and that are the subject of massive investment and efforts by the automobile industry.[2]

5. LGC's commitment to innovation led it to develop numerous, cutting-edge technologies related to the design and production of EV batteries over the course of the about 30 years, including many of the misappropriated trade secrets at issue in this dispute, which fall within the following categories: (1) Research and Development; (2) Procurement; (3) Manufacturing Processes and Systems; (4) Assembly; (5) Quality Control and Testing, and (6) Sales/Business (collectively, with and including, but not limited to, the trade secrets described below, as well as

[1] https://www.lgchem.com/global/vehicle-battery/car-batteries-Different/product-detail-PDEB0002, citing Navigant Research.

[2] D. Coffin & J. Horowitz, *The Supply Chain for Electric Vehicle Batteries*, J. OF INT'L COMMERCE & ECONOMICS at 56, Fig. 83 (U.S. Int'l Trade Comm'n Dec. 2018) (hereafter, "Coffin & Horowitz").

other paragraphs herein, "LGC's Trade Secrets", "LGC Trade Secrets" or "LGC Trade Secret" information or material).

6. LGC expended billions of dollars to develop the LGC Trade Secrets and confidential information over the course of about 30 years. The significant investments of time and money resulted in LGC's development of batteries that (a) are stable, strong and versatile, (b) can be produced efficiently and at a substantially lower cost than other products in the market, and (c) have evolved through vigorous testing and optimization with custom machinery and proprietary processes. As a result, LGC's Trade Secrets and other confidential information have substantial independent economic value. By stealing LGC's Trade Secrets and other confidential information, and by engaging in the unlawful conduct described below, Defendants have, at minimum, avoided years of their own research and development time and hundreds of millions of dollars of investment expense, causing damages to LGC in amounts that exceed billions of dollars.

7. In addition to its investment in innovation, LGC has invested heavily in developing effective sales and business strategies, leading to the development of the LGC Trade Secrets. There are a limited number of automobile manufacturing companies that serve as direct customers for the relevant EV battery products. LGC spent years developing relationships with those companies, learning their technical preferences and environments, creating products that are designed to satisfy those customers' needs and specifications, and obtaining information regarding how best to market and sell products to those customers. Thus, the LGC Trade Secrets include LGC's internal knowledge concerning such matters.

8. As a result of its significant investments in developing the LGC Trade Secrets, LGC has become one of the top suppliers of EV battery products in the world, including for electric vehicles in the United States market, such as the Chevrolet Bolt and Ford Focus EVs. By 2017,

LGC battery packs were installed in more than 26,000 vehicles in the United States, making it the second leading supplier by installed base by a considerable margin.[3] LG Chem and its wholly owned subsidiary, LGCMI, manufactured battery cells for those vehicles in the United States and South Korea and assembled those cells into battery packs at LGCMI's facilities in Michigan, creating lucrative jobs for citizens of the United States.

9. Per public market research reports and upon information and belief, Defendants substantially lagged behind LGC in research and development, market share, and technology offerings with respect to manufacturing and selling EV battery products. As of 2016-17, SKI "was not among the global industry leaders, meaning the top six global cell suppliers" and as of 2021 SKI had projected market share of only about 2%, whereas LGC was "expected to reach 30%" by that time.[4]

10. LGC is informed and believes that due to Defendants' inferior market position and desire to steal LGC's market share, in or about 2017, Defendants embarked on a scheme to significantly injure LGC and take over the global battery market by becoming the largest battery supplier, with an intent to eclipse LGC.[5] Defendants' strategy was not based on fair competition, independent research and development, and their own development and use of technological advances. Rather, Defendants' strategy was built around their unlawful theft and use of LGC's proprietary, valuable and cutting-edge LGC Trade Secrets and other LGC confidential information. Indeed, Defendants sought to obtain and coast on LGC's significant investments in research, development, production sales, and business strategies.

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[3] Coffin & Horowitz at 11, Table 3.

[4] *See* Chris Randall, "VW & SK Innovation looking into battery manufacturing," electrive.com (Oct. 25, 2018).

[5] *See* iTers News, "SK Innovation to invest 10 trillion on EV battery business through 2025" (May 31, 2017).

11. LGC is informed and believes that in or about 2017, while announcing their intent to reinvent themselves and become a top-tier battery maker, Defendants engaged in a targeted campaign to hire LGC engineers, scientists and technicians who were involved in virtually all core aspects of LGC's battery business to leave LGC, take competing positions with Defendants, and disclose and use LGC Trade Secrets (such as those including research and development for the EV industry, battery design manufacturing, lithium-ion quality control assessments, battery performance and testing information, purchasing, and sales histories and strategies and myriad other confidential information) ("Former LGC Employees").

12. The Former LGC Employees knew and were so experienced in using LGC Trade Secrets that, upon information and belief, Defendants specifically sought to unlawfully obtain not just their know how, but LGC Trade Secrets and other confidential information. For example, LGC is informed and believes that many of the Former LGC Employees had worked specifically on products and technologies concerning Volkswagen automobiles, one of LGC's key and emerging customers in the EV market, and its modular electric toolkit (known as the "MEB")[6] platform for electric vehicles. The Former LGC Employees had access to, were trained on, and routinely used LGC's Trade Secrets and other confidential information. Thus, they were central to Defendants' scheme to misappropriate LGC Trade Secrets and inflict massive damage to LGC's business, including its customer relationships, sales campaigns and revenue generation.

13. In this regard, after Defendants hired more than seventy experienced, trained LGC engineers and technical employees, those Former LGC Employees embarked on a campaign to benefit Defendants by illegally transferring to Defendants LGC's Trade Secrets and proprietary information.

[6] "MEB" is an acronym for "Modularer E-Antriebs-Baukasten," which translates to "Modular Electric-Drive Toolkit."

14. Indeed, forensic evidence shows that many of the Former LGC Employees began illegally transferring LGC's Trade Secrets to Defendants even while they were still employed by LGC. Further, the forensic evidence reveals Defendants' knowledge and inducement of this specific unlawful behavior.

15. Defendants' efforts to obtain LGC's Trade Secrets through the Former LGC Employees were blatant. For example, a now Former LGC Employee, shortly before leaving for SKI, suggested in a message that another LGC employee could "**go to SK with me . . . We can go to the Advanced Development Team and introduce what has been applied here, take advantage of the situation for 2-3 years**, then we will get promoted and let the juniors do the work and we can take it easy." (Emphasis added.) Subsequently, another LGC employee stated in a message that the same Former LGC Employee informed him that SKI was copying LGC: "**they're trying to follow everything that LG does**." (Emphasis added.) Still other messages show that Former LGC Employees, on information and belief, working on behalf and at the behest of Defendants, requested LGC's Trade Secrets regarding various materials, design changes, battery cell capacity, battery cooling and electrolytes.

16. Upon information and belief, as alleged in more detail in this Complaint, Defendants specifically targeted the Former LGC Employees based on their ability to divert and disclose LGC's Trade Secrets to Defendants. For example, upon information and belief, Defendants required the Former LGC Employees, as part of their employment, to submit detailed descriptions of their work and knowledge concerning important areas of competitive value, as well as plans, strategies, improvements, and other proprietary information belonging to LGC, including LGC Trade Secrets. Upon information and belief, the information Defendants obtained from the Former LGC Employees included and related to many categories of LGC Trade Secrets--including

manufacturing, plant operation, design, R&D information, quality control, material supply and vendors, sales, and cost reduction information--and this stolen information was confidential, proprietary, and highly valuable to LGC.

17. As described below in more detail, Defendants obtained LGC Trade Secrets not only through their hiring of Former LGC Employees, but also through other means, such as requesting LGC Trade Secrets from current LGC employees and/or through photographs and other information improperly taken, downloaded, and/or transmitted by Former LGC Employees. Defendants' unlawful conduct not only shows that LGC Trade Secrets and other confidential information were stolen by Defendants, but that Defendants' mere pursuit of LGC's Trade Secrets demonstrates Defendants' belief and understanding that LGC's Trade Secrets are commercially valuable.

18. On information and belief, Defendants have incorporated, at minimum, LGC's extremely valuable battery technology designs, production features and processes, and the LGC Trade Secrets concerning how to test the performance of batteries regarding energy flow, energy storage, reactions to changes in temperatures and other means to develop and optimize EV Battery performance into their current electric vehicle battery products. Indeed, Defendants are using the LGC Trade Secrets to design, develop, and produce future battery products that are the subject of existing contracts even though, on information and belief, they have failed to tell their customers that they are relying on LGC Trade Secrets and LGC confidential information to make their EV battery products. On information and belief, Defendants also intend to import into the United States manufacturing and testing systems and processes that incorporate or that will be used based on the misappropriated LGC Trade Secrets.

19. Upon information and belief, during the time Defendants were raiding the Former LGC Employees, Defendants were discussing with Volkswagen the opportunity to work together to mass produce battery cells, including the establishment of potential "Gigafactories" to manufacture battery products on a massive scale. See Chris Randall, "*VW & SK Innovation looking into battery manufacturing*," electrive.com (Oct. 25, 2018).

20. Upon information and belief, during the time when Defendants were raiding the Former LGC Employees, Defendants advanced their discussions with Volkswagen and obtained a multi-billion dollar contract with Volkswagen, under which Defendants would supply battery products for Volkswagen electric vehicles to be sold in the U.S., using Volkswagen's MEB platform. See Mike Pare, "*Chattanooga VW Will Source EV Batteries from New Georgia Factory*," Chattanooga (Tenn.) Times / Free Press (Mar. 20, 2019) (reporting that a Volkswagen representative confirmed that "SK Innovation will supply lithium-ion battery cells for our planned electric vehicle production in 2022.").

21. Upon information and belief, Defendants misappropriated LGC's Trade Secrets to unfairly compete with LGC for the Volkswagen U.S. supply contract, thus injuring and/or threatening to injure LGC and its business in the battery industry in the U.S. at an amount to be proven at trial.

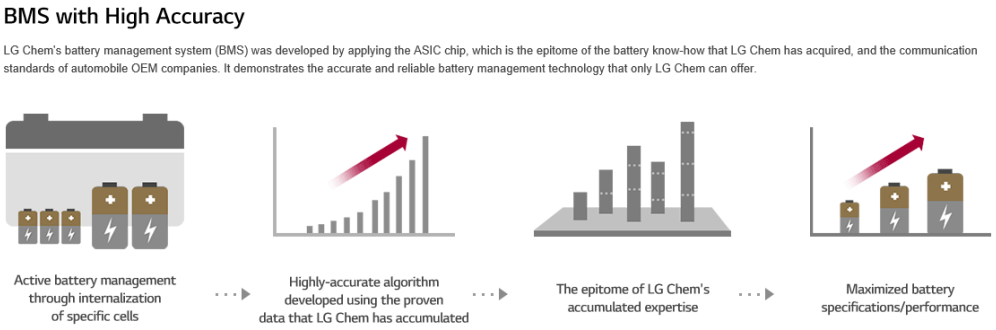
22. The multi-billion dollar amount of the contract between Volkswagen and Defendants in and of itself shows the immense commercial value of LGC's Trade Secrets, as well as the harm LGC has suffered and will continue to suffer if Defendants are allowed to continue using the misappropriated LGC Trade Secrets and confidential information.

THE PARTIES

23. LG Chem is a corporation organized and existing under the laws of South Korea that maintains its principal place of business at 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, South Korea.

24. LGCMI is a Delaware corporation. LGCMI is a wholly-owned subsidiary of LG Chem, with its principal place of business at 1 LG Way, Holland, Michigan 49423. LGCMI develops and manufactures lithium batteries at its facilities in Michigan, including individual battery cells as well as fully-assembled battery packs for customer applications. LGCMI has approximately 1000 employees devoted to the manufacture, engineering, quality control, sales, and marketing of its lithium-ion battery products.

25. Since its founding in 1947, LGC has grown to encompass about 16,000 employees worldwide devoted to research, design, engineering, testing, marketing, technical and business support services, and sales of its lithium-ion battery products. LGC's lithium-ion battery products include innovative solutions such as its Safety Reinforced Separator ("SRS") technology and its Battery Management System ("BMS") technology. For example, LGC's proprietary BMS technology provides highly accurate, state-of-the-art measurements and reports of battery performance:[7]



[7] https://www.lgchem.com/global/vehicle-battery/car-batteries-Different/product-detail-PDEB0002.

26. In addition, LGC's SRS technology offers superior safety through the improvement of the mechanical strength and heat resistance of batteries by applying a ceramic coating to the battery's separator layer, thereby enhancing robustness and reducing the potential for short circuits inside the battery. As a result of the SRS and BMS technologies and other LGC innovations, LGC's lithium-ion batteries have enjoyed great success in the marketplace.

27. LGC's innovative battery technology and solutions have resulted in over 1,725 U.S. patents and 20,000 patents and applications world-wide. LGC has been recognized and received numerous awards in the battery industry for its products and technological advances. Certain information about the success of LGC's battery technology can be found at https://www.lgchem.com/us/research-and-development/research-result.

28. LGC is a global leader in the EV battery market. Battery cells made by LG Chem and LGCMI, and battery packs assembled by LGCMI, are used in electric vehicles assembled in the United States, including, for example, those of the Chevrolet Bolt and Ford Focus EVs. Coffin, & Horowitz at 3 (Table 1).

29. LG Chem and LGCMI have substantial operations in the United States, including with respect to developing and making use of the LGC Trade Secrets. For example, LG Chem and LGCMI have significantly invested in developing, making, distributing and selling EV battery products in and for the U.S. market. Specifically, LGCMI has research and development, testing and engineering, manufacturing, and business offices in Holland, Michigan, where it has invested hundreds of millions of dollars and employs hundreds of workers. LGCMI also has research and development, testing and engineering, manufacturing, sales and marketing, and business offices in Troy, Michigan, where it has invested many millions of dollars and employs hundreds of workers. Through its facilities in Michigan, LGC supplies millions of battery cells each year to automotive

manufacturers including General Motors and Chrysler. Given the increasing demand for safe, high-performance lithium-ion batteries in the U.S., especially in the automotive industry, LGC is in the process of further expanding its manufacturing facilities in the United States, adding hundreds of new jobs and injecting hundreds of millions of dollars into the U.S. economy.

30. LGC has made and continues to make significant investment in the design, development, and production of products resulting from use of the LGC Trade Secrets. In the United States, LGC uses the LGC Trade Secrets and related technologies in various activities, including research and development, engineering, manufacturing, and sales strategies, as discussed more fully below. In addition, LGC has made significant investments in the United States in facilities, equipment, labor, capital, and research and development as detailed below. As set forth in more detail herein, LGC has invested hundreds of millions of dollars in its United States operations devoted to articles produced through use of the LGC Trade Secrets—and that does not include many billions of dollars more that LGC has invested in the LGC Trade Secrets and use thereof worldwide.

31. On information and belief, Defendant SK Innovation Co., Ltd. ("SKI") is a corporation organized under the laws of South Korea with a principal place of business at 26 Jong-Ro, Jongno-Gu, Seoul 03188, South Korea.

32. On information and belief, SKI conducts business in South Korea, including research, development, manufacturing and sales, in various industry segments, including petroleum, petrochemicals, lubricants, alternative energies, and batteries for electronic vehicles, grid energy systems, and other applications.

33. On information and belief, SKBA is a wholly-owned subsidiary of SKI and is a corporation organized under the laws of Delaware with a principal place of business at 201 17th Street NW, Suite 1700, Atlanta, GA, 30363. On further information and belief, SKBA also

maintains an office at 289 South Culver Street, Lawrenceville, GA 30046. SKBA has appointed The Corporation Trust Company, with an address at Corporation Trust Center, 1209 Orange Street, Wilmington, Delaware, as its agent for service of process.

34. On information and belief, SKBA focuses on the research, development, manufacturing and sales of battery technology in the United States.

35. On information and belief, SKBA was incorporated in Delaware on or about February 26, 2019 by SKI to further Defendants' scheme to misappropriate and utilize LGC's trade secrets by creating a manufacturing plant in the United States to directly compete with LGC for the U.S. market for lithium-ion batteries, battery cells, and battery modules.

36. On information and belief, SKI and/or SKBA is/are building a plant in Commerce, Georgia, to develop and manufacture lithium-ion vehicle battery products for sale in the United States that compete directly with LGC in the marketplace and are derived at least in part from the LGC Trade Secrets.

37. LGC is informed and believes, and based thereon alleges, that at all times pertinent hereto, both Defendants were the agent, servant, employee, partner, subsidiary, and/or co-conspirator of the other Defendant, and that, in performing or failing to perform the acts herein alleged, each was acting individually as well as through and in the foregoing alleged capacity and within the course and scope of such agency, employment, joint venture, partnership, subsidiary and/or conspiracy, and each other Defendant ratified and affirmed the acts and omissions of the other Defendant. LGC is further informed and believes that each Defendant, in taking the actions alleged herein and/or ratifying the actions alleged herein, acted within the course and scope of such authority and, at the same time, for its own financial and individual advantage, as well as in the course and scope of such employment, agency and as an alter ego therein.

38. Whenever, in this Complaint, reference is made to any actions of any Defendants or Defendant, such allegations shall mean that the directors, officers, employees or agent of said entity or entities did perform or authorize the alleged acts or actively engaged in the management, direction and control of such entity and were acting within the course and scope of their employment.

JURISDICTION AND VENUE

39. This Court has personal jurisdiction over Defendants, because SKBA, a wholly-owned subsidiary of SKI, is a Delaware corporation with a registered office in Delaware, SKBA has designated an agent in Delaware for service of process, and/or SKBA has been conducting and/or is presently conducting business in the District of Delaware on a regular basis.

40. SKI is further subject to personal jurisdiction because, upon information and belief, in furtherance of its scheme to misappropriate LGC's Trade Secrets, SKI organized SKBA as a wholly-owned, and wholly-controlled, subsidiary in the state of Delaware. SKI is thus subject to personal jurisdiction under Del. Code Ann., tit. 10, § 3104(c)(1).

41. This Court has specific jurisdiction over Defendants, because the Defendants possess the requisite "minimum contacts" with this forum, including but not limited to the sale of products used in Delaware, as well as physical visits, mail, email, phone calls, and numerous other contacts in Delaware over the span of years in furtherance of the acts giving rise to this litigation, as well as the intentional misappropriation of intellectual property belonging to a Delaware company.

42. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. § 1331 because Plaintiffs allege a claim under the Defend Trade Secrets Act of 2016, 18 U.S.C. § 1836. Subject matter over any related state law claims is appropriate under 28 U.S.C. § 1367 and the doctrines of ancillary and pendent jurisdiction.

43. Venue is proper in this district under 28 U.S.C. § 1391, because a substantial part of the acts and the injuries arising from the trade secret misappropriation, unfair competition and interference with business relationships complained of herein have occurred and are occurring in this judicial district. In addition, SKI's acts to found and incorporate SKBA in Delaware were in furtherance of its scheme to misappropriate LGC's Trade Secrets.

GENERAL ALLEGATIONS

44. This is a case involving a multi-company, international conspiracy to misappropriate and steal LGC's Trade Secrets, confidential information, and proprietary technologies, to intentionally interfere with LGC's business relationships in a multi-billion dollar contract bid to Volkswagen, as well as to interfere with LGC's customer relationships and unfairly compete against LGC in the EV lithium-ion battery market.

FACTUAL BACKGROUND

I. THE PRODUCTS AT ISSUE

45. The technology and intellectual property at issue generally relate to lithium-ion batteries and the processes and systems used to design, manufacture, test, and sell the same. As will be described in detail below, the LGC Trade Secrets lie in designing, developing, manufacturing, improving, marketing, testing and selling lithium-ion battery products for electric vehicles, including battery electric vehicles (BEV), plug-in hybrid electric vehicles (PHEV), hybrid electric vehicles (HEV), and micro hybrid electric vehicles (micro-HEV). The LGC Trade Secrets also lie in LGC's sales and marketing strategies associated with commercializing lithium-ion batteries.

46. LGC's products are commonly used in the EV Market. With respect to this market "[e]lectric vehicles [EVs] are becoming an increasingly important part of the automotive

landscape." Coffin & Horowitz at 2. "Batteries are the key differentiator between the various EV manufacturers." *Id*. at 4. The battery industry is forecasting explosive growth in demand, and is projected to grow globally from 19 GWh in 2015 to 1,293 GWh in 2030. *See* Claire Curry, "Lithium-ion Battery Costs and Market," Bloomberg New Energy Finance (June 20, 2017) at 4. For example, Ford Motor Company intends to introduce electric versions of its popular F-150 pickup truck in the near future.[8] Many of these U.S.-assembled automobiles are soon likely to incorporate imported batteries, including batteries produced by Defendants. [9]

47. "Lithium-ion batteries made up 70% of the rechargeable battery market in 2016; since then, EV-driven demand for lithium-ion batteries has risen, and will likely continue to rise as long as lithium-ion batteries are the primary power source for EVs." Coffin & Horowitz at 4.

48. At a high level, a lithium-ion battery stores energy electrochemically using a positive electrode (*i.e*., cathode), a negative electrode (*i.e*., anode), a separator, and an electrolyte. The electrolyte provides a medium that transports lithium ion, while the separator provides a transport route for the lithium ions and a separation between the positive and negative electrodes. Lithium-ion batteries are charged and discharged through the movement of ions between the electrodes.[10]

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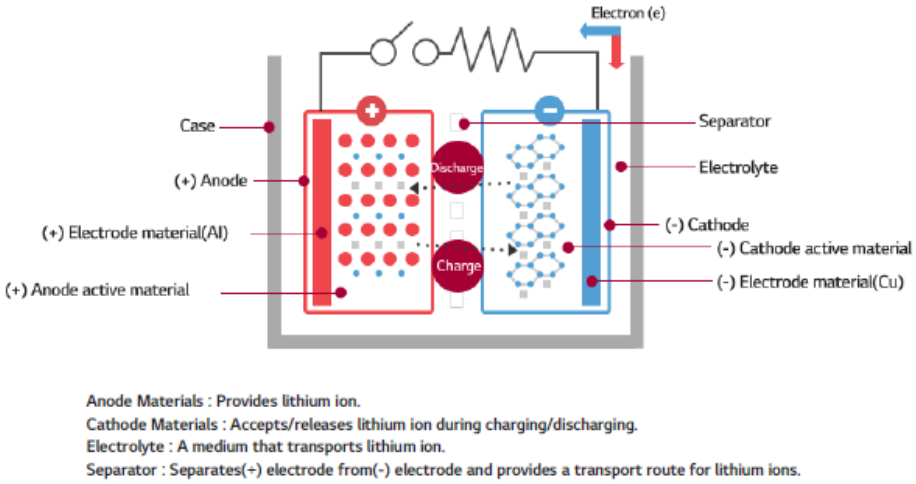
[8] https://www.caranddriver.com/news/a25933730/ford-f-150-electric-pickup-truck-confirmed/.

[9] https://www.bloomberg.com/news/articles/2019-03-18/sk-innovation-ceo-sees-ev-battery-business-breaking-even-by-2021 ("[SK's] Kim said his company also is in talks with other carmakers, which he declined to name. Invited guests expected to attend SK Innovation's groundbreaking event Tuesday include executives from BMW AG, Ford Motor Co. and VW.").

[10] https://www.lgchem.com/global/materials/secondary-cell-battery-materials/product-detail-PDDB0000



Anode Materials : Provides lithium ion.
Cathode Materials : Accepts/releases lithium ion during charging/discharging.
Electrolyte : A medium that transports lithium ion.
Separator : Separates(+) electrode from(-) electrode and provides a transport route for lithium ions.

49. During charging, lithium ions travel from the cathode, through the electrolyte, to the anode. During discharging, lithium ions travel from the anode, through the electrolyte, to the cathode. During both of these processes, the separator provides a barrier between the cathode and the anode to prevent electrical short circuits.

50. "The battery manufacturing supply chain has three main parts: cell manufacturing, module manufacturing, and pack assembly" as shown in the following figure from a recent article:

Figure 1: The three stages of electric vehicle battery production

Source: Compiled from industry representative, interview with USITC staff, Washington DC, November 14, 2018; industry representative, telephone interview with USITC staff, June 12, 2018.

Coffin & Horowitz at 5 (Figure 1).

51. "The smallest, but most important, component of the lithium-ion batteries that power EVs is the electrochemical cell, which consists of: a cathode and an anode separated physically but connected electrically by an electrolyte." *Id*. at 6. "Multiple cells in a case with terminals attached form a module." *Id*. at 8. "EV battery packs are the final stage of EV battery production" and "consist of battery modules, electrical connections, and cooling equipment." *Id*. at 9. In other words, the basic electrochemical unit that contains the electrodes, separator, and electrolyte is referred to as a "cell," and a collection of cells that are assembled for use is referred to as a "module".

II. INTELLECTUAL PROPERTY AT ISSUE

A. Representative LGC Trade Secrets

52. LGC's Trade Secrets apply to the entire spectrum of designing, manufacturing, distributing, and selling battery products, including cells, modules, and packs, materials and components, manufacturing methods and processes, production speed, production yield, performance issues (such as energy, power, battery life, safety, temperature), selling and marketing products, vendors, and obtaining contracts and business with customers.[11]

53. At an overview level, the advancements made by LGC, and the development of LGC Trade Secrets and other confidential information, have improved the performance of automobiles, and allowed for substantial advancements in:

- Production efficiencies;
- Improvements to battery life, performance and stability;
- Active battery management;

[11] An extensive supply chain exists with respect to EV battery manufacturing. *See, e.g.*, Industry - EV Battery Makers, "Charging the car of tomorrow" (Deutsche Bank Markets Research June 2, 2016) at 57 (Table 85: supply chain of lithium industry).

- Uniform temperature control through effective cooling systems;
- Advanced designs for the isolation and prevention of leaks;
- Increased battery capacity and efficiencies;
- Energy regulation, including improvements in output and charging performance;
- Improvements in recharging rates and efficiencies;
- Cost reductions;
- Reductions in weight and volume;
- Quality control and reliability procedures, including processes for improved identification and detection of defects;
- Battery management and monitoring; and
- Processes for measuring and improving safety records.

54. LGC's Trade Secrets further include know-how relating to raw material development and production, as well as know-how used to obtain supply and reduce costs throughout the supply chain.[12]

55. With respect to facilities, LGC's Trade Secrets include know-how to construct, equip, and operate large-scale factories to manufacture and assemble products, including information specific to facilities in the U.S., Korea, China, and Europe. Based on its extensive R&D, product testing, trials, and other investments and experience, LGC has amassed LGC Trade Secrets regarding how to effectively manufacture batteries, efficiently meet customer demand, and perform quality testing to ensure that its products meet industry standards.

[12] An extensive supply chain exists with respect to EV battery manufacturing. *See, e.g.*, Industry - EV Battery Makers, "Charging the car of tomorrow" (Deutsche Bank Markets Research June 2, 2016) at 57 (Table 85: supply chain of lithium industry).

56. LGC's Trade Secrets also include know-how for the needs of particular customers. By way of example, Volkswagen introduced an electric vehicle platform known as MEB. LGC has developed valuable LGC Trade Secrets specifically for Volkswagen's MEB platform. LGC's Trade Secrets also include proprietary sales and marketing information relating to these and other current and prospective customers, including customer and contact lists, sales projections, and product development & launch data.

B. An Overview of LGC's Research and Development of the LGC Trade Secrets and LGC's Standing in the EV Market Resulting Therefrom

57. As noted above, the key components of a lithium-ion battery are the cathode, the anode, the separator, and the electrolyte. According to experts in the industry, "[t]o significantly improve the performance of the lithium battery, technology breakthroughs are required in all four components." Industry - EV Battery Makers, "Charging the car of tomorrow" (Deutsche Bank Markets Research June 2, 2016) at 40. These lithium-ion battery products are important as they directly impact battery performance and cost.

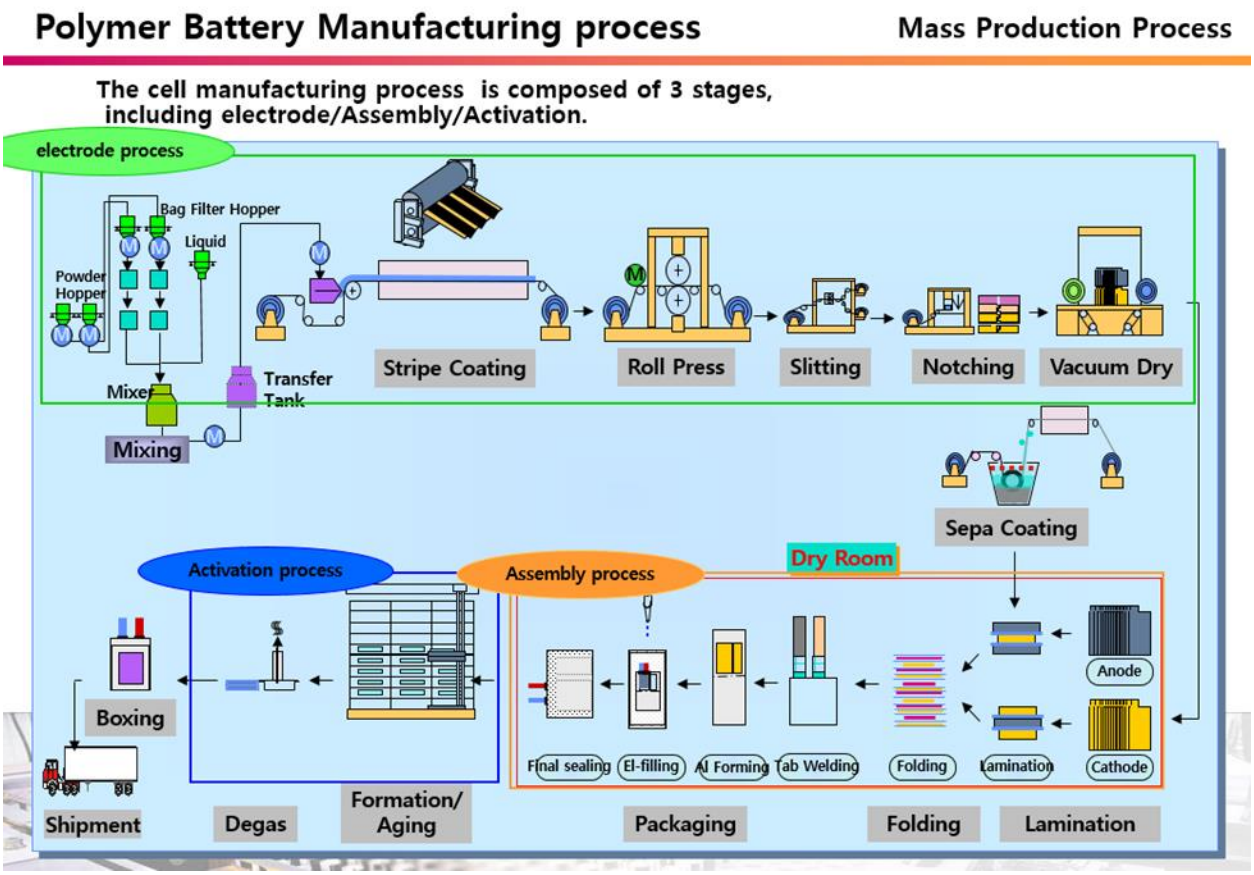
58. By improving the key components, manufacturers can increase energy storage (driving range), reduce charge time, manage heat production and conservation, and lower costs. Industry - EV Battery Makers, "Charging the car of tomorrow" (Deutsche Bank Markets Research June 2, 2016) at 40. LGC is engaged in R&D regarding each of these key areas.

59. LGC has many LGC Trade Secrets, developed over the course of many years at substantial financial cost and with many labor-hours concerning the optimum balancing for its products and components. Each round of testing, including successes and failures, and battery-related analysis gives LGC a competitive advantage in the market place. That competitive advantage has and will suffer due to Defendants' misappropriation of the LGC Trade Secrets.

60. The market for lithium-ion batteries is extremely competitive. "Intense price competition is leading manufacturers to develop new chemistries and improved processes to reduce production costs." Claire Curry, "Lithium-ion Battery Costs and Market," Bloomberg New Energy Finance (June 20, 2017) at 7.

61. As a pioneer in battery manufacturing and EV industry, LGC has invested substantial R&D and cost to progress from early manufacturing stages to more advanced manufacturing and product development.

62. In 1999, after years of research and development, LGC started commercial production of battery cells in South Korea. LGC and LGCMI coordinate in Korea and the United States to make and supply cells and batteries. Below is a flow chart that describes at a high level LGC's production process for the products at issue:



63. LGC required years to develop the misappropriated LGC Trade Secrets, beginning with the development of the underlying proprietary LGC foundational battery technology and manufacturing. The individual LGC Trade Secrets themselves stem from the proprietary foundational technology, years of testing and analysis and a desire to advance the life, performance and function of battery products in the EV Market.

64. LGC engages in extensive R&D for its battery business, including for example improving existing products, developing new products, optimizing manufacturing techniques and processes, and assessing ways to reduce the costs associated with commercial lithium-ion batteries. Since 1995, LGC has invested billions of dollars in battery-related R&D.

65. Examples of LGC's technology leadership and innovative spirit include:

(a) ". . . LGC has shown the biggest improvement in energy density from transition of Gen 1 to Gen 2 batteries. The improvement from Gen 1 to Gen 2 has been achieved through a series of R&D, leading to better mix in chemistry for batteries";

(b) LGC was able to lower prices by 27% from Gen 1 to Gen 2;

(c) With respect to the PHEV segment, LGC was identified as "the most advanced PHEV battery producer"; and

(d) "Our comparative analysis of LGC's batteries indicates that the company is well positioned as one of the top tiered battery makers in terms of order book and technology."

Industry - EV Battery Makers, "Charging the car of tomorrow" (Deutsche Bank Markets Research June 2, 2016) at 9-10, 31.

66. Similarly, SNe Research identified LGC as one of only four or five "tier 1 battery makers," with a wide customer portfolio that includes many vehicle manufacturers as LGC customers. Presentation, "Opportunities and Issues of Enormously growing EV and battery Industry" (SNe Research) at 42 (identifying LGC customers as including VW/Audi, Daimler, Renault, GM, Ford, Hyundai, Volvo, and JLR).

67. SNe Research forecast that LGC would rank number 1 in 2018, and remain ranked number 1 in 2022, based on factors "technology," "global customers," "cost," and "financial support." Presentation, "Opportunities and Issues of Enormously growing EV and battery Industry" (SNe Research) at 57.

68. This world ranking is a result, at least in part, of LGC's investment in and development of, the LGC Trade Secrets. And LGC's world rankings and commercial advantage will be greatly harmed as a result of Defendants' theft and use of the LGC Trade Secrets.

C. LGC's Trade Secrets Provide A Competitive Advantage To LGC, and LGC Derives Economic Value From The LGC Trade Secrets

69. LGC has developed the LGC Trade Secrets over 30 years and at a great expense. The LGC Trade Secrets have enabled LGC to be a recognized leader in the industry and in the market place. Defendants' misappropriation of LGC's Trade Secrets has enabled Defendants to avoid the investment in research and development, labor and capital, and avoid the long lead time required to compete in the lithium-ion battery market.

D. LGC Has Taken Reasonable Measures to Maintain the Secrecy of the LGC Trade Secrets.

70. LGC has a strong internal culture to protect and secure the confidentiality of the LGC Trade Secrets. It generates and publishes written and oral policies that make it clear to its employees that in the course of employment with LGC, they will create, use and/or have access to LGC Trade Secrets and other confidential information. Those written and oral policies also advise

LGC employees that LGC considers its LGC Trade Secrets and confidential information to be proprietary, and the sole ownership of such information belongs solely to LGC.

71. Moreover, LGC uses training programs to remind its personnel of the aforementioned policies.

72. LGC also limits data access to personnel with need to know. LGC has use filters, anti-phishing and encryption technologies, among many protection schemes.

73. The internal culture is pervasive as the LGC Trade Secrets that are actively being used, developed and evolved are restricted. In this regard, LGC engages in the additional security steps to maintain the secrecy and privacy of LGC Trade Secrets and other confidential information, such as:

- Restricting access to LGC's offices and plants through physical security measures, including where appropriate locked areas and areas requiring the use of company badges;
- Restricting access to LGC's computer network and IT systems by requiring the use of passwords and establishing appropriate firewalls and other IT security measures;
- Limiting access to LGC Trade Secrets so that only employees with a need to know such information have access to that information, adopting appropriate company policies and procedures to protect trade secrets;
- Training employees on the importance of trade secret protection;
- Preventing the ability of company computers to output data onto flash drives or other removable media;
- Requiring confidentiality and non-disclosure agreements that protect Trade Secrets, including agreements with employees who have access to such information.

- Prohibiting unauthorized transfers or use of LGC Trade Secrets (e.g., transfers to personal emails or portable storage media);

- Conducting departing employee interviews to remind them of their confidentiality requirements, that includes an off-boarding policy to ensure that employees cannot remove electronic files.

- Requiring the Former LGC Employees to, upon their departure, sign an additional "Former Employee Trade Secret Confidentiality Agreement," which included the following specific promise to protect LGC Trade Secrets:

> "In departing from the Company, I will not disclose or divulge the Company's trade secrets to third parties as below obtained during my employment, and not use such trade secrets for profit or non-profit purposes. I promise to accept all civil and criminal liability in the event of violation thereof.
>
> 1. Matters regarding technology secrets such as product production methods, etc.
> 2. Matters regarding sales secrets such as product sales methods, etc.
> 3. Matters regarding management secrets such as personnel management, organization and finance, etc.
> 4. Matters regarding research, development and training, etc.
> 5. Secrets regarding alliances with other companies.
> 6. Secrets regarding business plans and research and development plans.
> 7. Secrets regarding information on business with related companies such as subsidiaries and subcontractors.
> 8. Secrets obtained by participating in projects, such as those described in the examples below.
> 9. Other matters regarding trade secrets."

- Obtaining ISO27001 certification for information security management systems.

74. LGC's Trade Secrets are not readily ascertainable through proper means. The LGC Trade Secrets are not discernible from inspection, reverse engineering, or tear down of the end products. They are unique, highly evolved, and not generally known. Independent development of

the LGC Trade Secrets took LGC over 30 years of intense research and development, and would have taken Defendants at least the same amount of time, if not more.

E. Defendants' Trade Secret Misappropriation Is Premised In Its Inability To Fully Compete in the EV Market

75. Defendants trailed LGC in the EV market. Defendants lacked the know-how, customer base, industry relationships and engineers, scientists and technicians needed to compete against LGC. Given the potential market, with annual revenue opportunities in the tens of billions of dollars, Defendants engaged in a scheme to misappropriate LGC's Trade Secrets and proprietary, secret and confidential information to compete against it in the EV Market.

76. SKI acknowledges that it "had a late start in the battery market compared to competitors . . . ." SK Innovation Sustainability Report at 19 (2015).

77. Upon information and belief, in 2005, SKI "commenced its lithium-ion battery business, principally for hybrid electric vehicles." SK Innovation Co., Ltd. Offering Circular at 46 (Aug. 6, 2013).

78. Upon information and belief, in 2006, SKI "commenced production of lithium-ion batteries and in the second half of 2012, the Company commenced mass production of lithium-ion batteries at its production facilities located in Seosan, Korea with an annual production capacity of 800 megawatt hours . . . . ." SK Innovation Co., Ltd. Offering Circular at 46 (Aug. 6, 2013).

79. Upon information and belief, in 2015, SKI "completed expansion of the Seosan battery plant, doubling its capacity," so that the plant "is now equipped with EV battery production facilities that can produce a total of 800 MWh, enough to supply 30 thousand units of EVs, twofold the original capacity." SK Innovation Sustainability Report at 18 (2015). In 2015,

SKI reportedly produced 1.1GWh of EV batteries. See iTers News, "SK Innovation to invest 10 trillion on EV battery business through 2025" (May 31, 2017).

80. Upon information and belief, in March 2016, SKI expanded its Seosan factory. As of Q1 2017, the company listed as the tenth largest in capacity had a production capacity of 2.1GWh. SKI was not listed among the top ten battery companies in manufacturing capacity. See Claire Curry, "Lithium-ion Battery Costs and Market," Bloomberg New Energy Finance (June 20, 2017) at 3. SK Innovation Sustainability Report at 35 (2015).

81. In 2018, SKI reportedly expanded its manufacturing from 1.1GWh electrode production capacity and 1.1GWh assembly capacity (three lines) in 2017 to 4.6GWh electrode production capacity and 3.9 GWh assembly capacity (six lines) in 2018. SKI Presentation, "SK Pursuit of Super Excellence 2017" at 25.

82. Upon information and belief, "[i]n 2017 and the first quarter of 2018, [SKI] allocated approximately 0.6% and 0.4%, respectively, of its sales revenue toward research and development expenses." SK Innovation Co., Ltd. Offering Circular at 59 (July 9, 2018). This R&D presumably includes all of SKI's business segments, and therefore includes R&D that is unrelated to its battery business.

83. As of 2017, Defendants' manufacturing capacity and its R&D investment were not competitive with the manufacturing capacity or R&D investment of top tier battery companies, including LGC.

84. As of 2017, Defendants' market share was far below LGC's market share.

85. Despite their low-tier position in market share, manufacturing capacity, and R&D, Defendants set an objective to transform themselves, leapfrog LGC, and become the largest EV battery company in the world, capturing 30% of the entire battery market.

86. In May 2017, SKI's President reportedly stated that SKI had "set a target to seize 30% of [the] global EV battery market in 2025" and "become the world's biggest EV battery maker." iTers News, "SK Innovation to invest 10 trillion on EV battery business through 2025" (May 31, 2017).

87. Upon information and belief, in August 2017, SKI "reorganized to put the battery unit and R&D lab under the direct supervision of CEO Kim Jun." Green Car Congress, "SK Innovation to begin production of NCM-811 batteries" (Sept. 1, 2017).

88. Shortly before announcing that SKI intended to propel itself ahead of LGC in the battery market, Defendants began targeting and hiring multiple, highly experienced employees of LGC, who knew of LGC's Trade Secrets and other confidential information, with the goal of using those LGC Trade Secrets to improve their products, production capabilities, facility design and performance, standing in the market place, and obtaining contracts with vehicle manufacturers that otherwise would have entered contracts with LGC.

89. Defendants have unfairly and improperly obtained LGC's Trade Secrets through a strategic campaign to lure away the Former LGC Employees with knowledge of LGC's Trade Secrets and other confidential information.

90. The Former LGC Employees are highly experienced in core aspects of LGC's business and technology, and had access to, and knowledge of, LGC's Trade Secrets through their employment with LGC.

91. Upon their departure from LGC, the Former LGC Employees signed the "Former Employee Trade Secret Confidentiality Agreement," discussed above.

92. Upon information and belief, before hiring the Former LGC Employees, Defendants solicited from them what they had learned and could provide to Defendants. The

following are specific (but by no means believed to be complete or comprehensive) examples of information disclosed to Defendants by several of the Former LGC Employees, and is believed to be representative of the type of information that Defendants solicited and obtained from Former LGC Employees, relevant to LGC's Trade Secrets:

(a) **Former Employee #1**. Former Employee #1 worked at LGC from on or about July 1, 2009 until on or about May 28, 2018. The following is alleged on information and belief. Former Employee #1 applied for a position at SKI concerning advanced process research. Defendants solicited, and Former Employee #1 provided, detailed information concerning work as a member of LGC's Electrode Process Technology Team, RTS Technology Team, and Small-sized Electrode Technology Team.

(b) **Former Employee #2**. Former Employee #2 worked at LGC from on or about May 2, 2011 until on or about October 5, 2018. The following is alleged on information and belief. Former Employee #2 applied for a position at SKI concerning battery marketing in or about June 2018. Defendants solicited, and Former Employee #2 provided, detailed information concerning work at LGC including as an Assistant Manager and Manager.

(c) **Former Employee #3**. Former Employee #3 worked at LGC from on or about July 1, 2008 until on or about November 1, 2017. The following is alleged on information and belief. Former Employee #3 applied for a position at SKI as a scientist. Defendants solicited, and Former Employee #3 provided, detailed information concerning work at LGC from November 2008 through February 2017.

(d) **Former Employee #4**. Former Employee #4 worked at LGC from on or about January 1, 2010 until on or about October 10, 2017. The following is alleged on information and belief. Former Employee #4 applied for a position at SKI concerning battery planning

and operations. Defendants solicited, and Former Employee #4 provided, detailed information concerning work as a member of LGC's Procurement Team, Materials Management Team, Strategic Purchasing Team, and Dream Cost Task.

(e) **Former Employee #5**. Former Employee #5 worked at LGC from on or about December 5, 2011 until on or about February 28, 2018. The following is alleged on information and belief. Former Employee #5 applied for a position at SKI in or about October 2017, concerning battery engineering, manufacturing technology, and formation. Defendants solicited, and Former Employee #5 provided, detailed information concerning work as a member of LGC's Process Development Team since December 2011.

(f) **Former Employee #6**. Former Employee #6 worked at LGC from on or about October 1, 2008 until on or about April 3, 2018. The following is alleged on information and belief. Former Employee #6 applied for a position at SKI concerning advanced process research. Defendants solicited, and Former Employee #6 provided, detailed information concerning work at LGC.

93. Each of the above Former LGC Employees had knowledge of LGC's Trade Secrets, including LGC Trade Secrets in the areas disclosed to Defendants.

94. Upon information and belief, each of the above Former LGC Employees is now working at SKI or one of the other Defendants, or has worked at SKI or one of the other Defendants since leaving LGC.

95. Upon information and belief, by hiring highly experienced Former LGC Employees, with knowledge of LGC's Trade Secrets, Defendants gained access to LGC's Trade Secrets.

96. Each of the above Former LGC Employees were obligated to protect the confidentiality of LGC's Trade Secrets, and in fact signed an agreement promising to protect the confidentiality of LGC's Trade Secrets.

97. Upon information and belief, it was understood by at least some Former LGC Employees that, in connection with their work with Defendants, they would be expected to use and/or disclose the proprietary know-how and LGC Trade Secrets they learned at LGC.

98. For example, as described above, a now former LGC employee (Former Employee #7), shortly before leaving to join SKI, suggested in a message that another LGC employee could "go to SK with me . . . We can go to the Advanced Development Team and introduce what has been applied here, take advantage of the situation for 2-3 years, then we will get promoted and let the juniors do the work and we can take it easy."

99. Subsequently, another LGC employee stated in a message that Former Employee #7 informed him that SKI was copying LG: "they're trying to follow everything that LG does."

100. Upon information and belief, Former LGC Employees who joined SKI or Defendants have sought to obtain, and did obtain, LGC's Trade Secrets to use and/or disclose in connection with their work with Defendants.

101. A now former LGC employee (Former Employee #8), shortly before leaving to work for SKI, requested information from an LGC employee, including "any material regarding 48v" that was in the process of a design change, despite knowing that this information should not be disclosed. Former Employee #8 asked "please send me one . . . even if it is being redone" and "I want to read it," and agreed not to "leak it outside."

102. In the same exchange, Former Employee #8 sought additional proprietary information concerning LGC's technology, as evidenced by the following message exchange:

Former Employee #8: How does the cooling work

[LGC employee]: The cell capacity is changed, so it's becoming smaller

Former Employee #8: That's what I want to know the most.

103. As another example of Defendants' soliciting proprietary LGC information, Former Employee #7, who worked for the Global Manufacturing Process Team, sent a message shortly before leaving LGC for SKI to another LGC employee asking for information concerning what electrolyte LGC was using, which the LGC employee provided. This information was not directly related to Former Employee #7's responsibilities and job scope.

104. Through investigation, LGC has learned that Former LGC Employees improperly sent substantial amounts of proprietary and LGC Trade Secret information to Defendants. Upon information and belief, Defendants now possess and are using the LGC Trade Secrets and other confidential information. Defendants' possession and use of said trade secrets and confidential information has harmed and will continue to harm LGC.

105. As for the unauthorized transfer of information, Former LGC Employees, upon information and belief, sent LGC Trade Secrets and other confidential information, and that information was intentionally stolen and improperly acquired by Defendants. Further, the Former LGC Employees have used and/or inevitably will disclose LGC Trade Secrets and other confidential information to Defendants.

106. Accordingly, specific examples of Defendants' unlawful effort to misappropriate and use LGC Trade Secrets, interfere with LGC's employment and business

relationships, injure LGC's competitive standing, and avoid having to spend billions of dollars and vast resources to compete with LGC in the EV Market include:

- Defendants systematically raided LGC of 77 highly trained scientists, engineers and business individuals during the 2016-2018 period.
- Defendants asked for and improperly obtained LGC's Trade Secrets from Former LGC Employees.
- Defendants used the LGC Trade Secrets and manufactured for importation and imported the lithium-ion batteries, battery cells, battery modules, battery packs, components thereof, and production and testing systems including equipment and processes for manufacturing and testing same.
- Defendants' lithium-ion batteries made with LGC's Trade Secrets have injured and will continue to injure LGC's domestic industry.

III. DEFENDANTS' CONDUCT IS INJURING LGC IN THE UNITED STATES AND WORLDWIDE

107. Defendants have used and are using the misappropriated Trade Secrets to compete with LGC for the EV battery market in the United States.

108. For example, upon information and belief the 2019 Kia Niro EV, a crossover utility electric vehicle, contains accused lithium-ion battery cells produced by SKI in South Korea through the use and application of misappropriated LGC Trade Secrets. "2019 Kia Niro EV: first drive of 239-mile electric Crossover" (Feb. 4, 2019), available at https://www.greencarreports.com/news/1121294_2019-kia-niro-ev-first-drive-of-239-mile-electric-crossover (last accessed April 11, 2019); "All New 2019 Kia Niro EV Crossover Utility Makes North American Debut" at 4 (Nov. 28, 2018), available at https://www.kiamedia.com/us/en/print/14816 (disclosing LGC and SKI as suppliers of EV batteries

for Kia). Indeed, the Kia Niro EV Crossover Utility vehicles "use cells from [LGC's] Korean competitor SK Innovation." Id. The configuration and characteristics of the SKI battery cells in the Kia Niro EV Crossover Utility indicate they were produced and/or improved upon using the LGC's Trade Secrets relating to lithium-ion battery cells, production and manufacturing equipment, production and manufacturing protocols and processes, testing equipment, testing protocols and processes, battery modules, battery packs, battery performance, sales and marketing, purchasing and vendors, and battery plants.

109. Upon information and belief, SKI has also signed long-term contracts at least with Volkswagen to supply Defendants' batteries incorporating LGC's Trade Secrets, specifically Volkswagen's MEB battery products that Defendants developed, improved upon, and/or are or will be producing by improper use of LGC's Trade Secrets. On or about November 13, 2018, Volkswagen Group announced "that it has selected SK Innovation as a strategic supplier of battery cells for production of electric vehicles based on [Volkswagen's] modular electric drive (MED) platform." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018), *available at* http://www.businesskorea.co.kr/news/articleView.html?idxno=26587.

110. Upon information and belief, SKI and SKBA have also announced plans to establish a production facility in Georgia, which will apply the misappropriated LGC Trade Secrets. Indeed, Volkswagen Group has confirmed that "'SK Innovation will supply lithium-ion battery cells for our planned electric vehicle production in 2022 . . .'" from Defendants' Georgia factory, which broke ground on construction on March 19, 2019. Mike Pare, "Chattanooga VW Will Source EV Batteries from New Georgia Factory," Chattanooga (Tenn.) Times (Mar. 20, 2019), available at https://www.ttnews.com/articles/chattanooga-vw-will-source-ev-batteries-new-georgia-factory).

111. On information and belief, samples of Defendants' battery products manufactured using misappropriated LGC Trade Secrets have been already imported into the U.S. and/or are being sold in other parts of the world. The design-in and testing process for specific automotive manufacturers requires two or more years lead time prior to the commercial production. On information and belief, Ford Motor Company is planning to incorporate imported SKI battery products into its next generation EV trucks.

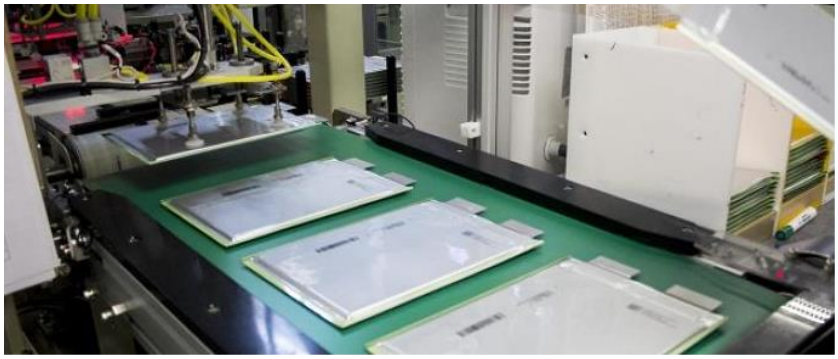
112. Defendants' conduct is injuring, will imminently injure and will continue to injure LGC's United States-based industry, includes its U.S. facilities, equipment, labor, and capital expenditures directed to manufacturing, research and development, engineering, and technical support of its batteries, battery cells, battery modules, battery packs, components thereof, articles incorporating batteries, and production and testing equipment for batteries and articles incorporating batteries.

A. LGC's Manufacturing In The United States

113. LGC is one of the world's largest lithium-ion battery manufacturers, with significant U.S. market share in both automotive and stationary applications.

114. Since 2013, LGCMI has owned and operated a facility in Holland, Michigan ("Holland Michigan Facility") where it produces lithium-ion battery cells, modules, battery packs and management systems. LGCMI's Holland Michigan Facility is the result of LGCMI collaborating with both the public and private sectors, including the U.S. Department of Energy, the state of Michigan, and the city of Holland. LGCMI is an anchor company of Michigan's SmartCoast Advanced Energy Storage cluster of companies. *See* http://michigansmartcoast.com/we-make-it-

here/. The following pictures[13] illustrate workers performing highly technical manufacturing work in the Holland Michigan Facility:



[13] Pictures available at: https://www.wardsauto.com/industry/lg-chem-details-cell-making-process-michigan-plant; https://www.vanadiumcorp.com/news/sustainability-news/is-energy-storage-the-next-job-creator-part-2/; and https://www.prnewswire.com/news-releases/lg-chems-holland-plant-accelerates-battery-production-300163934.html.

115. Each of the battery cells ("LGC battery cells"), modules, battery packs and battery management systems (collectively, "LGC's US Products") that are made in the Holland Michigan Facility incorporates LGC's Trade Secrets. The commercial utility of LGCMI's individual LGC battery cells is mainly with the automotive industry. In this industry multiple LGC battery cells are combined into a module that has a case with terminals, and modules are combined into a battery pack, which is then incorporated into the power system of an electric vehicle. The battery pack has a battery management system due to the nature of lithium ion batteries. The management system monitors the battery cell state, controls its environment, and protects the battery pack from operating in an unsafe manner. The battery management systems are integral to and critical for the battery packs, their modules and cells.

116. The Holland Michigan facility is dedicated nearly exclusively to the manufacturing and production of LGC's US Products.

117. Every step of the process for manufacturing the LGC battery cells occurs at LGCMI's Holland Michigan Facility. Similarly, battery packs and battery modules made by LGCMI are also wholly-manufactured at its Holland Michigan Facility. All of the LGC battery cells, modules and battery packs with management systems made by LGCMI in Michigan are made with LGC's Trade Secrets.

118. At its Holland Michigan Facility, LGCMI operates six production lines for the LGC battery cells manufactured for its automotive customers. LGCMI has made significant investments in these production lines.

119. LGCMI manufactures a significant number of articles that incorporate LGC's Trade Secrets at its Holland Michigan Facility.

B. Substantial and Ongoing Injury to LGC

120. Defendants' misappropriation of LGC's Trade Secrets already has caused substantial injury to LGC, and their continued misuse of the LGC Trade Secrets threatens to compound that injury significantly if their misconduct continues unabated.

121. LGC is recognized as a leading supplier to many global vehicle manufacturers. *See* Deutsche Bank Markets Research, "Charging the car of tomorrow," at 14 (June 2, 2016) (Figure 24 -- LGC announced contracts), https://rocktechlithium.com/wp-content/uploads/2016/11/Deutsche-Bank-Lithium-Research.pdf. As of 2015, LGC had 12% market share for the global EV battery market, and it was the second leading supplier in the U.S. market (after Panasonic). *Id.* at 12, 16. By contrast, SKI was not identified as a top 10 producer and thus had less than 2% market share. *Id.* at 12. According to one industry report, "LG Chem is capable of further expanding its U.S. plant without having to invest heavily in infrastructures, as the plant was originally designed to house further capacities." *Id.* at 16.

122. Defendants' misappropriation of LGC's Trade Secrets has disrupted LGC's customer relationships, diverted supply contracts from LGC to Defendants, and reduced LGC's market share and threatens to result in further disruption, diversion, and reduction. Defendants are able to compete in the lithium-ion battery market only as a direct result of their misappropriation of LGC's Trade Secrets. Battery producers such as LGC and Defendants compete to supply EV batteries to the same customers—namely automobile manufacturers.

123. As one example, Volkswagen is an important customer in the EV battery market. Volkswagen's battery supply contracts for electric vehicles have been estimated to amount to $40–$50 billion through 2025. See Michael Herh, "Orders from Volkswagen Give a

Breakthrough to Korean Battery Makers," BusinessKorea (Mar. 16 2018). Volkswagen recently announced that it intends to invest heavily in the EV market and develop and sell many EV models.

124. In or around 2016, Volkswagen considered proposals for battery orders for Volkswagen vehicles in the European market. In 2017, LGC competed for and won EV battery orders from Volkswagen for Europe, and it has supplied batteries to Volkswagen vehicles in Europe. According to an unidentified source, "SK Innovation did not participate in competing for the Volkswagen order by taking its profitability into question." Michael Herh, "Orders from Volkswagen Give a Breakthrough to Korean Battery Makers," BusinessKorea (Mar. 16, 2018).

125. Only months later, however, after raiding LGC's employees, Defendants reversed course and did compete with LGC for orders from Volkswagen for the U.S. market, and Volkswagen selected Defendants as a "strategic supplier" of battery cells for electric vehicles for the U.S. On or about November 13, 2018, Volkswagen Group announced "that it has selected SK Innovation as a strategic supplier of battery cells for production of electric vehicles based on [Volkswagen's] modular electric drive (MED) platform." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018), http://www.businesskorea.co.kr/news/articleView.html?idxno=26587; *see also* Fred Lambert, "Volkswagen announces 2 new factories to go electric, partners with SK Innovation for battery cells" (Nov. 14, 2018), https://electrek.co/2018/11/14/volkswagen-electric-factories-sk-innovation-battery-cells/.

126. Upon information and belief, Defendants have obtained other contracts for the supply of EV battery products to be produced oversees and imported into the United States for use in electric vehicles produced domestically. Upon information and belief, Defendants plan to build and operate battery manufacturing plants in China, Hungary, and the United States. Reportedly, SKI

"began to expand its Seosan plant in Korea to raise its production capacity to 4.7 GWh, and is building battery cell plants in Changzhou (7.5GWh) of China and Komarom (7.5GWh) of Hungary." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018).

127. Upon information and belief, Defendants also are planning to build a battery factory in the United States, so that Defendants can "produce batteries for electric cars produced at Volkswagen's North America plant starting in 2022 . . . ." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018). Upon information and belief, Defendants intend to be the sole provider of batteries for Volkswagen's production facilities in North America, and specifically in the United States. Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018).

128. Upon information and belief, Defendants' Georgia factory will use LGC's Trade Secrets obtained from Former LGC Employees, and Defendants will import equipment and systems for manufacturing lithium-ion EV batteries based on Defendants' misappropriation of the LGC Trade Secrets.

129. Due to Defendants' misappropriation of the LGC Trade Secrets, LGC has been and will continue to be forced to compete against SKI products made using the misappropriated LGC Trade Secrets. As Defendants have targeted LGCMI's customers or users of LGCMI's EV lithium-ion battery packs with competing EV battery cells, modules, and/or packs made using the LGC Trade Secrets, Defendants' misappropriation has significantly impacted LGC's sales of products in the United States and worldwide, and it is reasonably likely that LGC will suffer further reductions in the future.

130. Defendants' misappropriation of the LGC Trade Secrets already has substantially injured LGC based on Defendants' unfair competition with LGC for battery contracts, due to the long "design-in" times necessary for automotive manufacturers to incorporate battery designs into new vehicles. On information and belief, Defendants have been able to obtain long-term contracts for future automotive products by offering for sale in the United States batteries that embody or will be made using the misappropriated LGC Trade Secrets. But for Defendants' theft of LGC's Trade Secrets, Defendants would not have been able to win contracts to supply battery products to Volkswagen, Kia, and other automobile manufacturers. Moreover, Defendants' misappropriation of the LGC Trade Secrets has allowed and will continue to allow them to increase the volume of unfair imports into the United States and other countries, especially given the number of willing importers of such unfair products, including Volkswagen and other auto manufacturers.

131. In addition, Defendants' unfair acts have caused substantial injury to the value of LGC's Trade Secrets. By misappropriating the LGC Trade Secrets, Defendants have been able to free ride on LGC's significant production and development investments, eroding LGC's fairly and legitimately obtained first-mover advantage and availing itself of a substantial head start in developing competing EV lithium-ion batteries. LGC developed the LGC Trade Secrets over twenty-plus years through the significant efforts of many talented scientists and engineers and significant capital investment in equipment and testing. Defendants have taken the fruit of that effort and used it to launch a competitive business into the U.S. lithium-ion market, without payment, authorization, or right.

132. Defendants have relied on and used, one or more of LGC's Trade Secrets in connection with actual or likely: (a) manufacturing; (b) seeking and obtaining approvals or certifications related to importing, selling, and/or offering for sale in the U.S. and other countries; (c)

marketing in the U.S. and other countries; (d) offering for sale in the U.S. and other countries; (e) importing into the U.S. and other countries; (f) selling for importation into the U.S. and other countries; (g) selling in the U.S. and other countries after importation; (h) maintaining inventory in the U.S. and other countries; and/or (i) distributing in the U.S. and other countries products made using one or more of LGC's Trade Secrets. In the process, Defendants have unfairly and directly competed against LGC far earlier than it would have been able to compete but for its misappropriation of the LGC Trade Secrets, if Defendants ever would have been able to serve as significant competitors. LGC's actual and threatened injuries include, without limitation:

- Lost sales of products in the United States and other markets due to Defendants' rapid entry into the U.S. lithium-ion battery market as a result of its misappropriation of LGC's Trade Secrets, as well as the lost profits flowing from those lost sales;
- LGC's price erosion resulting in lost profits as a result of Defendants' likely underselling, which Defendants can do because their misappropriation of LGC's Trade Secrets provided them an improper and unfair head start in developing competing lithium-ion battery technology and thus allowed Defendants to avoid incurring the significant research and development expenditures that LGC made to develop the LGC Trade Secrets;
- LGC's loss of share in the United States and worldwide markets for lithium-ion battery cells, modules, and packs attributable to Defendants' ability to unfairly compete by offering lithium-ion batteries made using the LGC Trade Secrets;
- LGC's loss of potential royalties based on Defendants' unauthorized use of the LGC Trade Secrets; LGC's likely decline of its battery production and workforce in the United States and other countries related to battery design, development, and production;
- LGC's loss of confidentiality for its Trade Secrets; and

- LGC's loss of control over its Trade Secrets.

FIRST CAUSE OF ACTION

MISAPPROPRIATION OF TRADE SECRETS UNDER DEFEND TRADE SECRETS ACT (18 U.S.C. § 1836, et seq.)

(Against All Defendants)

133. LGC hereby incorporates by this reference Paragraph 1 through 132, inclusive, as if set forth fully herein.

134. LGC owns and possesses confidential and LGC Trade Secret information, as alleged above.

135. LGC's Trade Secret information relates to products and services used, sold, and ordered in, or intended to be used, sold, and/or ordered in, interstate and foreign commerce. Specifically, LGC's Trade Secret information relates to battery cells, production and manufacturing equipment, production and manufacturing protocols and processes, testing equipment, testing protocols and processes, battery modules, battery packs, battery performance, sales and marketing, purchasing and vendors, and battery plants, for its state-of-the-art lithium-ion batteries that are used in various electronic and automotive applications around the world, including EVs. Said information is not generally known to the public or to the EV and battery industries, and derives independent economic value from not being known to the general public or to the relevant industry.

136. LGC has expended hundreds of millions of dollars and a significant amount of time and other resources in developing its Trade Secrets. In addition, LGC goes to great lengths to protect the secrecy of this information by executing confidentiality agreements with all employees, independent contractors, and all other parties provided with LGC's confidential information, maintaining firewalls, private networks, and other technical mechanisms to ensure the security of

LGC's confidential information, labeling certain written communications as confidential, employing passwords and several other security mechanisms to protect LGC's confidential information. For example, LGC requires employees to read employee handbooks governing the treatment of confidential and LGC Trade Secret information; to attend training on the protection of confidential and LGC Trade Secret information; and for departing employees to return all documents and LGC computers or devices before having their access to all computers and systems terminated. LGC also has controlled access doors throughout its facilities. Further, LGC has computer access restrictions on individual computers as well as LGC databases, such as those containing its SRS and BMS technology.

137. Information concerning LGC's sales and customers is highly valuable competitive information, the confidentiality of which is strictly maintained by LGC. LGC shares its confidential information and LGC Trade Secrets only on a need-to-know basis with its employees and certain customers and partners subject to strict confidentiality agreements with an express obligation to protect confidentiality. LGC requires any third party, including payers, with access to LGC's confidential and LGC Trade Secret information to sign a LGC NDA prior to disclosing confidential information.

138. A competitor with access to LGC's Trade Secrets and proprietary information could harm and undermine LGC's sales success with its top customers, among other things. Such access by a competitor could cause LGC to suffer billions of dollars in damages through lost sales.

139. LGC's proprietary and confidential information derives independent economic value from not being generally known to and not being readily ascertainable through proper means by another person who could obtain economic value from the disclosure or use of the information.

140. LGC's Trade Secrets and confidential and proprietary information are of great value to LGC and would give any competitor of LGC, including Defendants, an unfair competitive advantage.

141. Specifically, LGC's confidential and LGC Trade Secret information are of great value to LGC and such information would give any competitor, who improperly acquired such information, an unfair competitive advantage by: (1) not expending the time and resources to develop the LGC Trade Secret and confidential and proprietary information as LGC has done; (2) quickly developing products and technologies to unfairly compete with LGC in order to diminish LGC's significant head start; and, (3) other improper advantages.

142. In violation of LGC's rights, Defendants willfully misappropriated LGC's confidential and proprietary information and converted the same to its own use, as part of its efforts to enter the EV lithium-ion battery market abroad, as described above.

143. On information and belief, by receiving, improperly using, and further disclosing the foregoing LGC Trade Secret material, Defendants misappropriated LGC's Trade Secrets in violation of 18 U.S.C. § 1836, et seq.

144. Upon information and belief, Defendants solicited and collected LGC's Trade Secret information, and used LGC as part of a scheme with the Former LGC Employees to misappropriate such LGC Trade Secrets to get the multi-billion dollar Volkswagen U.S. supply contract and develop competing EV lithium-ion battery products in order to compete with and steal LGC's business. Further, upon information and belief, Defendants acquired, used, and continues to use LGC's Trade Secrets, knowing that they were misappropriated and obtained through deceitful means. Such misappropriation permitted Defendants to develop their competing products, and to do

so in substantially shorter time and with substantially less investment than could have been accomplished without misappropriation of such LGC Trade Secrets.

145. For example, through investigation, LGC has learned that Former LGC Employees improperly sent a substantial amounts of trade secret information to Defendants. Upon information and belief, Defendants now possess and are using the LGC Trade Secrets depicted in the aforementioned photos. Defendants' possession and use of said trade secrets and confidential information has harmed and will continue to harm LGC.

146. LGC is informed and believes, and based thereon alleges, that Defendants knew or should have known that the information provided by the Former LGC Employees was taken from and belonged to LGC. LGC is further informed and believes, and based thereon alleges, that Defendants intended, induced, and encouraged the Former LGC Employees to do so and willingly accepted information from the Former LGC Employees that it did not otherwise have, and solicited the Former LGC Employees for information knowing that it came from LGC. LGC is further informed and believes, and on that basis alleges, that Defendants took no steps to ensure that the Former LGC Employees did not share confidential LGC information with Defendants, but rather Defendants induced and encouraged the Former LGC Employees to misappropriate LGC information for the benefit of Defendants.

147. Defendants are, on information and belief, still in possession of LGC's Trade Secret information, and, on information and belief, are able to access and use this information.

148. Defendants' misappropriation of LGC's Trade Secret information has been intentional, knowing, willful, malicious, fraudulent, and oppressive.

149. If Defendants' conduct is not remedied, they will continue to misappropriate, disclose, and use for their own benefit and to LGC's detriment LGC's Trade Secret information.

150. Because LGC's remedy at law is inadequate, LGC seeks, in addition to damages, permanent injunctive relief to recover and protect the LGC Trade Secrets and other legitimate business interests.

151. As the direct and proximate result of Defendants' conduct, LGC has suffered and will continue to suffer irreparable injury and significant damages, in an amount to be proven at trial.

152. LGC has been damaged by all of the foregoing, and is also entitled to an award of exemplary damages and attorneys' fees.

153. LGC's remedy at law is inadequate to redress the harm caused by Defendants' misappropriation and to ensure that further misappropriation does not occur. Moreover, Defendants' prior intentional, willful, and malicious conduct indicates that injunctive or other equitable relief will be inadequate to prevent Defendants' future misconduct, therefore, LGC further seeks an order under 18 U.S.C. § 1836(b)(2) for the seizure of any and all of LGC's Trade Secrets and confidential or proprietary information in the possession, custody, or control of any Defendant in order to recover and protect LGC's Trade Secrets and other legitimate business interests.

SECOND CAUSE OF ACTION

MISAPPROPRIATION OF TRADE SECRETS UNDER DELAWARE UNIFORM TRADE SECRETS ACT "DUTSA"

(Against All Defendants)

154. LGC hereby incorporates by this reference Paragraph 1 through 153, inclusive, as if set forth fully herein.

155. At all times relevant herein, LGC was in possession of LGC Trade Secrets as described above. The information constitutes LGC's trade secrets as defined by Delaware Uniform

Trade Secrets Act ("DUTSA"), 6 Del. C. §§ 2001, et. seq. This information—which relates to battery cells, production and manufacturing equipment, production and manufacturing protocols and processes, testing equipment, testing protocols and processes, battery modules, battery packs, battery performance, sales and marketing, purchasing and vendors, and battery plants, for its state-of-the-art lithium-ion batteries—has independent economic value in that it enables LGC to offer and provide state-of-the-art lithium-ion batteries that are widely used in various electronic and automotive applications around the world, including EV's. Said information is not generally known to the public or to the EV and battery industries, and derives independent economic value from not being known to the general public or to the relevant industry.

156. LGC has expended billions of dollars and a significant amount of time and other resources in developing its proprietary information and LGC Trade Secrets. In addition, LGC goes to great lengths to protect the secrecy of this information by executing confidentiality agreements with all employees, independent contractors, and all other parties provided with LGC's confidential information, maintaining firewalls, private networks, and other technical mechanisms to ensure the security of LGC's confidential information, labeling certain written communications as confidential, employing passwords and several other security mechanisms to protect LGC's confidential information. For example, LGC requires employees to read employee handbooks governing the treatment of confidential and LGC Trade Secret information; to attend training on the protection of confidential and LGC Trade Secret information; for departing employees, to return all documents and LGC computers or devices, after which LGC then terminates the access of those departing employees to all computers and systems. LGC also has controlled access doors throughout its facilities. Further, LGC has computer access restrictions on computers themselves, but also LGC databases, such as its SRS and BMS technology.

157. LGC shares its confidential information and LGC Trade Secrets only on a need-to-know basis with its employees and certain customers and partners subject to strict confidentiality agreements with an express obligation to protect confidentiality. LGC requires any third party including payers, with access to LGC's confidential and LGC Trade Secret information to sign a LGC non-disclosure agreement ("NDA") prior to disclosing confidential information.

158. Defendants have unfairly and improperly obtained LGC's Trade Secrets through a strategic campaign to raid LGC for employees who could provide and use LGC's Trade Secrets.

159. Upon information and belief, Defendants have hired scores of Former LGC Employees to work at SKI or Defendants since in or about August 2016.

160. The Former LGC Employees are highly experienced in core aspects of LGC's business and technology, and had access to, and knowledge of, LGC's Trade Secrets based on their employment with LGC.

161. LGC is informed and believes, and based thereon alleges, that in or about August 2016, and continuing to the present, Defendants, with the assistance of the Former LGC Employees, misappropriated LGC's confidential and proprietary information and converted the same to its own use for its efforts to enter the battery market abroad.

162. For example, through investigation, LGC has learned that Former LGC Employees improperly sent voluminous emails from LGC work email addresses, containing substantial amounts of proprietary and trade secret information, to personal email addresses. These unauthorized emails included, for example, numerous photos concerning LGC battery facilities, products, and equipment. Upon information and belief, Defendants now possess and are using the

LGC Trade Secrets and other confidential information depicted in the aforementioned photos. Defendants' possession and use of said trade secrets has harmed and will continue to harm LGC.

163. Each of the Former LGC Employees signed an agreement promising to protect the confidentiality of LGC's Trade Secrets.

164. On information and belief, by receiving, improperly using, and further disclosing the foregoing LGC Trade Secret material, Defendants misappropriated LGC's Trade Secrets in violation of DUTSA, 6 Del. C. §§ 2001, et. seq.

165. LGC is informed and believes, and based thereon alleges, that Defendants knew or should have known that the proprietary information provided by the Former LGC Employees was taken from and belonged to LGC. LGC is further informed and believes, and based thereon alleges, that Defendants intended, induced, and encouraged the Former LGC Employees to do so and willingly accepted information from the Former LGC Employees that it did not otherwise have, and solicited Former LGC Employees for information knowing that it came from LGC. LGC is further informed and believes, and on that basis alleges, Defendants took no steps to ensure that the Former LGC Employees did not share confidential LGC proprietary information with the Defendants, but rather Defendants induced and encouraged Former LGC Employees to misappropriate LGC proprietary information and the LGC Trade Secrets for the benefit of Defendants.

166. As a proximate result of Defendants' acts as alleged herein, LGC has suffered damages, and will continue to suffer damages, unless Defendants are enjoined from using the confidential LGC Trade Secret information they misappropriated and ordered to immediately return said information, and unless LGC obtains actual damages consisting of the loss of customers and revenues. While the exact amount of damages will be proven at trial, LGC is informed and believes,

and based thereon alleges, that the value of the actual and potential customer contracts and associated revenues lost though Defendants' wrongful conduct exceeds $1 billion. Alternatively, and at a minimum, LGC is entitled to a reasonable royalty for Defendants' wrongful misappropriation and use of LGC's Trade Secrets, in an amount to be proven at trial.

167. Defendants, in engaging in the aforementioned acts, are guilty of malice and oppression in that it deliberately intended to harm LGC's business and improve their own by misappropriation and acted in conscious disregard of LGC's rights. Defendants' conduct therefore warrants the assessment of punitive damages in an amount appropriate to punish Defendants and deter others from engaging in similar conduct.

168. Defendants' wrongful conduct in misappropriating LGC's confidential customer and competitive business information and disclosing and utilizing said information will continue unless and until enjoined and restrained by order of this Court. Without such Court intervention, Defendants' conduct in misappropriating LGC's proprietary information will cause great and irreparable injury to LGC's business, in that LGC has lost and will continue to lose existing and potential clients and customers, including, without limitation, Volkswagen.

169. LGC has no adequate remedy at law for the injuries currently being suffered in that Defendants will continue to wrongfully solicit LGC's existing and potential clients and customers and utilize information that was wrongfully misappropriated from LGC, including but not limited to confidential and proprietary technical information and know-how and customer information that is not generally available to the public at large. LGC is entitled to a temporary, preliminary and permanent injunction against Defendants as prayed herein.

170. LGC is informed and believes, and on that basis alleges, that Defendants' conduct was, and is, malicious, fraudulent, deliberate and willful. LGC is therefore entitled to

recover from Defendants exemplary damages in the amount of twice the total damages or reasonable royalty awarded, pursuant to the DUTSA, 6 Del. C. §§ 2001, et. seq.

171. LGC is also entitled to an award of attorneys' fees pursuant to the DUTSA, 6 Del. C. §§ 2004, et. seq.

THIRD CAUSE OF ACTION

TORTIOUS INTERFERENCE WITH PROSPECTIVE BUSINESS OPPORTUNITY

(Against All Defendants)

172. LGC hereby incorporates by this reference Paragraph 1 through 171, inclusive, as if set forth fully herein.

173. Defendants acted intentionally, willfully, maliciously, and in bad faith to interfere with and cause damage to LGC's business relationship with, at a minimum, Volkswagen by fraudulently, and by improper means, representing to, at a minimum, Volkswagen, directly and through third parties, that SKI's Products containing unlawfully obtained LGC's Trade Secrets, are properly developed by Defendants.

174. LGC is informed and believes, and based thereon alleges, that Defendants have not only misappropriated LGC's confidential technical information and know-how, customer and business information and used the same to solicit existing and potential LGC customers, including Volkswagen, but have interfered with LGC's economic relationships with existing and potential clients through other wrongful acts. LGC is informed and believes, and based thereon alleges, that Defendants have utilized their position as the direct or indirect employers of the Former LGC Employees to funnel LGC's Trade Secrets through the Former LGC Employees and compete with LGC for customers. LGC is further informed and believes, and based thereon alleges, that

Defendants used this information for the benefit of Defendants, a competitor of LGC, with Defendants' full encouragement and knowledge.

175. Battery producers such as LGCMI and SKI compete to supply EV batteries to a discrete set of customers—primarily, automobile manufacturers. As one example, Volkswagen is an important customer in the EV battery market. Volkswagen's battery supply contracts for electric vehicles have been estimated to amount to $40–$50 billion through 2025. *See* Michael Herh, "Orders from Volkswagen Give a Breakthrough to Korean Battery Makers," BusinessKorea (Mar. 16 2018). Volkswagen recently announced that it intends to invest heavily in the EV market and develop and sell many EV models.

176. As yet another example of Defendants' wrongful conduct designed to interfere with LGC's existing and potential clients, including Volkswagen, LGC is informed and believes, and based thereon alleges, that Defendants solicited and encouraged the Former LGC Employees to breach not only the terms of their employment and confidentiality Agreements, but also the duty of fair dealing, loyalty and confidentiality obligations to LGC by soliciting and encouraging the Former LGC Employees to disclose confidential information, such as LGC's confidential technical information and LGC Trade Secrets, know-how, pricing and business model information.

177. Defendants' intentional and willful acts were calculated, designed to, and caused damage to LGC and to harm its prospective business relationship with Volkswagen and, deny LGC profits from future sales to Volkswagen and others, so that Defendants could supplant LGC as the suppliers to Volkswagen and others for EV lithium-ion battery products.

178. For example, in 2016, Volkswagen considered proposals for battery orders for Volkswagen vehicles in the European market. In 2017, LGC competed for and won EV battery orders from Volkswagen for Europe, and it has supplied batteries made in the United States to

Volkswagen vehicles in Europe. According to an unidentified source, "SK Innovation did not participate in competing for the Volkswagen order by taking its profitability into question." Michael Herh, "Orders from Volkswagen Give a Breakthrough to Korean Battery Makers," BusinessKorea (Mar. 16, 2018).

179. Only months later in or around 2018, after raiding LGC's employees, SKI competed with LGC for orders from Volkswagen of EV batteries for use in vehicles for the U.S. market, and Volkswagen selected SKI as a "strategic supplier" of battery cells for electric vehicles for the U.S. On or about November 13, 2018, Volkswagen Group announced "that it has selected SK Innovation as a strategic supplier of battery cells for production of electric vehicles based on [Volkswagen's] modular electric drive (MED) platform." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018), http://www.businesskorea.co.kr/news/articleView.html?idxno=26587; see also Fred Lambert, "Volkswagen announces 2 new factories to go electric, partners with SK Innovation for battery cells" (Nov. 14, 2018), https://electrek.co/2018/11/14/volkswagen-electric-factories-sk-innovation-battery-cells/.

180. SKI has signed long-term contracts with Volkswagen to supply SKI's battery Products containing LGC's Trade Secrets, specifically the MEB battery products that SKI developed, improved upon, and/or is or will be producing by improper use of LGC's Trade Secrets. On or about November 13, 2018, Volkswagen Group announced "that it has selected SK Innovation as a strategic supplier of battery cells for production of electric vehicles based on [Volkswagen's] modular electric drive (MED) platform." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018), available at http://www.businesskorea.co.kr/news/articleView.html?idxno=26587.

181. Upon information and belief, SKI has obtained other contracts for the supply of EV battery products to be produced oversees and imported into the United States for use in electric vehicles produced domestically. Upon information and belief, SKI plans to build and operate battery manufacturing plants in China, Hungary, and the United States. Reportedly, SKI "began to expand its Seosan plant in Korea to raise its production capacity to 4.7 GWh, and is building battery cell plants in Changzhou (7.5GWh) of China and Komarom (7.5GWh) of Hungary." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018).

182. LGCMI has already suffered financially and competitively as a result of this new, targeted competition from SKI through the loss of the Volkswagen contract to supply EV batteries for the U.S. market. The market for EV battery products features long "design-in" times, in which contracts are awarded years in advance of production so that vehicle and battery manufacturers can work together during the design process to develop battery products that meet the specific power and performance requirements of a given vehicle. The loss of a long-term supply contract will mean that an EV battery producer is shut out of the design-in process and thus will be unable to make future EV battery sales for that product cycle. Automotive product cycles typically run for at least three years between major model redesigns. Furthermore, due to the nature of supply relationships in the EV battery market, the loss of a sales contract today also limits a battery producer's ability to compete for future contracts, as vehicle manufacturers and battery suppliers tend to work together on successive vehicle development projects. As a result, the loss of a supply contract today can have significant ramifications both immediately and over a period of several years.

183. SKI's new, targeted competition has caused LGCMI both immediate harm and harm that is likely to manifest itself over the next several years. SKI's "win" of Volkswagen U.S.-market EV battery business significantly constrains LGCMI's ability to sell EV battery products to Volkswagen for the United States and makes it more difficult for LGC to partner with Volkswagen for the supply of EV battery products for the next generation of vehicles.

184. As a result of SKI's rapid entry into the U.S. lithium-ion battery market and new, targeted competition, LGC and LGCMI have been and will continue to be harmed in a number of respects, including at least the following ways. First, due to the loss of sales contracts to SKI, LGC and LGCMI have lost current and future sales of EV battery products for the United States, as well as the profits from those anticipated sales. Second, to attempt to combat this new competition from SKI, LGC and LGCMI have been forced to lower their prices on EV battery products. This price reduction has led LGC and LGCMI to experience lower profits and reduced margins. Third, LGCMI has lost market share in the United States market for lithium-ion battery cells, modules, and packs to SKI.

185. LGC and LGCMI expect further erosion to their market share and market exclusivity based on SKI's increasing projected production of EV batteries. SKI has represented to the public that "[b]y around 2022, when the company's new plants in Hungary and China are completed, the total capacity will grow to some 20 GWh, equivalent to the power needed for about 670,000 electric vehicles." Song Su-hyun, SK Innovation takes leap in electric vehicle market, Korea Herald (Sept. 6, 2018) available at http://www.koreaherald.com/view.php?ud=20180906000627. This capacity is expected to increase further as SKI's Georgia facility begins production in 2022.

186. Upon information and belief, SKI also is planning to build a battery factory in the United States, so that SKI can "produce batteries for electric cars produced at Volkswagen's

North America plant starting in 2022 . . . ." Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018). Upon information and belief, SKI intends to be the sole provider of batteries for Volkswagen's production facilities in North America, and specifically in the United States. Jung Min-hee, "Volkswagen to Use SK Innovation Batteries for Next Generation Electric Cars," BusinessKorea (Nov. 15, 2018).

187. As a result of the foregoing wrongful acts by Defendants, LGC has been irreparably damaged. While the exact amount of damages will be proven at trial, LGC is informed and believes, and based thereon alleges, that it has lost in excess of $1 billion in contractual benefits as a result of Defendants' wrongful conduct that LGC stood to gain through its relationship with Volkswagen and other actual and potential customers.

188. LGC is informed and believes, and based thereon alleges, that Defendants' wrongful acts will continue to cause injury to LGC and that such injury will continue unless enjoined and restrained by this Court.

189. LGC is informed and believes, and based thereon alleges, that the acts of Defendants alleged herein were willful, oppressive, fraudulent, despicable and in conscious disregard of the rights of LGC and the resulting harm to LGC. Defendant is liable for punitive and exemplary damages in an amount to be established according to proof at time of trial.

FOURTH CAUSE OF ACTION

UNFAIR COMPETITION/ DECEPTIVE TRADE PRACTICES UNDER DELAWARE DECEPTIVE TRADE PRACTICES ACT

(Against All Defendants)

190. LGC hereby incorporates by this reference Paragraph 1 through 189, inclusive, as if set forth fully herein.

191. The actions of Defendants described herein in misappropriating LGC's proprietary information and LGC Trade Secret information, and other information and property that belonged to LGC, and unfairly and fraudulently soliciting existing and potential customers of LGC, including Volkswagen, constitutes unlawful, unfair and fraudulent business acts and deceptive trade practices, in violation of Delaware's Deceptive Trade Practices Act, 6 Del. C. §§ 2532 et seq. LGC is informed and believes, and based thereon alleges, that Defendants knew of the Former LGC Employees' wrongful acts of unfair competition described herein and encouraged the same, and together with the Former LGC Employees usurped relationships that LGC expended substantial time and resources cultivating with its customers and clients.

192. Defendants willfully and intentionally committed unfair and deceptive trade practices under Delaware's Deceptive Trade Practices Act, 6 Del. C. §§ 2532 et seq., by, among other things, falsely and misleadingly identifying the origin and creation of the SKI EV battery products, specifically the MEB EV battery products that SKI developed, improved upon, and/or is or will be producing by improper use of LGC's Trade Secrets to Volkswagen, consumers, and the public; by disparaging the goods and services of LGC to Volkswagen and consumers; by falsely claiming ownership of LGC's intellectual property rights to SKI EV battery products, and by falsely claiming and committing fraud and deception with respect to a contract for the sale, marketing, brokering, or promotion of SKI EV products to existing and potential customers of LGC, including Volkswagen.

193. Defendants knew these representations were false, deceptive, and misleading at the time they were made and made them maliciously with the intent of injuring LGC and consumers. In fact, Defendants poached almost 80 Former LGC Employees for the specific purpose of stealing LGC's Trade Secrets and proprietary information. Following the departure of key LGC

employees for Defendants, and the misappropriation by Defendants of LGC's Trade Secrets, Volkswagen awarded this business to Defendants and Defendants now are one of Volkswagen's key suppliers.

194. Defendants committed these unfair and deceptive trade practices for the purpose of injuring LGC and using LGC's Trade Secrets and intellectual property to establish sales of SKI battery products, to create a need for its manufacturing capacity to fulfill Volkswagen's needs, and to improperly sell the SKI battery products directly to Volkswagen. Defendants unfair and wrongful actions prevented LGC from obtaining the supply contract with Volkswagen.

195. As a direct result of Defendants' acts of unfair competition and deceptive trade practices, under Delaware's Deceptive Trade Practices Act, 6 Del. C. §§ 2532 et seq., LGC has suffered and will continue to suffer harm as described herein at an amount to be proven at trial, and such harm will continue unless the Court enjoins and restrains Defendants' actions.

196. Defendants should be required to restore to LGC any and all of LGC's confidential LGC Trade Secret information, and other non-confidential yet valuable information and assets, and any other information of LGC in Defendants' possession, custody or control. LGC also seeks injunctive relief to stop Defendants from unfairly soliciting LGC's current and potential customers, including Volkswagen, and to stop Defendants from disparaging LGC to LGC's existing customers, potential customers and others in the industry. Further, LGC seeks injunctive relief for the return of its information wrongfully obtained through appropriate restitution and any other property wrongfully taken.

197. As a proximate and legal result of Defendants' wrongful conduct, LGC has been damaged in its business relationships with potential and existing clients and customers, including Volkswagen, and has suffered harm in the form of lost sales, loss of reputation, loss of the

ability to control access to its LGC Trade Secrets and loss of goodwill. As detailed herein, LGC seeks an order granting LGC and the general public relief from Defendants' deceptive, unfair and fraudulent trade practices.

FIFTH CAUSE OF ACTION

CONVERSION

(Against All Defendants)

198. LGC hereby incorporates by this reference Paragraph 1 through 197, inclusive, as if set forth fully herein.

199. At all times relevant herein, LGC exclusively owned and was in possession of certain valuable confidential and proprietary information as described above. This information includes a) LGC's state-of-the-art lithium-ion batteries that are widely used in various electronic and automotive applications around the world, including EV's; b) LGC's lithium-ion battery products which include innovative solutions such as its SRS technology and its BMS technology; and c) LGC's proprietary "Sales and Marketing" and "Purchasing and Vendor" LGC trade secrets.

200. Defendants willfully converted LGC's confidential and proprietary information and intellectual property to its own use and fraudulently claimed ownership of LGC's confidential and proprietary information and intellectual property as part of a scheme to steal LGC's confidential and proprietary information and intellectual property relating to lithium-ion batteries for EV's, to sell Defendants' Products directly to Volkswagen, and to take revenue and profits from the sale of Defendants' Products for its own, while knowing that the confidential and proprietary information and intellectual property relating to Defendants' Products was the property of LGC.

201. LGC is the rightful owner of this property. LGC is lawfully entitled to its possession, and has an absolute and unconditional right to the immediate possession of the confidential and proprietary information and intellectual property.

202. Defendants have wrongfully and without authorization obtained and retained control, dominion, and/or ownership of LGC's confidential and proprietary information and intellectual property.

203. Defendants' possession and retention of LGC's confidential and proprietary information and intellectual property constitutes conversion and has harmed LGC.

204. Defendants are, on information and belief, still in possession of LGC's valuable confidential and proprietary information, and, on information and belief, are able to access and use this information.

205. As the direct and proximate result of Defendants' conduct, including the theft of LGC's valuable confidential and proprietary information, LGC has suffered and will continue to suffer irreparable injury and significant damages, in an amount to be proven at trial, by its loss of the multi-billion dollar Volkswagen U.S. Supply contract, and other potential customers. The damages to LGC from such conduct are estimated to exceed $1 billion.

206. Punitive damages are proper to punish Defendants for its willful, intentional, and malicious conversion and to deter future tortious conduct.

SIXTH CAUSE OF ACTION

UNJUST ENRICHMENT

(Against All Defendants)

207. LGC hereby incorporates by this reference Paragraph 1 through 206, inclusive, as if set forth fully herein.

208. Defendants wrongfully received LGC's valuable confidential and proprietary information described above, which it relied on to unlawfully compete with LGC and secure a lucrative business contract with Volkswagen for Defendants' benefit.

209. LGC is informed and believes and on that basis alleges that LGC's valuable confidential and proprietary information wrongfully obtained by Defendants was given to and shared with Defendants, and that Defendants understood that LGC's confidential and proprietary information were wrongfully obtained and shared.

210. LGC is informed and believes and on that basis alleges that Defendants used LGC's valuable confidential and proprietary information for their own financial benefit, including but not limited to developing a competing EV battery product and competing directly with LGC for customers based on the stolen LGC confidential and proprietary information, including to obtain a multi-billion dollar U.S. supply contract with Volkswagen.

211. LGC was never reimbursed for the value of the scientific and technical knowledge regarding its confidential and proprietary information used by Defendants. Defendants were unjustly enriched by receiving this information and using it to develop their own EV battery product without providing any consideration or value in return to LGC for said information. Defendants were further unjustly enriched by securing a lucrative contract with Volkswagen as a benefit for stealing LGC's confidential and proprietary information and used them to develop a competing EV battery product.

212. As a direct result of Defendants' wrongful conduct in stealing LGC's valuable confidential and proprietary information, Defendants were substantially enriched by receiving a lucrative multi-billion dollar contract to supply EV batteries to Volkswagen in the U.S. market.

213. It would be unconscionable to allow Defendants to retain the benefit of the multi-billion dollar U.S. supply contract with Volkswagen given their wrongful conduct towards LGC that led to securing it.

214. LGC has no adequate remedy at law for the injuries currently being suffered in that Defendants will continue to wrongfully solicit LGC's existing and potential clients and customers and utilize information that was wrongfully misappropriated from LGC, including but not limited to confidential and proprietary technical information and know-how and customer information that is not generally available to the public at large. LGC is entitled to equitable relief against Defendants under the fundamental principles of justice as prayed herein.

DEMAND FOR JURY TRIAL

215. Plaintiffs respectfully request a jury trial in this action under Federal Rules of Civil Procedure 38 and 39 on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiffs demand judgment against Defendants as follows:

1. Judgment in Plaintiff's favor and against Defendants on all causes of action alleged herein;

2. A preliminary and/or permanent injunction restraining Defendants, and their agents, servants, employees, attorneys, successors and assigns, and all persons, firms, and corporations acting in concert with them, from maintaining possession of, directly or indirectly disclosing, or further misappropriating or directly or indirectly using without authorization LGC's Trade Secrets and other confidential or proprietary information;

3. For an order requiring Defendants to certify, in writing, under oath, that they have returned and/or destroyed all confidential, proprietary, or LGC Trade Secret information and no

longer have any such information, or documents, photos, or any other material containing or reflecting such information, in their possession, custody, or control;

4. For compensatory damages, according to proof, with interest thereon as provided by law;

5. For consequential and actual damages, according to proof, or disgorgement of Defendants' profits unjustly obtained and/or a reasonable royalty, with interest thereon as provided by law;

6. For exemplary damages;

7. For punitive damages;

8. For an order under 18 U.S.C. § 1836(b)(2) for the seizure of any and all of LGC's Trade Secrets and confidential or proprietary information in the possession, custody, or control of any Defendant, or that has been disclosed by any Defendant, including in photographic, written, or any other form;

9. For an order under 18 U.S.C. § 1835 to preserve the confidentiality of all LGC Trade Secrets by Defendants;

10. For pre- and post-judgment interest on all damages;

11. For attorneys' fees;

12. For costs of suit as provided for by law; and

13. For such further and other relief as the Court deems just and proper.

MORRIS, NICHOLS, ARSHT & TUNNELL LLP

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