# IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

LG CHEM, LTD. and TORAY INDUSTRIES, INC.,

Plaintiffs,

v.

Civil Action No.

JURY TRIAL DEMANDED

SK INNOVATION CO., LTD. and SK BATTERY AMERICA, INC.,

Defendants.

# LG CHEM, LTD. AND TORAY INDUSTRIES, INC.'S COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs LG Chem, Ltd. ("LGC") and Toray Industries, Inc. ("Toray") (collectively,

"Plaintiffs"), claim relief from Defendants SK Innovation Co., Ltd. ("SKI") and SK Battery

America, Inc. ("SKBA") (collectively, "Defendants"), by their attorneys, and allege as follows:

# THE NATURE OF THE ACTION

1. This is an action for infringement of United States Patent Nos. 7,662,517 ("the '517 patent"), 7,638,241 ("the '241 patent"), 7,709,152 ("the '152 patent"), 7,771,877 ("the '877 patent"), and U.S. Patent No. 8,012,626 ("the '626 patent") (collectively, the "Asserted Patents") under the Patent Laws of the United States, 35 U.S.C. § 100 *et seq.*, relating to Defendants' lithium ion battery cells, battery modules, battery packs, and components thereof, including composite porous separators and cathode active material, as well as products containing the same, including but not limited to an exemplary SKI battery labeled "E600," "S66008CVPBL01595" used in the 2019 Kia Niro EV (the "Accused Products").

#### THE PARTIES

2. LGC is a corporation organized under the laws of South Korea, having a principal place of business at 128 Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, South Korea.

3. Toray is a corporation organized under the laws of Japan with its principal place of business at Nihonbashi Mitsui Tower 1-1, Nihonbashi-Muromachi 2-chome, Chuo-ku Tokyo, Japan. Toray is a global leader in the integrated chemical industry.

4. On information and belief, SKI is a South Korean company having a principal place of business at SK Building, 26 Jong-ro, Jongno-gu 03188, Seoul, South Korea.

5. 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.

# JURISDICTION AND VENUE

6. This action for patent infringement arises under the laws of the United States, Title 35 of the United States Code, 35 U.S.C. § 100, *et seq.*, including 35 U.S.C. §§ 271, 281-285. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

7. This Court has personal jurisdiction over Defendants because, *inter alia*, SKBA and SKI have committed acts of patent infringement and/or contributed to or induced acts of patent infringement by others in this District and continue to do so. SKI regularly does business or solicits business, engages in other persistent courses of conduct, and/or derives substantial revenue from products and/or services provided to individuals in this District. Upon information and belief, SKI has purposefully and voluntarily imported infringing devices into the United States, or contributed to the importation of infringing devices, with the knowledge and expectation that the same will end up in, and be marketed, sold, and purchased in, Delaware.

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 3 of 22 PageID #: 3

SKI has also purposefully placed or contributed to the placement of its infringing products into the stream of commerce of this District and has availed itself of the benefits of the market in this District.

8. Moreover, SKBA, a wholly-owned subsidiary of SKI, is a Delaware corporation with a registered office in Delaware. SKBA has designated the Corporation Trust Company, 1209 Orange Street, Corporation Trust Center, New Castle County, Wilmington, Delaware 19801 as SKBA's Registered Agent in the state of Delaware for service of process. SKBA has been conducting and/or is presently conducting business in this District on a regular basis.

9. SKI is further subject to personal jurisdiction because, upon information and belief, SKI organized SKBA as a wholly-owned, and wholly-controlled, subsidiary in the state of Delaware.

10. This Court has specific jurisdiction over Defendants because Defendants possess the requisite "minimum contacts" within this forum, including but not limited to the sale of products used in Delaware in furtherance of the acts giving rise to this litigation.

11. SKI has also previously elected to avail itself to the benefits of litigating its patent disputes in the District of Delaware. *See, e.g., SK Innovation Co., LTD. v. LG Chem, LTD, et al.,* C.A. No. 19-1637, and *SK Innovation Co., LTD. v. LG Chem, LTD, et al.*, C.A. No. 19-1638.

12. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400.

### THE PATENTS-IN-SUIT

13. On February 16, 2010, United States Patent No. 7,662,517 ("the '517 patent"), entitled "Organic/Inorganic Composite Microporous Membrane and Electrochemical Device Prepared Thereby," was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 11/721,259, which was filed on June 8, 2007, and claims priority to Korean patent applications KR 10-2004-0110400 and KR 10-2004-0110402,

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 4 of 22 PageID #: 4

both filed on December 22, 2004. A true and correct copy of the '517 patent is attached to this Complaint as Exhibit A.

14. At the time of issuance, LGC was the owner, by valid assignment, of the entire right, title, and interest in and to the '517 patent. Prior to issuance, the inventors of the '517 patent assigned all right, title, and interest in U.S. Patent Application Serial No. 11/721,259 to LGC. This assignment is recorded at the United States Patent and Trademark Office ("USPTO") at Reel/Frame 019423/0111. In April 2017, LGC executed a deed of assignment through which it conveyed certain rights to—and received certain rights from—Toray. The '517 patent is valid, enforceable, and is currently in full force and effect.

15. On December 29, 2009, United States Patent No. 7,638,241 ("the '241 patent"), entitled "Organic/Inorganic Composite Separator Having Morphology Gradient, Manufacturing Method Thereof and Electrochemical Device Containing the Same," was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 11/997,948, which was filed on February 5, 2008, and claims priority to Korean patent application KR 10-2005-0118315 filed on December 6, 2005. A true and correct copy of the '241 patent is attached to this Complaint as Exhibit B.

16. At the time of issuance, LGC was the owner, by valid assignment, of the entire right, title, and interest in and to the '241 patent. Prior to issuance, the inventors of the '241 patent assigned all right, title, and interest in U.S. Patent Application Serial No. 11/997,948 to LGC. This assignment is recorded at the USPTO at Reel/Frame 020465/0308. In April 2017, LGC executed a deed of assignment through which it conveyed certain rights to—and received certain rights from—Toray. The '241 patent is valid, enforceable, and is currently in full force and effect.

17. On May 4, 2010, United States Patent No. 7,709,152 ("the '152 patent"), entitled "Organic/Inorganic Composite Separator Having Porous Active Coating Layer and Electrochemical Device Containing the Same," was duly and legally issued by the United States Patent and Trademark Office from U.S. Patent Application Serial No. 12/158,934, which was filed on June 23, 2008, and claims priority to Korean patent application KR 10-2007-0011818 filed on February 5, 2007. A true and correct copy of the '152 patent is attached to this Complaint as Exhibit C.

18. At the time of issuance, LGC was the owner, by valid assignment, of the entire right, title, and interest in and to the '152 patent. Prior to issuance, the inventors of the '152 patent assigned all right, title, and interest in U.S. Patent Application Serial No. 12/158,934. This assignment is recorded at the USPTO at Reel/Frame 021257/0011. In April 2017, LGC executed a deed of assignment through which it conveyed certain rights to—and received certain rights from—Toray. The '152 patent is valid, enforceable, and is currently in full force and effect.

19. U.S. Patent No. 7,771,877 ("the '877 patent") is entitled "Electrode Active Material Powder with Size Dependent Composition and Method To Prepare the Same" and duly and legally issued on August 10, 2010. The '877 patent issued from U.S. Patent Application Serial No. 10/584,992, and claims priority to U.S. Patent Application Serial No. 60/533,225 filed on December 31, 2003. A true and correct copy of the '877 patent is attached to this Complaint as Exhibit D.

20. At the time of issuance, LGC was the owner of the entire right, title, and interest in and to the '877 patent. Prior to issuance, the inventors of the '877 patent assigned all right, title, and interest in U.S. Patent Application Serial No. 10/584,992 to LGC. This assignment is

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 6 of 22 PageID #: 6

recorded at the USPTO at Reel/Frame 018042/0077. The '877 patent is valid, enforceable, and is currently in full force and effect.

21. U.S. Patent No. 8,012,626 ("the '626 patent") is entitled "Electrode Active Material Powder with Size Dependent Composition and Method to Prepare the Same" and duly and legally issued on September 6, 2011. The '626 patent issued from U.S. Patent Application Serial No. 12/827,585 and claims priority to application Serial No. 10/584,992, filed on December 30, 2004. The '626 patent also claims priority to U.S. Provisional Application No. 60/533,225, filed on December 31, 2003. A true and correct copy of the '626 patent is attached to this Complaint as Exhibit E.

22. At the time of issuance, LGC was the owner of the entire right, title, and interest in and to the '626 patent. Prior to issuance, the inventors of the '626 patent assigned all right, title, and interest in U.S. Patent Application Serial No. 10/584,992 to LGC. This assignment is recorded at the USPTO at Reel/Frame 018042/0077. The '626 patent is valid, enforceable, and is currently in full force and effect.

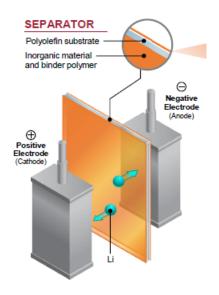
# **BACKGROUND**

23. For roughly 70 years since its founding in 1947, LGC has established itself as one of the most respected chemical companies in the world, relentlessly pursuing the enhancement of the quality of life through continuous technological development and breakthrough innovations. More recently, LGC is known as one of the world's largest and most innovative producers of lithium-ion batteries. Lithium-ion batteries have become an omnipresent fixture of modern life, powering nearly every mobile phone on the planet, providing municipal power grids with a reliable source of long duration grid storage, and ever-increasing proliferation in motor vehicles. LGC's lithium-ion batteries are widely recognized as being among the most compact, lightweight, efficient, and safe. Not surprisingly, LGC retains numerous intellectual property

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 7 of 22 PageID #: 7

rights covering chemical, mechanical, and electrical technologies, and much more, relating to lithium-ion battery technology.

24. Among LGC's numerous lithium-ion battery innovations is its patented Safety Reinforced Separator ("SRS") technology. A critical component of the battery system, referred to as a separator, allows ion flow through the separator while safely enabling the exchange of lithium ions from one side of the battery to the other:



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 safety by reducing the potential for short circuits.

25. In addition, LGC's patented cathode active material powder with size dependent composition offers superior performance and safety by combining high energy density with high cycling stability and safety at a low cost.

26. As a result of LGC's SRS, cathode materials, and other innovations, LGC's lithium-ion batteries have enjoyed industry-leading success in the marketplace.

27. LGC has extensive involvement in the U.S. market with its innovative battery technology. In fact, LGC and its wholly owned subsidiary LG Chem Michigan Inc. ("LGCMI")

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 8 of 22 PageID #: 8

supply, through plants in Michigan, millions of battery cells to U.S. companies like General Motors and Chrysler. For example, LGCMI has invested hundreds of millions of dollars in a facility in Holland, Michigan, which employs hundreds of workers making lithium ion batteries for electric vehicles (EVs).

28. Defendants<sup>1</sup> design, develop, market, manufacture, use, sell, offer to sell, and/or import into the United States infringing lithium-ion battery cells, battery modules, battery packs, components thereof, and products containing such products, and battery components in the United States, and Defendants are unfairly competing with LGC by misappropriating and taking advantage of LGC's intellectual property and research and development. For example, on information and belief, SKI and SKBA have begun the construction of a manufacturing plant in Georgia to build batteries that incorporate LGC's proprietary technology. Moreover, SKI has and continues to supply customers with its infringing batteries from abroad to meet U.S. demand in an effort to increase its market share in the U.S. while infringing the Asserted Patents.

29. Defendants have infringed, literally or under the doctrine of equivalents, one or more claims of the Asserted Patents by making, having made, using, offering to sell, selling, and/or importing into the United States, Defendants' lithium ion battery cells, battery modules, battery packs, and components thereof. For example, Defendants' infringing battery products can be found within the 2019 Kia Niro EV, a crossover utility electric vehicle made in Korea and imported into the United States.

30. On information and belief, Defendants have had actual knowledge and notice of Plaintiffs' Asserted Patents and their infringement since at least as of the filing of this complaint,

<sup>&</sup>lt;sup>1</sup> Throughout this Complaint, unless otherwise indicated, "Defendants" refers to one or both of SKI and SKBA. Discovery is expected to reveal the precise roles of the parties with respect to the supply chain of the Accused Products.

including the claim charts attached hereto.

31. Defendants' acts of infringement have caused injury and damage to the Plaintiffs and will cause additional severe and irreparable injury and damages in the future.

### **COUNT 1: INFRINGEMENT OF THE '517 PATENT**

32. Plaintiffs hereby incorporate by reference and reallege their allegations contained in all of the preceding paragraphs of this Complaint as though fully set forth herein.

33. Upon information and belief, Defendants have infringed and continue to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '517 patent pursuant to 35 U.S.C. §§ 271(a), (b), and (c) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, the Accused Products.

34. Claim 1 of the '517 patent is directed to an organic/inorganic composite porous separator comprising: (1) a polyolefin-based separator substrate; and (2) an active layer formed by coating at least one region selected from the group consisting of a surface of the substrate and a part of pores present in the substrate with a mixture of inorganic particles and a binder polymer. Moreover, (i) the inorganic particles in the active layer are interconnected among themselves and are fixed by the binder polymer, and interstitial volumes among the inorganic particles form a pore structure, (ii) the inorganic particles have a size between 0.001 µm and 10 µm and are present in the mixture of inorganic particles with the binder polymer in an amount of 50-99 wt % based on 100 wt % of the mixture, and (iii) the separator has uniform pore structures both in the active layer and the polyolefin-based separator substrate.

35. Defendants' Accused Products infringe at least claim 1 of the '517 patent, as illustrated in an exemplary claim chart attached hereto as Exhibit F.

36. In addition to their direct infringement, Defendants have been and are now indirectly infringing by way of inducing infringement and/or contributing to the infringement of

one or more claims of the '517 patent.

37. On information and belief, Defendants induce, and continue to induce, infringement of the '517 patent. On information and belief, Defendants actively induce others to infringe the '517 patent by selling infringing products in the United States and by providing materials and instructions for operation of '517 patent, with the specific intent and knowledge that the materials and instructions direct, teach, or assist others to infringe the '517 patent.

38. For example, Defendants have induced infringement of the '517 patent by selling and providing lithium-ion cells to various customers who use and/or sell infringing products in the United States, without license or authority, for the manufacture of and for the purpose of incorporation into products containing lithium-ion cells for importation and sale in the United States. Defendants induced such infringing acts and knew or should have known that their actions would induce actual infringement of the '517 patent. Upon information and belief, SKI and SKBA have had actual notice of the '517 patent as set forth above in paragraph 30.

39. On information and belief, Defendants also contributorily infringe the '517 patent through their sale and offers to sell within the United States and/or importation into the United States of components of infringing products, which constitute a material part of the '517 patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '517 patent, and which are not a staple article or commodity of commerce suitable for substantial noninfringing use, including but not limited to separators for lithium ion batteries. For example, on information and belief, Defendants' infringing products and/or components thereof are specifically designed for use in infringement of the '517 patent. Due to their specific designs, Defendants' infringing products and/or components thereof do not have any substantial noninfringing uses.

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 11 of 22 PageID #: 11

40. Despite having knowledge of their infringement, Defendants continue to intentionally and willfully infringe at least claim 1 of the '517 patent, or at the very least act with willful blindness and/or a reckless disregard of Plaintiffs' patent rights. As a result of Defendants' willful infringement, Plaintiffs are entitled to treble damages and attorneys' fees and costs incurred in this action, along with prejudgment interest under 35 U.S.C. §§ 284, 285. As a result of Defendants' unlawful infringement of the '517 patent, Plaintiffs have suffered and will continue to suffer damage. Plaintiffs are entitled to recover from Defendants the damages adequate to compensate for such infringement, which have yet to be determined.

41. Defendants will continue to infringe the '517 patent unless and until they are enjoined by this Court.

42. Defendants' acts of infringement have caused and will continue to cause irreparable harm to Plaintiffs unless and until enjoined by this Court.

### **COUNT 2: INFRINGEMENT OF THE '241 PATENT**

43. Plaintiffs hereby incorporate by reference and reallege their allegations contained in all of the preceding paragraphs of this Complaint as though fully set forth herein.

44. Upon information and belief, Defendants have infringed and continue to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '241 patent pursuant to 35 U.S.C. § 271(a), (b), and (c) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, the Accused Products.

45. Claim 1 of the '241 patent is directed to an organic/inorganic composite separator comprising: (1) a porous substrate having pores; and (2) a porous active layer containing a mixture of inorganic particles and a binder polymer with which at least one surface of the porous substrate is coated. Moreover, the porous active layer shows heterogeneity of composition morphology toward a thickness direction in which a content ratio of the binder

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 12 of 22 PageID #: 12

polymer/inorganic particles present in a surface region of the porous active layer is higher than that of the binder polymer/inorganic particles present inside the porous active layer.

46. Defendants' products infringe at least claim 1 of the '241 patent, as illustrated in an exemplary claim chart attached hereto as Exhibit G.

47. In addition to their direct infringement, Defendants have been and are now indirectly infringing by way of inducing infringement and/or contributing to the infringement of one or more claims of the '241 patent.

48. On information and belief, Defendants induce, and continue to induce, infringement of the '241 patent. On information and belief, Defendants actively induce others to infringe the '241 patent by selling infringing products in the United States and by providing materials and instructions for operation of '241 patent, with the specific intent and knowledge that the materials and instructions direct, teach, or assist others to infringe the '241 patent.

49. For example, Defendants have induced infringement of the '241 patent by selling and providing lithium-ion cells to various customers who use and/or sell infringing products in the United States, without license or authority, for the manufacture of and for the purpose of incorporation into products containing lithium-ion cells for importation and sale in the United States. Defendants induced such infringing acts and knew or should have known that their actions would induce actual infringement of the '241 patent. Upon information and belief, Defendants have had actual notice of the '241 patent as set forth above in paragraph 30.

50. On information and belief, Defendants also contributorily infringe the '241 patent through their sale and offers to sell within the United States and/or importation into the United States of components of infringing products which constitute a material part of the '241 patent claims, knowing the same to be especially made or especially adapted for use in an infringement

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 13 of 22 PageID #: 13

of the '241 patent, and which are not a staple article or commodity of commerce suitable for substantial noninfringing use, including but not limited to separators for lithium ion batteries. For example, on information and belief, Defendants' infringing products and/or components thereof are specifically designed for use in infringement of the '241 patent. Due to their specific designs, Defendants' infringing products and/or components thereof do not have any substantial noninfringing uses.

51. Despite having knowledge of their infringement, Defendants continue to intentionally and willfully infringe at least claim 1 of the '241 patent, or at the very least act with willful blindness and/or a reckless disregard of Plaintiffs' patent rights. As a result of Defendants' willful infringement, Plaintiffs are entitled to treble damages and attorneys' fees and costs incurred in this action, along with prejudgment interest under 35 U.S.C. §§ 284, 285. As a result of Defendants' unlawful infringement of the '241 patent, Plaintiffs have suffered and will continue to suffer damage. Plaintiffs are entitled to recover from Defendants the damages adequate to compensate for such infringement, which have yet to be determined.

52. Defendants will continue to infringe the '241 patent unless and until they are enjoined by this Court.

53. Defendants' acts of infringement have caused and will continue to cause irreparable harm to Plaintiffs unless and until enjoined by this Court.

#### **COUNT 3: INFRINGEMENT OF THE '152 PATENT**

54. Plaintiffs hereby incorporate by reference and reallege their allegations contained in all of the preceding paragraphs of this Complaint as though fully set forth herein.

55. Upon information and belief, Defendants have infringed and continue to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '152 patent pursuant to 35 U.S.C. § 271(a), (b), and (c) by making, using, offering to sell, and/or selling in the United

States, and/or importing into the United States, the Accused Products.

56. Claim 1 of the '152 patent is directed to an organic/inorganic composite separator, comprising: (1) a polyolefin porous substrate having pores; and (2) a porous active layer containing a mixture of inorganic particles and a binder polymer, with which at least one surface of the polyolefin porous substrate is coated. Moreover, (i) the porous active layer has a peeling force of 5 gf/cm or above, and a thermal shrinkage of the separator after being left alone at 150° C for 1 hour is 50% or below in a machine direction (MD) or in a transverse direction (TD), and (ii) the inorganic particles and the binder polymer are mixed in a weight ratio of 50:50 to 99:1.

57. Defendants' products infringe at least claim 1 of the '152 patent, as illustrated in an exemplary claim chart attached hereto as Exhibit H.

58. In addition to their direct infringement, Defendants have been and are now indirectly infringing by way of inducing infringement and/or contributing to the infringement of one or more claims of the '152 patent.

59. On information and belief, Defendants induce, and continue to induce, infringement of the '152 patent. On information and belief, Defendants actively induce others to infringe the '152 patent by selling infringing products in the United States and by providing materials and instructions for operation of '152 patent, with the specific intent and knowledge that the materials and instructions direct, teach, or assist others to infringe the '152 patent.

60. For example, Defendants have induced infringement of the '152 patent by selling and providing lithium-ion cells to various customers who use and/or sell infringing products in the United States, without license or authority, for the manufacture of and for the purpose of incorporation into products containing lithium-ion cells for importation and sale in the United States. Defendants induced such infringing acts and knew or should have known that their

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 15 of 22 PageID #: 15

actions would induce actual infringement of the '152 patent. Upon information and belief, Defendants have had actual notice of the '152 patent as set forth above in paragraph 30.

61. On information and belief, Defendants also contributorily infringe the '152 patent through their sale and offers to sell within the United States and/or importation into the United States of components of infringing products which constitute a material part of the '152 patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '152 patent, and which are not a staple article or commodity of commerce suitable for substantial noninfringing use, including but not limited to separators for lithium ion batteries. For example, on information and belief, Defendants' infringing products and/or components thereof are specifically designed for use in infringement of the '152 patent. Due to their specific designs, Defendants' infringing products and/or components thereof do not have any substantial noninfringing uses.

62. Despite having knowledge of their infringement, Defendants continue to intentionally and willfully infringe at least claim 1 of the '152 patent, or at the very least act with willful blindness and/or a reckless disregard of Plaintiffs' patent rights. As a result of Defendants' willful infringement, Plaintiffs are entitled to treble damages and attorneys' fees and costs incurred in this action, along with prejudgment interest under 35 U.S.C. §§ 284, 285. As a result of Defendants' unlawful infringement of the '152 patent, Plaintiffs have suffered and will continue to suffer damage. Plaintiffs are entitled to recover from Defendants the damages adequate to compensate for such infringement, which have yet to be determined.

63. Defendants will continue to infringe the '152 patent unless and until they are enjoined by this Court.

64. Defendants' acts of infringement have caused and will continue to cause

irreparable harm to Plaintiffs unless and until enjoined by this Court.

# **COUNT 4: INFRINGEMENT OF THE '877 PATENT**

65. LGC hereby incorporates by reference and realleges all of the preceding paragraphs of this Complaint as if fully set forth herein.

66. Upon information and belief, Defendants have infringed and continue to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '877 patent pursuant to 35 U.S.C. § 271(a), (b), and (c) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, the Accused Products.

67. Claim 1 of the '877 patent is directed to a powderous electrode active material comprising a lithium transition metal oxide  $Li_aM_bO_2$  where 0.9 < a < 1.1.0.9 < b < 1.1 and M is a mixture of at least two transition metals selected from the group consisting of Mn, Co and Ni. The material contains particles with a distribution of sizes where the content of Mn, Co and Ni in M varies with the size of the particles.

68. Defendants' products infringe at least claim 1 of the '877 patent, as illustrated in an exemplary claim chart attached hereto as Exhibit I.

69. In addition to their direct infringement, Defendants have been and are now indirectly infringing by way of inducing infringement and/or contributing to the infringement of one or more claims of the '877 patent.

70. On information and belief, Defendants induce, and continue to induce, infringement of the '877 patent. On information and belief, Defendants actively induce others to infringe the '877 patent by selling infringing products in the United States and by providing materials and instructions for operation of the '877 patent, with the specific intent and knowledge that the materials and instructions direct, teach, or assist others to infringe the '877 patent.

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 17 of 22 PageID #: 17

71. For example, Defendants have induced infringement of the '877 patent by selling and providing lithium-ion cells to various customers who use and/or sell infringing products in the United States, without license or authority, for the manufacture of and for the purpose of incorporation into products containing lithium-ion cells for importation and sale in the United States. Defendants induced such infringing acts and knew or should have known that their actions would induce actual infringement of the '877 patent. Upon information and belief, Defendants have had actual notice of the '877 patent as set forth above in paragraph 30.

72. On information and belief, Defendants also contributorily infringe the '877 patent through their sale and offers to sell within the United States and/or importation into the United States of components of infringing products, which constitute a material part of the '877 patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '877 patent, and which are not a staple article or commodity of commerce suitable for substantial noninfringing use, including but not limited to powderous electrode active material for lithium ion batteries. For example, on information and belief, Defendants' infringing products and/or components thereof are specifically designed for use in infringement of the '877 patent. Due to their specific designs, Defendants' infringing products and/or components thereof do not have any substantial noninfringing uses.

73. Despite having knowledge of their infringement, Defendants continue to intentionally and willfully infringe at least claim 1 of the '877 patent, or at the very least act with willful blindness and/or a reckless disregard of LGC's patent rights. As a result of Defendants' willful infringement, LGC is entitled to treble damages and attorneys' fees and costs incurred in this action, along with prejudgment interest under 35 U.S.C. §§ 284, 285. As a result of Defendants' Defendants' unlawful infringement of the '877 patent, LGC has suffered and will continue to

suffer damage. LGC is entitled to recover from Defendants the damages adequate to compensate for such infringement, which have yet to be determined.

74. Defendants will continue to infringe the '877 patent unless and until they are enjoined by this Court.

75. Defendants' acts of infringement have caused and will continue to cause irreparable harm to LGC unless and until enjoined by this Court.

# **COUNT 5: INFRINGEMENT OF THE '626 PATENT**

76. LGC hereby incorporates by reference and realleges all of the preceding paragraphs of this Complaint as if fully set forth herein.

77. Upon information and belief, Defendants have infringed and continue to infringe, either literally or under the doctrine of equivalents, at least claim 1 of the '626 patent pursuant to 35 U.S.C. § 271(a), (b), and (c) by making, using, offering to sell, and/or selling in the United States, and/or importing into the United States, the Accused Products.

78. Claim 1 of the '626 patent is directed to a powderous electrode active material comprising a lithium transition metal oxide  $Li_aM_bO_2$ , where 0.9 < a < 1.1, 0.9 < b < 1.1 and  $Mn_x$ -Ni<sub>y</sub>Co<sub>1-x-y</sub>,  $0 \le y \le 1$ ,  $0 \le x \le 1$ . The material contains particles with a distribution of sizes where the content of Mn, Co and Ni in M varies with the size of the particles.

79. Defendants' products infringe at least claim 1 of the '626 patent, as illustrated in an exemplary claim chart attached hereto as Exhibit J.

80. In addition to their direct infringement, Defendants have been and are now indirectly infringing by way of inducing infringement and/or contributing to the infringement of one or more claims of the '626 patent.

81. On information and belief, Defendants induce, and continue to induce, infringement of the '626 patent. On information and belief, Defendants actively induce others to

### Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 19 of 22 PageID #: 19

infringe the '626 patent by selling infringing products in the United States and by providing materials and instructions for operation of the '626 patent, with the specific intent and knowledge that the materials and instructions direct, teach, or assist others to infringe the '626 patent.

82. For example, Defendants have induced infringement of the '626 patent by selling and providing lithium-ion cells to various customers who use and/or sell infringing products in the United States, without license or authority, for the manufacture of and for the purpose of incorporation into products containing lithium-ion cells for importation and sale in the United States. Defendants induced such infringing acts and knew or should have known that their actions would induce actual infringement of the '626 patent. Upon information and belief, Defendants have had actual notice of the '626 patent as set forth above in paragraph 30.

83. On information and belief, Defendants also contributorily infringe the '626 patent through their sale and offers to sell within the United States and/or importation into the United States of components of infringing products, which constitute a material part of the '626 patent claims, knowing the same to be especially made or especially adapted for use in an infringement of the '626 patent, and which are not a staple article or commodity of commerce suitable for substantial noninfringing use, including but not limited to powderous electrode active material for lithium ion batteries. For example, on information and belief, Defendants' infringing products and/or components thereof are specifically designed for use in infringement of the '626 patent. Due to their specific designs, Defendants' infringing products and/or components thereof do not have any substantial noninfringing uses.

84. Despite having knowledge of their infringement, Defendants continue to intentionally and willfully infringe at least claim 1 of the '626 patent, or at the very least act with

willful blindness and/or a reckless disregard of LGC's patent rights. As a result of Defendants' willful infringement, LGC is entitled to treble damages and attorneys' fees and costs incurred in this action, along with prejudgment interest under 35 U.S.C. §§ 284, 285. As a result of Defendants' unlawful infringement of the '626 patent, LGC has suffered and will continue to suffer damage. LGC is entitled to recover from Defendants the damages adequate to compensate for such infringement, which have yet to be determined.

85. Defendants will continue to infringe the '626 patent unless and until it is enjoined by this Court.

86. Defendants' acts of infringement have caused and will continue to cause irreparable harm to LGC unless and until enjoined by this Court.

### **PRAYER FOR RELIEF**

WHEREFORE, Plaintiffs pray for judgment in their favor against SKI and SKBA and granting relief as follows:

A. For a judgment declaring that SKI and SKBA have infringed each of the Asserted Patents directly, contributorily, and by inducement;

B. For a judgment declaring that SKI and SKBA's infringement of each of the Asserted Patents is willful pursuant to 35 U.S.C. § 284;

C. For a grant of an injunction pursuant to 35 U.S.C. § 283, enjoining SKI and SKBA together with their respective officers, directors, agents, servants, employees, and attorneys, and upon those persons in active concert or participation with them from infringing each of the Asserted Patents by engaging in any commercial manufacture, use, offer to sell, or sale within the United States, or importation into the United States, of any product covered by each of the Asserted Patents for the full terms thereof or any additional period of exclusivity to

## Case 1:19-cv-01805-UNA Document 1 Filed 09/26/19 Page 21 of 22 PageID #: 21

which Plaintiffs and/or such Patents are, or become, entitled, and from inducing or contributing to such activities;

D. The entry of an order declaring that Plaintiffs be awarded damages in an amount sufficient to compensate them for SKI and SKBA's infringement of each of the Asserted Patents, together with prejudgment and post-judgment interest and costs;

E. That SKI and SKBA be ordered to provide an accounting for the damages resulting from infringement of each of the Asserted Patents, together with interests and costs, and all other damages permitted by 35 U.S.C. § 284, including an accounting for infringing acts not presented at trial and an award by the court of additional damages for any such infringing acts.

F. For a judgment declaring that this case is exceptional and awarding Plaintiffs their expenses, costs, and attorneys' fees in accordance with 35 U.S.C. § 285, Rule 54(d) of the Federal Rules of Civil Procedure, and all other applicable statutes, rules, and common law;

G. The taxation of all allowable costs against SKI and SKBA; and

H. For such other and further relief as the Court deems just and proper under the circumstances.

### **DEMAND FOR A JURY TRIAL**

Plaintiffs hereby demands a trial by jury in this action.

Respectfully submitted,

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Counsel for Plaintiffs LG Chem, Ltd. and Toray Industries, Inc.

Dated: September 26, 2019