

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

PLASTIC OMNIUM ADVANCED  
INNOVATION AND RESEARCH,

Plaintiff,

v.

DONGHEE AMERICA, INC. and  
DONGHEE ALABAMA, LLC,

Defendants.

Civil Action No. 16-0187-LPS-CJB

**JURY TRIAL DEMANDED**

**AMENDED COMPLAINT**

Pursuant to Fed. R. Civ. P. 15(a)(1)(B), Plaintiff Plastic Omnium Advanced Innovation and Research (“Plastic Omnium”), by and through its attorneys, for its Amended Complaint against Defendants Donghee America, Inc. (“Donghee America”) and Donghee Alabama, LLC (“Donghee Alabama”) (collectively, “Defendants”), alleges as follows:

**Preliminary Statement**

1. This is an action for infringement of U.S. Patent Nos. 6,814,921; 6,866,812; 7,166,253; 8,122,604; 8,163,228; 9,079,490; 9,399,326; and 9,399,327 (the “Asserted Patents”) under the U.S. Patent Act based on Defendants’ unauthorized manufacture, use, offer for sale, and sale of fuel tanks using Plastic Omnium’s patented technologies in the United States.

**Parties**

2. Plaintiff Plastic Omnium is a société anonyme organized under the laws of Belgium and has its principal place of business in Brussels, Belgium. Plastic Omnium manufactures and distributes plastic fuel systems for automotive fuel applications. Plastic Omnium was formerly named “Inergy Automotive Systems Research” prior to a corporate

name change. Plastic Omnium group companies derive revenue from the sale of fuel-tank assemblies in the United States by Plastic Omnium's sister companies that are in direct competition with Defendants.

3. Defendant Donghee America is a corporation organized under the laws of Delaware and has its principal place of business in Auburn, Alabama. Upon information and belief, defendant Donghee America manages and finances the operations of defendant Donghee Alabama. Donghee America sells and distributes to third parties fuel tanks that it purchases from Donghee Alabama.

4. Defendant Donghee Alabama is a limited liability company organized under the laws of Delaware and has its principal place of business in Auburn, Alabama. Upon information and belief, defendant Donghee Alabama was originally named Donghee Kautex, LLC in furtherance of a joint venture, now dissolved, between Donghee and one or more third-party Kautex group companies ("Kautex"), formed for the purpose of manufacturing automotive fuel tanks.

5. Upon information and belief, Defendants jointly manufacture, sell, and distribute automotive fuel tanks to automobile manufactures in the United States.

### **Jurisdiction**

6. This lawsuit is an action for patent infringement arising under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.* This court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has personal jurisdiction over defendant Donghee America at least because Donghee America is incorporated in Delaware. Donghee America has purposefully availed itself of the rights and benefits of Delaware law.

8. This Court has personal jurisdiction over defendant Donghee Alabama at least because Donghee Alabama is incorporated in Delaware. Donghee Alabama has purposefully availed itself of the rights and benefits of Delaware law.

### **Venue**

9. Venue is proper in this district under 28 U.S.C. §§ 1391(b) and 1400(b) because Defendants reside in Delaware.

### **The Asserted Patents**

10. The Asserted Patents generally relate to the manufacture of automotive fuel tanks, using a process known in the industry as “twin-sheet blow molding” or “TSBM.” Plaintiff Plastic Omnium has an extensive patent portfolio relating to twin-sheet blow molding technologies used in the manufacture of automotive fuel tanks. The twin-sheet blow molding technologies invented by Plastic Omnium provide substantial efficiencies and advantages in the manufacture of automotive fuel tanks, including a reduction in the number of openings in the tank shell.

11. U.S. Patent No. 6,814,921 (“the ’921 patent”), entitled Method for Making a Fuel Tank in Plastic Material, was duly and legally issued on November 9, 2004, and names Jules-Joseph Van Schaftingen, Yannick Gerard, Serge Dupont, and Stephane Leonard as the inventors. Attached as Exhibit A is a true and correct copy of the ’921 patent.

12. Plastic Omnium is the assignee of the entire right, title, and interest in the ’921 patent.

13. U.S. Patent No. 6,866,812 (“the ’812 patent”), entitled Process for Manufacturing Hollow Plastic Bodies, was duly and legally issued on March 15, 2005, and names Jules-Joseph Van Schaftingen, Yannick Gerard, Stéphane Leonard, Serge Dupont, and Joël Op De Beeck as the inventors. Attached as Exhibit C is a true and correct copy of the ’812 patent.

14. Plastic Omnium is the assignee of the entire right, title, and interest in the '812 patent.

15. U.S. Patent No. 7,166,253 ("the '253 patent"), entitled Process for Manufacturing Hollow Plastic Bodies, was duly and legally issued on January 23, 2007, and names Jules-Joseph Van Schaftingen, Yannick Gerard, Stéphane Leonard, Serge Dupont, and Joël Op De Beeck as the inventors. Attached as Exhibit E is a true and correct copy of the '253 patent.

16. Plastic Omnium is the assignee of the entire right, title, and interest in the '253 patent.

17. U.S. Patent No. 8,122,604 ("the '604 patent"), entitled Method for Fastening an Accessory to a Plastic Fuel Tank, was duly and legally issued on February 28, 2012, and names Frederic Jannot, Bjorn Criel, Hugues Masse, Barbara Mabed, and Herve Lemoine as the inventors. Attached as Exhibit G is a true and correct copy of the '604 patent.

18. Plastic Omnium is the assignee of the entire right, title, and interest in the '604 patent.

19. U.S. Patent No. 8,163,228 ("the '228 patent"), entitled Method for Manufacturing a Plastic Fuel Tank, was duly and legally issued on April 24, 2012, and names Bjorn Criel and Hervé Lemoine as the inventors. Attached as Exhibit I is a true and correct copy of the '228 patent.

20. Plastic Omnium is the assignee of the entire right, title, and interest in the '228 patent.

21. U.S. Patent No. 9,079,490 ("the '490 patent"), entitled Method for Fastening an Accessory to a Plastic Fuel Tank, was duly and legally issued on July 14, 2015, and names Hervé Lemoine and Frédéric Jannot as the inventors. Attached as Exhibit K is a true and correct copy of the '490 patent.

22. Plastic Omnium is the assignee of the entire right, title, and interest in the '490 patent.

23. U.S. Patent No. 9,399,326 ("the '326 patent"), entitled Method for Fastening an Accessory in a Plastic Fuel Tank, was duly and legally issued on July 26, 2016, and names Bjorn Criel, Jules-Joseph Van Schaftingen, and Pascal De Henau as the inventors. Attached as Exhibit M is a true and correct copy of the '326 patent.

24. Plastic Omnium is the assignee of the entire right, title, and interest in the '326 patent.

25. U.S. Patent No. 9,399,327 ("the '327 patent"), entitled Method for Fastening an Accessory in a Plastic Fuel Tank, was duly and legally issued on July 26, 2016, and names Bjorn Criel, Jules-Joseph Van Schaftingen, and Pascal De Henau as the inventors. Attached as Exhibit O is a true and correct copy of the '327 patent.

26. Plastic Omnium is the assignee of the entire right, title, and interest in the '327 patent.

### **Defendants' Infringing Activities**

27. Upon information and belief, Defendants have and continue to infringe the Asserted Patents by, among other things, manufacturing and selling automotive fuel tanks that embody Plaintiff Plastic Omnium's patented inventions. Such automotive fuel tanks include at least the LFA Fuel Tank Assembly manufactured at Defendants' Auburn, Alabama manufacturing facility for the Hyundai Sonata model years 2014-2019. Donghee America financed and opened Defendants' manufacturing facility in or around 2013. *See, e.g.*, <http://governor.alabama.gov/newsroom/2013/06/donghee-america-to-invest-48-million-creating-80-jobs-in-auburn/>.

28. Upon information and belief, in or around the early 2010s, Defendants' Korean parent, third party DH Holdings Co., Ltd. ("Donghee Ltd."), sought to supply automotive fuel

tanks to automobile manufacturers in the United States. At that time, Donghee Ltd. did not possess the technology or know-how to produce fuel tank systems that met customer specifications and cost requirements in the United States.

29. Upon information and belief, defendant Donghee Alabama is the result of a joint venture involving third party Kautex to manufacture automotive fuel tanks. This joint venture was originally named “Donghee Kautex, LLC” (“Donghee-Kautex”). Donghee-Kautex changed its name to “Donghee Alabama, LLC” in December 2014. Defendants’ fuel tanks for the LFA Fuel Tank Assembly still bear the name “Donghee-Kautex” molded into the tanks.

30. Upon information and belief, Kautex brought to the Donghee-Kautex joint venture Kautex’s knowledge of twin-sheet blow molding. Kautex refers to its twin-sheet blow-molding process as “NGFS” or “NGFS II.” NGFS stands for next generation fuel system. Kautex describes its NGFS process as “Similar to INERGY TSBM.” *See, e.g.*, Kautex group presentation at [http://www.mkplastico.biz/attachments/article/48/08.%20Fuel%20systems%20\(J%C3%83%C2%BCrgen%20Moitzheim\).pdf](http://www.mkplastico.biz/attachments/article/48/08.%20Fuel%20systems%20(J%C3%83%C2%BCrgen%20Moitzheim).pdf).

31. Upon information and belief, Kautex sold Kautex-designed equipment to Donghee-Kautex for twin-sheet blow molding, and Kautex installed that equipment in Defendants’ Alabama plant.

32. Kautex’s NGFS process for twin-sheet blow molding was at least partially described (i) at the tank.tech 2009 conference in a presentation by Carsten Elsasser and Dirk Eulitz entitled “Next Generation Fuel System (NGFS) The way for the future” (November 10-11, 2009); (ii) in Elsasser *et al.*, “The Next Generation Fuel System,” autotechreview, Sept. 2011, <http://autotechreview.com/news/item/download/10.html>, pp. 60-64 (“NGFS 2011”); and (iii) in Canadian Patent No. 2641463, assigned to Kautex Textron GmbH & Co. KG.

33. Kautex's NGFS II process was at least partially described in U.S. Patent No. 8,603,280, assigned to Kautex Textron GmbH & Co. KG.

34. Appendices B, D, F, H, J, L, N, and P are claim charts that include photographs of an LFA Fuel Tank Assembly manufactured by the Defendants.

35. Prior to the formation of Donghee-Kautex, Kautex was aware of Plaintiff Plastic Omnium's patent portfolio relating to twin-sheet blow molding, including the '921, '812, '253, '604, '228, and '490 patents. Upon information and belief, through Defendants' relationship with Kautex, including the formation of the joint venture that eventually became defendant Donghee Alabama, Defendants knew or should have known that they were infringing the '921, '812, '253, '604, '228, and '490 patents.

36. Defendants were also given written notice on February 25, 2016, that their manufacture, sale, use, and/or offer for sale of, at a minimum, Hyundai Sonata fuel tanks manufactured using technology inherited from Kautex for the joint venture, infringes at least the '921, '812, '253, '604, '228, and '490 patents.

37. On May 18, 2016, Defendants were given notice that the continuation patent applications that issued as the '326 and '327 patents were pending before the U.S. Patent & Trademark Office.

38. On July 27, 2016, Defendants were given written notice that the '326 and '327 patents issued on July 26, 2016, and were relevant to Donghee's manufacturing process and fuel tank products. Moreover, the '326 and '327 patents are continuations of Plastic Omnium's U.S. Patent No. 8,591,798, which Defendants were aware of by February 25, 2016, at the latest.

39. Defendants have known of the existence of the Asserted Patents, and their acts of infringement have been willful and in disregard for the Asserted Patents, without any reasonable basis for believing that they had a right to engage in the infringing conduct.

40. Plastic Omnium has suffered damage as a result of Defendants' infringing activities to date. Upon information and belief, Defendants have been, and will continue to, unless enjoined by this Court, infringe the Asserted Patents by making, selling, and offering for sale infringing fuel-tank assemblies, including LFA Fuel Tank Assemblies.

41. This is an exceptional case as that term is used in 35 U.S.C. § 285.

**Count One**  
**Infringement of U.S. Patent No. 6,814,921**

42. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

43. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '921 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit B is a preliminary claim chart showing by way of non-limiting example how Defendants directly infringe at least independent claim 1 of the '921 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2-5, 8, and 9 of the '921 patent.

44. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '921 patent. During the process used by Defendants to manufacture such fuel tanks, a portion of a fuel tank sheet undergoes compression molding in a region for joining the shells together. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 3; Canadian Patent No. 2641463, Fig. 7.

45. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 3 of the '921 patent. During the process used by Defendants to manufacture such fuel tanks, the two shells are compression-molded and blow-molded at the same time, by using stacked double molds. Simultaneous with the compression molding at the region for joining the shells, the primary shape of the shells is achieved by



blow molding. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 3; Canadian Patent No. 2641463, Fig. 7.

46. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 4 of the '921 patent. During the process used by Defendants to manufacture such fuel tanks, before the shells are joined, at least one accessory of the fuel tank is inserted into the shell and fixed onto it. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 10; Canadian Patent No. 2641463, Fig. 7.

47. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 5 of the '921 patent. For example, during the molding process used by Defendants to manufacture such fuel tanks, a device of the mold allows the simultaneous riveting onto the shell of at least one fuel-tank accessory by flow of the sheet.

48. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 8 of the '921 patent. During the process used by Defendants to manufacture such fuel tanks, at least one device placed on the punch side or on the die side of the mold makes it possible to fix, during molding, at least one fuel-tank accessory by depositing and welding the accessory to the sheet or by partially covering the accessory with a portion of the sheet. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 10; Canadian Patent No. 2641463, Fig. 7.

49. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 9 of the '921 patent. During the process used by Defendants to manufacture such fuel tanks, at least a preassembled Roll Over Valve ("ROV") and a Fill Limiting Venting Valve ("FLVV") are stake-fastened to the fuel tank, allowing the tank to be stiffened by simultaneously pressing on each of the two shells and/or fixing at least one accessory of the tank.

50. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '921 patent by actively, knowingly, and intentionally inducing infringement of the '921 patent by others, including Defendants' customers. Since Defendants have been aware of the '921 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

51. Defendants' acts of infringement of the '921 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '921 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

52. Defendants' infringement of the '921 patent has been, and continues to be, knowing, intentional, and willful.

53. Defendants' acts of infringement of the '921 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Two**  
**Infringement of U.S. Patent No. 6,866,812**

54. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

55. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '812 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit D is a preliminary claim chart showing by way of non-limiting example

how Defendants directly infringe at least independent claims 1, 16, and 32 of the '812 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2-5, 7-10, 13, 14, 17-22, 24-27, 30, 31, 33-36, 38-41, 44, and 45 of the '812 patent.

56. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '812 patent as the tanks are liquid-fuel tanks for automobiles.

57. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 3 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the sheets of the parison are pinched together to close. Upon information and belief, based upon the presence of melted seams between the two shells of the LFA Fuel Tank Assemblies, a hot-fusion welding process occurs to join the two surfaces. *See, e.g.*, NGFS 2011, p. 62.

58. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 4 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, a parison is extruded and split in the longitudinal direction to form two sheets of molten plastic corresponding to the two halves of the fuel tank.

59. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 5 of the '812 patent. Markings on the tank shell indicate a thermoplastic construction of HDPE-EVOH-HDPE and, during the process used by Defendants to manufacture such fuel tanks, the thermoplastic melt is passed through a die to form the parison.

60. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 7 of the '812 patent. During the process used by

Defendants to manufacture such fuel tanks, the two separate sheets are initially held apart from each other and then subsequently brought together to finish the molding process.

61. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 8 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, an accessory or object is inserted and affixed into one of the parison sheets while the two sheets are held apart. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 3; Canadian Patent No. 2641463, Fig. 7.

62. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 9 of the '812 patent. For example, during the process used by Defendants to manufacture such fuel tanks, a preassembled ROV and FLVV are inserted between the parison sheets.

63. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 10 of the '812 patent. The ROV and FLVV of Defendants' LFA Fuel Tank Assemblies are stake-fastened and configured to anchor to an internal wall of the tank.

64. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 13 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the primary shape of the shells is achieved by blow molding, and the presence of melted seams between the two shells indicates that a hot-fusion welding process is used to join the two portions together.

65. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 14 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the sheets of the parison are welded together, leaving behind a visible seam at the joint between the two sheets. The joint is leak-tight to fuel.

66. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 17 of the '812 patent as the assemblies are liquid-fuel tanks for automobiles.

67. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 18 of the '812 patent as the tank is made of a HDPE-EVOH-HDPE construction, including at least one layer of an HDPE thermoplastic.

68. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 19 of the '812 patent as the tank is made of a HDPE-EVOH-HDPE construction, including at least one layer of a high-density polyethylene (HDPE).

69. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 20 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the sheets of the parison are pinched together to close. *See, e.g.*, NGFS 2011, p. 62. The presence of melted seams between the two shells of the LFA Fuel Tank Assemblies indicates that a hot-fusion welding process occurs to join the two surfaces.

70. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 21 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, a parison is extruded and split in the longitudinal direction to form two sheets of molten plastic corresponding to the two halves of the fuel tank.

71. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 22 of the '812 patent. The tank-shell markings on Defendants' LFA Fuel Tank Assemblies show a thermoplastic construction of HDPE-EVOH-HDPE and, during the process used by Defendants to manufacture such fuel tanks, the thermoplastic melt is passed through a die to form the parison.

72. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 24 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the two separate sheets are initially held apart from each other and then subsequently brought together to finish the molding process.

73. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 25 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, an accessory or object is inserted and affixed into one of the parison sheets while the two sheets are held apart. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 3; Canadian Patent No. 2641463, Fig. 7.

74. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 26 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, a preassembled ROV and FLVV are inserted between the parison sheets.

75. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 27 of the '812 patent. The ROV and FLVV are stake-fastened and configured to anchor to an internal wall of the tank.

76. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 30 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the primary shape of the shells is achieved by blow molding, and the presence of melted seams between the two shells of the fuel tank indicates that a hot-fusion welding process is used to join the two portions together. *See, e.g.*, NGFS 2011, p. 62.

77. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 31 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the sheets of the parison are pinched together, and

the presence of melted seams between the two shells of the fuel tanks indicates that a hot-fusion welding process is used to join the two portions together to form a joint leak-tight to fuel. *See, e.g.*, NGFS 2011, p. 62.

78. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 33 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, molding is carried out using a mold that has two cavities and a core for positioning at least a ROV and FLVV prior to a step of bringing said two portions together.

79. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 34 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the sheets of the parison are pinched together, and the presence of melted seams between the two shells of the fuel tanks indicates that a hot-fusion welding process occurs to join the two surfaces. *See, e.g.*, NGFS 2011, p. 62.

80. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 35 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, a parison is extruded and split in the longitudinal direction to form two sheets of molten plastic corresponding to the two halves of the fuel tank.

81. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 36 of the '812 patent. The tank-shell markings on Defendants' LFA Fuel Tank Assemblies show a thermoplastic construction of HDPE-EVOH-HDPE and, during the process used by Defendants to manufacture such fuel tanks, the thermoplastic melt is passed through a die to form the parison.

82. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 38 of the '812 patent. During the process used by

Defendants to manufacture such fuel tanks, the two separate sheets are initially held apart from each other and then subsequently brought together to finish the molding process.

83. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 39 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, an accessory or object is inserted and affixed into one of the parison sheets while the two sheets are held apart. *See, e.g.*, U.S. Patent No. 8,603,280, Fig. 3; Canadian Patent No. 2641463, Fig. 7.

84. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 40 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, a preassembled ROV and FLVV are inserted between the parison sheets.

85. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 41 of the '812 patent. The ROV and FLVV are stake-fastened and configured to anchor to an internal wall of the tank.

86. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 44 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the primary shape of the shells is achieved by blow molding, and the presence of melted seams between the two shells of the fuel tanks indicates that a hot-fusion welding process is used to join the two portions together.

87. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 45 of the '812 patent. During the process used by Defendants to manufacture such fuel tanks, the sheets of the parison are pinched together, and the presence of melted seams between the two shells of the fuel tanks indicates that a hot-fusion welding process is used to join the two portions together to form a joint leak-tight to fuel. *See, e.g.*, NGFS 2011, p. 62.



88. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '812 patent by actively, knowingly, and intentionally inducing infringement of the '812 patent by others, including Defendants' customers. Since Defendants have been aware of the '812 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

89. Defendants' acts of infringement of the '812 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '812 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

90. Defendants' infringement of the '812 patent has been, and continues to be, knowing, intentional, and willful.

91. Defendants' acts of infringement of the '812 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Three**  
**Infringement of U.S. Patent No. 7,166,253**

92. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

93. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '253 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit F is a preliminary claim chart showing by way of non-limiting example

how Defendants directly infringe at least independent claim 1 of the '253 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2-3, 5-8, and 11-14 of the '253 patent.

94. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '253 patent. The ROV and FLVV of Defendants' LFA Fuel Tank Assemblies include a mounting bracket or device with tabs that are fastened to an internal wall of the tank by a self-formed plastic rivet.

95. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 3 of the '253 patent. At least the ROV and FLVV of Defendants' LFA Fuel Tank Assemblies include a mounting bracket or device with tabs that are supported by an arm.

96. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 5 of the '253 patent. During the process used by Defendants to manufacture such fuel tanks, at least the ROV and FLVV are positioned precisely in the fuel tank with supports.

97. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 6 of the '253 patent as the tank shell indicates it is made of a HDPE-EVOH-HDPE construction.

98. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 7 of the '253 patent as the tank shell indicates it is made of a stacked HDPE-EVOH-HDPE construction.

99. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 8 of the '253 patent as the tank shell indicates it is made of a central layer of EVOH surrounded by two layers of HDPE.

100. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 11 of the '253 patent. During the process used by Defendants to manufacture such fuel tanks, the multi-layered HDPE-EVOH-HDPE fuel tank is made by coextrusion.

101. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 12 of the '253 patent as the assembly is a tank for liquid fuel.

102. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 13 of the '253 patent. At least the ROV and FLVV are incorporated into the fuel tank assembly by stake-fastening the valves' mounting brackets to one of the sheets of the fuel tank.

103. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 14 of the '253 patent. At least the ROV and FLVV, connected by ducts, are incorporated into the fuel tank assembly by stake-fastening the valves' mounting brackets to one of the sheets of the fuel tank.

104. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '253 patent by actively, knowingly, and intentionally inducing infringement of the '253 patent by others, including Defendants' customers. Since Defendants have been aware of the '253 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

105. Defendants' acts of infringement of the '253 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '253 patent, a Plastic Omnium group company would

have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

106. Defendants' infringement of the '253 patent has been, and continues to be, knowing, intentional, and willful.

107. Defendants' acts of infringement of the '253 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Four**  
**Infringement of U.S. Patent No. 8,122,604**

108. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

109. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '604 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit H is a preliminary claim chart showing by way of non-limiting example how Defendants directly infringe at least independent claims 1 and 10 of the '604 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2, 4, 6-8, 11, 13, 15, and 16 of the '604 patent.

110. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '604 patent as the fuel tank include at least one baffle accessory having weldpads (fastening parts) to connect the baffle accessory to the tank, which are molded as one part with the baffle accessory or attached to the accessory.

111. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 4 of the '604 patent as the tanks include at least one baffle having rigid weldpads (fastening tabs) to connect to a flexible portion of the baffle accessory.

112. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 6 of the '604 patent as the tanks include at least one baffle accessory having weldpads (fastening parts) to connect to a flexible portion of the baffle accessory to provide an anti-vibration/shock mounting.

113. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 7 of the '604 patent as the weldpads (fastening tabs) are fastened to the wall of the fuel tank and the baffle accessory is movable relative to all the fastening points in flex areas connected to the weldpads. *See* Appendix G.

114. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 8 of the '604 patent. During the process used by Defendants to manufacture such fuel tanks, a tubular parison is extruded, cut on opposite sides, and opened into two sheets, which are then fed into the mold.

115. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 11 of the '604 patent as the fuel tank include at least one baffle accessory having weldpads (fastening parts) to connect the baffle to the tank, which are molded as one part with the baffle accessory or attached to the accessory.

116. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 13 of the '604 patent as the tanks include at least one baffle accessory having rigid weldpads (fastening tabs) to connect to a flexible portion of the baffle accessory.

117. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 15 of the '604 patent as the tanks include at least one baffle accessory having weldpads (fastening parts) to connect to a flexible portion of the baffle accessory to provide an anti-vibration/shock mounting.

118. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 16 of the '604 patent as the baffle accessory weldpads (fastening tabs) are fastened to the wall of the fuel tank and the baffle accessory is movable relative to all the fastening points in the flex areas. *See* Appendix G.

119. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '604 patent by actively, knowingly, and intentionally inducing infringement of the '604 patent by others, including Defendants' customers. Since Defendants have been aware of the '604 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

120. Defendants' acts of infringement of the '604 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '604 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

121. Defendants' infringement of the '604 patent has been, and continues to be, knowing, intentional, and willful.

122. Defendants' acts of infringement of the '604 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Five**  
**Infringement of U.S. Patent No. 8,163,228**

123. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

124. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '228 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit J is a preliminary claim chart showing by way of non-limiting example how Defendants directly infringe at least independent claim 1 of the '228 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2-4 and 7-9 of the '228 patent.

125. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '228 patent. During the process used by Defendants, a tubular parison is extruded, cut on opposite ends, and opened into two sheets, which are then fed into the mold.

126. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 3 of the '228 patent. At least the ROV and FLVV are connected by pipes that are attached to the parison by welding or rivet punching.

127. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 4 of the '228 patent as the pipe connecting the ROV and FLVV has an s-shaped bend configuration. *See* Appendix I.

128. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 7 of the '228 patent as the pipe connecting the ROV and FLVV has a plurality of ends, is a ventilation pipe for venting vapor fumes, and is connected at one end to either the ROV or FLVV.

129. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 8 of the '228 patent as the pipe is connected, at its ends, to the ROV and FLVV and the pipe is fixed to the valves, which are stake-fastened to the fuel tank.

130. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 9 of the '228 patent as the fuel tank is molded to include several pockets and at least one of the pockets is fitted for providing a vent valve that is connected to a vent pipe for communication with a canister.

131. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '228 patent by actively, knowingly, and intentionally inducing infringement of the '228 patent by others, including Defendants' customers. Since Defendants have been aware of the '228 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

132. Defendants' acts of infringement of the '228 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '228 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

133. Defendants' infringement of the '228 patent has been, and continues to be, knowing, intentional, and willful.

134. Defendants' acts of infringement of the '228 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Six**  
**Infringement of U.S. Patent No. 9,079,490**

135. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.



136. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '490 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit L is a preliminary claim chart showing by way of non-limiting example how Defendants directly infringe at least independent claim 1 of the '490 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2-3, 7, 8, 11, and 14 of the '490 patent.

137. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '490 patent as the fuel tank includes at least a ROV and FLVV, which are connected to the tank with a mounting bracket having snap-riveting orifices formed within fastening tabs and as one part with the accessory or attached thereto.

138. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 3 of the '490 patent as the fuel tank includes at least a ROV and a FLVV, which are connected to the tank with a mounting bracket having snap-riveting orifices formed within fastening tabs equidistant around the periphery of the mounting bracket and each tab having one snap-riveting orifice.

139. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 7 of the '490 patent. During the process used by Defendants to manufacture such fuel tanks, a parison is extruded, cut on opposite sides, and opened into two sheets, which are then fed into the mold.

140. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 8 of the '490 patent. During the process used by Defendants to manufacture such fuel tanks, molding is carried out using a mold that has two cavities and a core for positioning and attaching at least a ROV and FLVV to the wall of the tank using a snap-riveting tool. *See, e.g.,* Appendix K.

141. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 11 of the '490 patent as the fuel tank includes at least a ROV and FLVV connected to the tank by a stake-fastening procedure where molten plastic material is forced to protrude from the snap-riveting orifices of the fastening tabs with the use of a counterform tool. *See* Appendix K.

142. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 14 of the '490 patent as the fuel tank includes at least a ROV and FLVV connected to the tank by fastening tabs having a snap-riveting orifice and concave relief, which is cylindrical and directed substantially perpendicular to the wall of the tank.

143. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '490 patent by actively, knowingly, and intentionally inducing infringement of the '490 patent by others, including Defendants' customers. Since Defendants have been aware of the '490 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

144. Defendants' acts of infringement of the '490 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '490 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

145. Defendants' infringement of the '490 patent has been, and continues to be, knowing, intentional, and willful.

146. Defendants' acts of infringement of the '490 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Seven**  
**Infringement of U.S. Patent No. 9,399,326**

147. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

148. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '326 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit N is a preliminary claim chart showing by way of non-limiting example how Defendants directly infringe at least independent claims 1 and 25 of the '326 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 2, 9, 11, 13, 26-29, 31-34, 40, 42, and 44 of the '326 patent.

149. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 2 of the '326 patent as the tank shell indicates that it is made of a stacked HDPE-EVOH-HDPE construction and, thus, comprises a thermoplastic outer layer of high density polyethylene (HDPE) and a fuel-impermeable inner layer of a copolymer of ethylene and partially hydrolysed vinyl acetate (EVOH).

150. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 9 of the '326 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

151. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 11 of the '326 patent as the included ROV and FLVV act as a level gauge.

152. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 13 of the '326 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

153. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 26 of the '326 patent as the tank shell indicates that it is made of a stacked HDPE-EVOH-HDPE construction and, thus, the outer layer of thermoplastic polymer is high density polyethylene and the barrier layer of fuel impermeable resin is a copolymer of ethylene and partially hydrolysed vinyl acetate or high density polyethylene which has been surface treated so as to render it impermeable to the fuel.

154. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 27 of the '326 patent as the orifice of the ROV and/or FLVV mounting bracket that is in direct contact with part of the inner wall of the fuel tank is rounded and angularly shaped to encourage the thermoplastic material of which the wall is made to flow through said orifice without rupturing the barrier layer of the fuel tank wall.

155. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 28 of the '326 patent as the tank shell indicates that it is made of a stacked HDPE-EVOH-HDPE construction and, thus, the wall of the fuel tank comprises an outermost layer of thermoplastic polymer, a barrier layer of thermoplastic resin impermeable to fuel, and an innermost layer of thermoplastic polymer.

156. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 29 of the '326 patent as the ROV and FLVV are stake-fastened to the tank by the protrusion shaped to overhang the at least one orifice of the

mounting bracket without rupturing the barrier layer of the wall of the fuel tank. The protrusion is also shaped as a rivet.

157. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 31 of the '326 patent as the mounting bracket of the ROV and FLVV is made of polyoxymethylene, which is different from that of the fuel tank.

158. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 32 of the '326 patent as the mounting bracket of the ROV and FLVV is made of polyoxymethylene, which is described by the '326 patent as compatible with the material of the fuel tank.

159. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 33 of the '326 patent as the mounting bracket of the ROV and FLVV has at least one orifice.

160. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 34 of the '326 patent as the mounting bracket of the ROV and FLVV has at least one orifice which passes through the accessory.

161. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 40 of the '326 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

162. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 42 of the '326 patent as the included ROV and FLVV act as a level gauge.

163. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 44 of the '326 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

164. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '326 patent by actively, knowingly, and intentionally inducing infringement of the '326 patent by others, including Defendants' customers. Since Defendants have been aware of the '326 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

165. Defendants' acts of infringement of the '326 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '326 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

166. Defendants' infringement of the '326 patent has been, and continues to be, knowing, intentional, and willful.

167. Defendants' acts of infringement of the '326 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

**Count Eight**  
**Infringement of U.S. Patent No. 9,399,327**

168. Plastic Omnium repeats and realleges paragraphs 1 through 41 hereof, as if fully set forth herein.

169. Defendants, in violation of 35 U.S.C. § 271(a), have been and are directly infringing the '327 patent through manufacture, sale, and offer for sale of, at a minimum, LFA Fuel Tank Assemblies in the United States, literally or through the doctrine of equivalents. Attached as Exhibit P is a preliminary claim chart showing by way of non-limiting example

how Defendants directly infringe at least independent claims 1 and 9 of the '327 patent. Upon information and belief, Defendants also directly infringe, literally or through the doctrine of equivalents, at least claims 3, 5, 7, 10, 13, and 15 of the '327 patent.

170. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 3 of the '327 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

171. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 5 of the '327 patent as the included ROV and FLVV act as a level gauge.

172. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 7 of the '327 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

173. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 10 of the '327 patent as the tank shell indicates that it is made of a stacked HDPE-EVOH-HDPE construction and, thus, comprises a thermoplastic outer layer of high density polyethylene (HDPE) and a fuel-impermeable inner layer of a copolymer of ethylene and partially hydrolysed vinyl acetate (EVOH).

174. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 13 of the '327 patent as the included ROV and FLVV act as a level gauge.

175. Upon information and belief, Defendants' LFA Fuel Tank Assemblies satisfy the additional limitations of claim 15 of the '327 patent as the tank includes, at a minimum, a ROV and FLVV as ventilation devices.

176. Defendants, in violation of 35 U.S.C. § 271(b), have been and are indirectly infringing the '327 patent by actively, knowingly, and intentionally inducing infringement of

the '327 patent by others, including Defendants' customers. Since Defendants have been aware of the '327 patent, Defendants have known and intended that its customers engage in acts of infringement that include the use and sale of Defendants' infringing fuel-tank assemblies and of automobiles incorporating Defendants' infringing fuel-tank assemblies.

177. Defendants' acts of infringement of the '327 patent have caused and will continue to cause Plastic Omnium damages for which Plastic Omnium is entitled to compensation pursuant to 35 U.S.C. § 284, including lost profits or a reasonable royalty. But for Defendants' infringement of the '327 patent, a Plastic Omnium group company would have sold the LFA Fuel Tank Assemblies to Hyundai, and the Plastic Omnium group would have made additional profits.

178. Defendants' infringement of the '327 patent has been, and continues to be, knowing, intentional, and willful.

179. Defendants' acts of infringement of the '327 patent have caused and will continue to cause Plastic Omnium immediate and irreparable harm unless such infringing activities are enjoined by this Court pursuant to 35 U.S.C. § 283. Plastic Omnium has no adequate remedy at law.

#### **Demand for Jury Trial**

180. Plastic Omnium demands a jury trial of all issues in this action so triable.

#### **Prayer for Relief**

Plastic Omnium requests judgment against Defendants as follows:

- a. Adjudging that Defendants have infringed the '921, '812, '253, '604, '228, '490, '326, and '327 patents in violation of 35 U.S.C. § 271;
- b. Granting an injunction permanently enjoining Defendants, their employees, agents, officers, directors, attorneys, successors, affiliates, subsidiaries and assigns, and all of



those in active concert and participation with any of the foregoing persons or entities from infringing the '921, '812, '253, '604, '228, '490, '326, and '327 patents;

c. Ordering Defendants to account and pay damages adequate to compensate Plastic Omnium for Defendants' infringement of the '921, '812, '253, '604, '228, '490, '326, and '327 patents, with pre-judgment and post-judgment interest and costs, pursuant to 35 U.S.C. § 284;

d. Ordering that the damages award be increased up to three times the actual amount assessed, pursuant to 35 U.S.C. § 284;

e. Declaring this case exceptional and awarding Plastic Omnium its reasonable attorneys' fees, pursuant to 35 U.S.C. § 285; and

f. Awarding such other and further relief as this Court deems just and proper.

Dated: August 24, 2016

BARNES & THORNBURG LLP

/s/ Chad S.C. Stover

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