# UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

TRANSCEND SHIPPING SYSTEMS, LLC,

Plaintiff,

V.

HAPAG-LLOYD AG AND HAPAG-LLOYD (AMERICA) LLC,

Defendants.

Case No. 6:20-cv-1195

JURY TRIAL DEMANDED

## ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Transcend Shipping Systems, LLC ("Transcend") hereby files this Original Complaint for Patent Infringement against Hapag-Lloyd AG and Hapag-Lloyd (America) LLC, (collectively "Defendants"), and alleges, upon information and belief, as follows:

## THE PARTIES

- 1. Transcend is a limited liability company organized and existing under the laws of the State of Florida with its principal place of business at 600 S. Dixie Highway, Suite 605, West Palm Beach, Florida 33401.
- Upon information and belief, Hapag-Lloyd AG is a corporation organized and existing under the laws of Germany with its principal office at Ballingdamm 25, D-20095 Hamburg, Germany.
- 3. Upon information and belief, Hapag-Lloyd (America) LLC is a limited liability company organized and existing under the laws of the State of Delaware with its principal office at 399 Hoes Lane, Piscataway, New Jersey 08854. Upon information and belief, Hapag-Lloyd

(America) LLC also maintains an office in Texas at 11410 Greens Crossing, Suite 400, Houston, Texas 77067.

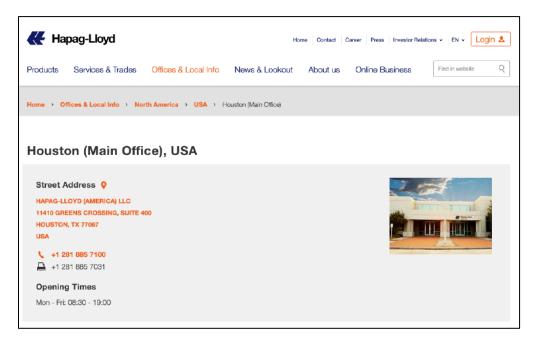
### **JURISDICTION AND VENUE**

- 4. Subject matter jurisdiction is proper under 28 U.S.C. §§ 1331, 1332, 1338, and 1367.
- 5. The Court has personal jurisdiction under the Texas Long Arm Statute and the Due Process Clause of the U.S. Constitution over Defendants because they are present within or have minimum contacts within the State of Texas, including the Western District of Texas.
- 6. Defendants have sought protection and benefit from the laws of the State of Texas;

  Defendants regularly conduct business within the State of Texas and within the Western

  District of Texas; and Plaintiff's cause of action arises directly from Defendants' business

  contacts and other activities in the State of Texas and in the Western District of Texas.



7. More specifically, Defendants, directly and/or through intermediaries, ship, distribute, use, offer for sale, sell, and/or advertise products and services in the United States, the State of Texas, and the Western District of Texas including but not limited to the Accused

Instrumentalities as detailed below. Upon information and belief, Defendants have committed patent infringement in the State of Texas and in the Western District of Texas. Defendants solicit and have solicited customers in the State of Texas and in the Western District of Texas. Defendants have paying customers, who are residents of the State of Texas and the Western District of Texas, who each use and have used the Defendants' products and services in the State of Texas and in the Western District of Texas.

- 8. Venue is proper pursuant to 28 U.S.C. §§ 1391 and 1400(b).
- 9. Venue is also proper in this judicial district pursuant to 28 U.S.C. §§ 1391(c)(3) because Defendant Hapag-Lloyd AG is not a resident of the United States and therefore may be sued in any judicial district.

## **PATENTS-IN-SUIT**

- 10. Transcend Shipping Systems, LLC is the sole and exclusive owner, by assignment, of U.S. Patent Nos. 7,253,731 ("the '731 Patent"); 7,482,920 ("the '920 Patent"); 9,847,029 ("the '029 Patent"); 10,181,109 ("the '109 Patent"); and 10,796,268 ("the '268 Patent") (hereinafter collectively referred to as "the Transcend Patents").
- 11. The Transcend Patents are valid, enforceable, and were duly issued in full compliance with Title 35 of the United States Code.
- 12. The Transcend Patents each include numerous claims defining distinct inventions.
- 13. The priority date of each of the Transcend Patents is at least as early January 23, 2001. As of the priority date, the inventions as claimed were novel, non-obvious, unconventional, and non-routine.
- 14. Plaintiff alleges infringement on the part of Defendants of each of the Transcend Patents.

- 15. The '731 Patent relates generally to an apparatus, including a shipment conveyance device, associated with a shipment, which is a shipping a container, pallet, or tote, a memory device, located at the shipment conveyance device, in which information regarding the shipment is stored, a global positioning device, located at the shipment conveyance device, which determines a position or location of the shipment conveyance device, a processing device which processes information regarding the shipment and/or shipment conveyance device in response to an occurrence of an event or in response to a request for information and generates a message containing information regarding the position or location of the shipment conveyance device and information regarding the occurrence of an event, a status of the shipment, a shipment temperature, or an impact or force on the shipment conveyance device, and a transmitter, located at the shipment conveyance device, which transmits the message to a communication device. See Abstract, '731 Patent.
- 16. The '920 Patent relates generally to an apparatus, including a shipment conveyance device which is a shipping container, pallet, piece of luggage, or tote, a memory device located in, on, or at, the shipment conveyance device which stores information regarding the shipment conveyance device which determines a position or location of the shipment conveyance device, a processing device which processes information regarding the shipment conveyance device in response to an occurrence of an event or a request for information and which generates a message containing information regarding the position or location of the shipment conveyance device and information regarding the occurrence of an event, a status of a shipment or transportation involving the shipment conveyance device, a temperature, or an impact or force on the shipment conveyance device, and a transmitter located in, on, or at, the

- shipment conveyance device which transmits the message to a communication device. *See* Abstract, '920 Patent.
- 17. The '029 Patent relates generally to an apparatus, including a shipment conveyance device which is a shipping container, pallet, or piece of luggage, a memory device located in, on, or at, the shipment conveyance device which stores information regarding the shipment conveyance device, a global positioning device which determines a position or location of the shipment conveyance device, a processing device which processes information regarding the shipment conveyance device in response to an occurrence of an event or a request for information and which generates a message containing information regarding the position or location of the shipment conveyance device and information regarding the occurrence of an event, a status of a shipment or transportation involving the shipment conveyance device, a temperature, or an impact or force on the shipment conveyance device, and a transmitter located in, on, or at, the shipment conveyance device which transmits the message to a communication device. See Abstract, '029 Patent.
- 18. The '109 Patent relates generally to an apparatus, including a shipment conveyance device, wherein the shipment conveyance device is a shipping container, pallet, or piece of luggage; a receiver; a global positioning device which is located in, on, or at, the shipment conveyance device and which determines a position or location of the shipment conveyance device; a processor which generates a message in response to an occurrence of an event or in response to a request for information regarding the shipment conveyance device, wherein the request for information is automatically received by the receiver, wherein the message contains information regarding a position or location of the shipment conveyance device; and a transmitter which is located in, on, or at, the shipment conveyance device and which

transmits the message to a communication device associated with an owner of the shipment conveyance device or an individual authorized to receive the message. *See* Abstract, '109 Patent.

- 19. The '268 Patent relates generally to an apparatus, including a shipment conveyance device which is a shipping container, a pallet, or a piece of luggage; a global positioning device, located in, on, or at, the shipment conveyance device, which determines a position or location of the shipment conveyance device; a processor which generates a message in response to an occurrence of an event or in response to a request for information regarding the shipment conveyance device which request is automatically received by a receiver, and which message contains information regarding a shipment of the shipment conveyance device; and a transmitter, located in, on, or at, the shipment conveyance device, which transmits the message to a communication device associated with an owner of the shipment conveyance device or an individual authorized to receive the message. *See* Abstract, '268 Patent.
- 20. The claims of the Transcend Patents are not drawn to laws of nature, natural phenomena, or abstract ideas. Although the systems and methods claimed in the Transcend Patents are ubiquitous now (and, as a result, are widely infringed), the specific combinations of elements, as recited in the claims, was not conventional or routine at the time of the invention.
- 21. The '731 Patent was examined by Primary United States Patent Examiner Van T. Trieu. During the examination of the '731 Patent, the United States Patent Examiner searched for prior art in the following US Classifications: 340/539.13, 340/568.1 and 340/572.1.
- 22. After conducting searches for prior art during the examination of the '731 Patent, the United States Patent Examiner identified and cited the following as the most relevant prior art

references found during the searches: (i) US 3,669,288, 06/1972, Young; (ii) US 5,317,323, 05/1994, Kennedy et al.; (iii) "Envirokare announces letter of intent with Electroship . . ." 2 page Envirokare press release dated Jul. 25, 2000"; (iv) US 5,825,283, 10/1998, Camhi; (v) US 6,044,990, 04/2000, Palmeri; (vi) US 6,464,142, 10/2002, Denenberg et al.; (vii) US 2002/0017996, 02/2002, Niemiec; (viii) FR 2816434, 05/2002, Touzet; (ix) US 5,877,707, 03/1999, Kowalick; (x) US 5,917,405, 06/1999, Joao; (xi) US 5,917,434, 06/1999, Murphy; (xii) US 6,046,678, 04/2000, Wilk; (xiii) US 6,148,291, 11/2000, Radican; (xiv) US 6,281,797, 08/2001, Forster et al.; (xv) US 6,292,828, 09/2001, Williams; (xvi) US 6,332,098, 12/2001, Ross et al.; (xviii) US 6,474,927, 11/2002, McAdams et al.; (xix) US 6,542,076, 04/2003, Joao; (xx) US 6,542,077, 04/2003, Joao; (xxi) US 6,549,130, 04/2003, Joao; (xxii) US 6,587,046, 07/2003, Joao; (xxiii) US 6,610,954, 08/2003, Takizawa; (xxiv) US 6,844,473, 01/2005, Quinlin et al.; (xxv) US 2002/0016655, 02/2002, Joao; (xxvi) US 2002/0049622, 04/2002, Lettich et al.; (xxvi) US 2002/0049622, 04/2002, Lettich et al.; (xxvii) US 2002/0116318, 08/2002, Thomas et al.; (xxviii) US 2002/0121969, 09/2002, Joao; (xxix) US 2002/0198774, 12/2002, Weirich; (xxx) US 2003/0009361, 01/2003, Hancock et al.; (xxxi) US 2003/0016130, 01/2003, Joao; (xxxii) US 2003/0067541, 04/2003, Joao; (xxxiii) US 2003/0071899, 04/2003, Joao; (xxxiv) US 2003/0084125, 05/2003, Nagda et al.; (xxxv) US 2003/0193404, 10/2003, Joao; (xxxvi) US 2003/0206102, 11/2003, Joao; (xxxvii) US 2004/0160319, 08/2004, Joao; (xxxviii) US 2004/0230601, 11/2004, Joao; (xxxix) US 2005/0171835, 08/2005, Mook et al.; (xxxx) US 2005/0248444, 11/2005, Joao; (xxxxi) "Technology Executive . . . joins Envirokare as president and Director", 2 page Envirokare press release dated Sep. 5, 2000; and (xxxxii) "Envirokare Tech Inc. announces additions to advisory board", 3 page Envirokare press release dated Sep. 7, 2000.

- 23. After giving full proper credit to the prior art and having conducted a thorough search for all relevant art and having fully considered the most relevant art known at the time, the United States Patent Examiner allowed all of the claims of the '731 Patent to issue. In so doing, it is presumed that Examiner Trieu used his or her knowledge of the art when examining the claims. *K/S Himpp v. Hear-Wear Techs., LLC,* 751 F.3d 1362, 1369 (Fed. Cir. 2014). It is further presumed that Examiner Trieu has experience in the field of the invention, and that the Examiner properly acted in accordance with a person of ordinary skill. *In re Sang Su Lee,* 277 F.3d 1338, 1345 (Fed. Cir. 2002).
- 24. The '731 Patent is a pioneering patent, and has been cited as relevant prior art in over 130 subsequent United States Patent Applications, including Applications assigned to technology and business leaders such as Google, Inc., AT&T, FedEx, Qualcomm, Inc., Fujitsu, Ltd., United Parcel Services of America, American Airlines and NEC Corp.
- 25. The '920 Patent was examined by Primary United States Patent Examiner Van T. Trieu. During the examination of the '920 Patent, the United States Patent Examiner searched for prior art in the following US Classifications: 340/539.11, 340/568.1 and 340/572.1.
- After conducting searches for prior art during the examination of the '731 Patent, the United States Patent Examiner identified and cited the following as the most relevant prior art references found during the searches: (i) US 5,825,283, 10/1998, Camhi; (ii) US 6,046,678, 04/2000, Wilk; (iii) US 6,148,291, 11/2000, Radican; (iv) US 6,323,782, 11/2001, Stephens et al.; (v) US 6,429,810, 08/2002, De Roche; (vi) US 6,610,954, 08/2003, Takizawa; (vii) US 6,745,027, 06/2004, Twitchell, Jr.; and (viii) US 6,882,269, 04/2005, Moreno.
- 27. After giving full proper credit to the prior art and having conducted a thorough search for all relevant art and having fully considered the most relevant art known at the time, the United

States Patent Examiner allowed all of the claims of the '920 Patent to issue. In so doing, it is presumed that Examiner Trieu used his or her knowledge of the art when examining the claims. *K/S Himpp v. Hear-Wear Techs., LLC,* 751 F.3d 1362, 1369 (Fed. Cir. 2014). It is further presumed that Examiner Trieu has experience in the field of the invention, and that the Examiner properly acted in accordance with a person of ordinary skill. *In re Sang Su Lee,* 277 F.3d 1338, 1345 (Fed. Cir. 2002).

- 28. The '920 Patent is a pioneering patent, and has been cited as relevant prior art in over 130 subsequent United States Patent Applications, including Applications assigned to technology and business leaders such as Google, Inc., AT&T, FedEx, Qualcomm, Inc., Fujitsu, Ltd., United Parcel Services of America, American Airlines and NEC Corp.
- 29. The '029 Patent was examined by Primary United States Patent Examiner Van T. Trieu. During the examination of the '029 Patent, the United States Patent Examiner searched for prior art in the following US Classifications: G08G 1/20, G01S 13/84, G06Q 10/08, G06Q 10/087, G08B 1/08, G08G 1/202, G08G 1/205, H04W 4/02, and H04W 4/021.
- 30. After conducting searches for prior art during the examination of the '029 Patent, the United States Patent Examiner identified and cited the following as the most relevant prior art references found during the searches: (i) US 5,640,002, 06/1997, Ruppert et al.; (ii) US 5,825,283, 10/1998, Camhi; (iii) US 5,959,568, 09/1999, Woolley; (iv) US 6,046,678, 04/2000, Wilk; (v) US 6,148,291, 11/2000, Radican; (vi) US 6,281,797, 08/2001, Forster et al.; (vii) US 6,304,856, 10/2001, Soga; (viii) US 6,356,802, 03/2002, Takehara; (ix) US 6,411,891, 06/2002, Jones; (x) US 6,429,810, 08/2002, De Roche; (xi) US 6,610,954, 08/2003, Takizawa; (xii) US 6,745,027, 06/2004, Twitchell, Jr.; (xiii) US 6,748,318, 06/2004, Jones; (xix) US 6,859,722, 02/2005, Jones; (xx) US 6,882,269, 04/2005, Moreno;

- (xxi) US 6,904,359, 06/2005, Jones; (xxii) US 7,035,856, 04/2006, Morimoto; (xxiii) US 7,085,775, 08/2006, Short et al.; (xxiv) US 7,212,829, 05/2007, Lau et al.; (xxv) US 2002/0046173, 04/2002, Kelly; (xxvi) US 2002/0061758, 05/2002, Zarlengo et al.; (xxvii) US 2002/0120475, 08/2002, Morimoto; and (xxviii) US 2002/0132855, 07/2003, Swan.
- 31. After giving full proper credit to the prior art and having conducted a thorough search for all relevant art and having fully considered the most relevant art known at the time, the United States Patent Examiner allowed all of the claims of the '029 Patent to issue. In so doing, it is presumed that Examiner Trieu used his or her knowledge of the art when examining the claims. *K/S Himpp v. Hear-Wear Techs., LLC,* 751 F.3d 1362, 1369 (Fed. Cir. 2014). It is further presumed that Examiner Trieu has experience in the field of the invention, and that the Examiner properly acted in accordance with a person of ordinary skill. *In re Sang Su Lee,* 277 F.3d 1338, 1345 (Fed. Cir. 2002).
- 32. The '029 Patent is a pioneering patent, and has been cited as relevant prior art in over 130 subsequent United States Patent Applications, including Applications assigned to technology and business leaders such as Google, Inc., AT&T, FedEx, Qualcomm, Inc., Fujitsu, Ltd., United Parcel Services of America, American Airlines and NEC Corp.
- 33. The '109 Patent was examined by Primary United States Patent Examiner Van T. Trieu. During the examination of the '109 Patent, the United States Patent Examiner searched for prior art in the following US Classifications: G06Q 10/08, G06Q 10/083, G06Q 10/087, H04W 4/02, and H04W 4/021.
- 34. After conducting searches for prior art during the examination of the '109 Patent, the United States Patent Examiner identified and cited the following as the most relevant prior art references found during the searches: (i) US 5,959,568, 09/1999, Woolley; (ii) US 7,035,856,

- 04/2006, Morimoto; (iii) US 7,212,829, 05/2007, Lau et al.; (iv) US 7,253,731, 08/2007, Joao; (v) US 9,847,029, 12/2017, Joao; and (vi) US 2002/0120475, 08/2002, Morimoto.
- 35. After giving full proper credit to the prior art and having conducted a thorough search for all relevant art and having fully considered the most relevant art known at the time, the United States Patent Examiner allowed all of the claims of the '109 Patent to issue. In so doing, it is presumed that Examiner Trieu used his or her knowledge of the art when examining the claims. *K/S Himpp v. Hear-Wear Techs., LLC,* 751 F.3d 1362, 1369 (Fed. Cir. 2014). It is further presumed that Examiner Trieu has experience in the field of the invention, and that the Examiner properly acted in accordance with a person of ordinary skill. *In re Sang Su Lee,* 277 F.3d 1338, 1345 (Fed. Cir. 2002).
- 36. The '109 Patent is a pioneering patent, and has been cited as relevant prior art in over 130 subsequent United States Patent Applications, including Applications assigned to technology and business leaders such as Google, Inc., AT&T, FedEx, Qualcomm, Inc., Fujitsu, Ltd., United Parcel Services of America, American Airlines and NEC Corp.
- 37. The '268 Patent was examined by Primary United States Patent Examiner Van T. Trieu. During the examination of the '268 Patent, the United States Patent Examiner searched for prior art in the following US Classifications: G06Q 10/08 and G06Q 10/083.
- 38. After conducting searches for prior art during the examination of the '268 Patent, the United States Patent Examiner identified and cited the following as the most relevant prior art references found during the searches: (i) US 5,959,568, 09/1999, Woolley; (ii) US 6,148,291, 1/2000, Radican; (iii) US 6,492,904, 12/2002, Richards; (iv) US 7,035,856, 04/2006, Morimoto; (v) US 10,181,109, 01/2019, Joao; and (vi) US 2002/0111819, 08/2002, Li.

- 39. After giving full proper credit to the prior art and having conducted a thorough search for all relevant art and having fully considered the most relevant art known at the time, the United States Patent Examiner allowed all of the claims of the '268 Patent to issue. In so doing, it is presumed that Examiner Trieu used his or her knowledge of the art when examining the claims. *K/S Himpp v. Hear-Wear Techs., LLC,* 751 F.3d 1362, 1369 (Fed. Cir. 2014). It is further presumed that Examiner Trieu has experience in the field of the invention, and that the Examiner properly acted in accordance with a person of ordinary skill. *In re Sang Su Lee,* 277 F.3d 1338, 1345 (Fed. Cir. 2002).
- 40. The '268 Patent is a pioneering patent, and has been cited as relevant prior art in over 130 subsequent United States Patent Applications, including Applications assigned to technology and business leaders such as Google, Inc., AT&T, FedEx, Qualcomm, Inc., Fujitsu, Ltd., United Parcel Services of America, American Airlines and NEC Corp.
- 41. The claims of the Transcend Patents were all properly issued, and are valid and enforceable for the respective terms of their statutory life through expiration, and are enforceable for purposes of seeking damages for past infringement even post-expiration. *See, e.g., Genetics Institute, LLC v. Novartis Vaccines and Diagnostics, Inc.,* 655 F.3d 1291, 1299 (Fed. Cir. 2011) ("[A]n expired patent is not viewed as having 'never existed.' Much to the contrary, a patent does have value beyond its expiration date. For example, an expired patent may form the basis of an action for past damages subject to the six-year limitation under 35 U.S.C. § 286") (internal citations omitted).
- 42. The expiration dates of the Transcend Patents are at least the following: the '731 Patent expired on August 7, 2019 due to nonpayment of maintenance fees; the '920 Patent expires no earlier than April 27, 2022; the '029 Patent expires no earlier than November 1, 2023; the

'109 Patent expires no earlier than January 22, 2022; and the '268 Patent expires no earlier than January 22, 2022.

### **ACCUSED INSTRUMENTALITIES**

43. Upon information and belief, Defendants sell, advertise, offer for sale, use, or otherwise provide smart containers including, but not limited, to Reefer Cargo, Dry Cargo and/or Special Cargo (each being a "shipment conveyance device") for shipping and/or delivering goods, products, items, and/or other objects which are installed with Globe Tracker (GT) Communications Units provided by Globe Tracker International ("Accused Instrumentalities") that infringe the Transcend Patents.

## **COUNT I**

# (Infringement of U.S. Patent No. 10,181,109)

- 44. Plaintiff incorporates the above paragraphs by reference.
- 45. Defendants have been on actual notice of the '109 Patent at least as early as the date it received service of this Original Complaint.
- 46. On information and belief, Defendants own and control the operation of the Accused Instrumentalities and generates substantial financial revenues therefrom.
- 47. Upon information and belief, Defendants have directly infringed and continues to directly infringe at least claims 1, 8, 10, 13 and 14 of the '109 Patent by making, using, importing, selling, and/or, offering for sale the Accused Instrumentalities.
- 48. Defendants, with knowledge of the '109 Patent, also infringe at least claims 1, 8, 10, 13 and 14 of the '109 Patent by inducing others to infringe the '109 Patent. In particular,

- Defendants intend to induce its customers to infringe the '109 Patent by encouraging its customers to use the Accused Instrumentalities in a manner that results in infringement.
- 49. Defendants also induce others, including its customers, to infringe at least claims 1, 8, 10, 13 and 14 of the '109 Patent by providing technical support for the use of the Accused Instrumentalities.
- 50. Upon information and belief, Defendants make, use, sell and offer for sale an apparatus, comprising, a shipment conveyance device, wherein the shipment conveyance device is a shipping container, a pallet, or a piece of luggage. For example, Defendants provide smart containers including but not limited to Reefer Cargo, Dry Cargo and/or Special Cargo (each being a "shipment conveyance device") for shipping and/or delivering goods, products, items, and/or other objects which are installed with Globe Tracker (GT) Communications Units provided by Globe Tracker International. See Figures 1-9 below, which are screenshots of webpages found on the website <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.

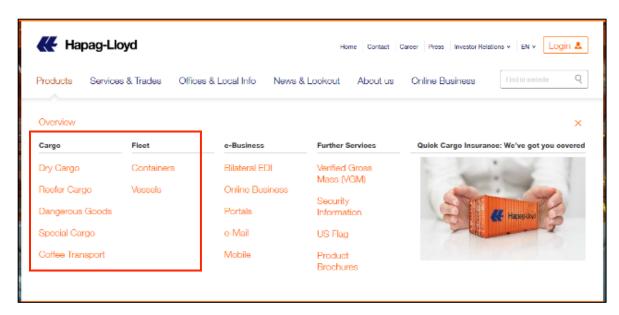


Figure 1<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products.html">https://www.hapag-lloyd.com/en/products.html</a>

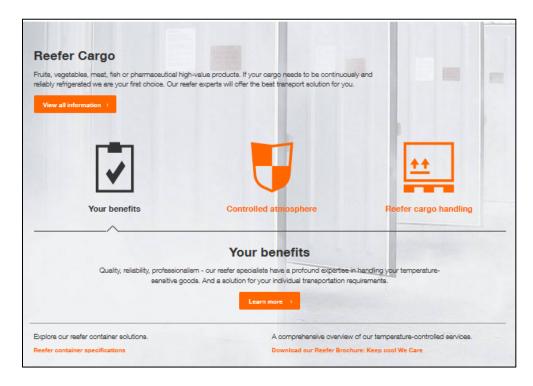


Figure 2<sup>2</sup>

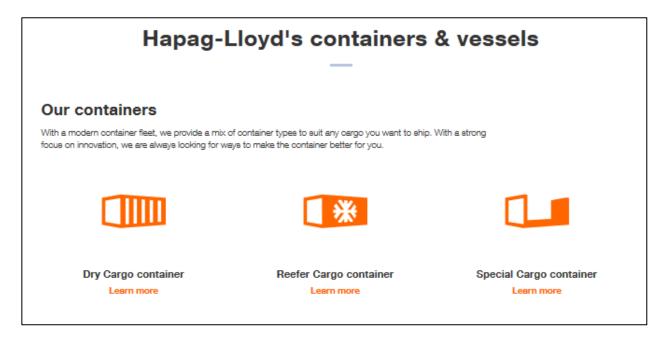


Figure 3<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products.html">https://www.hapag-lloyd.com/en/products.html</a>

<sup>&</sup>lt;sup>3</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products.html">https://www.hapag-lloyd.com/en/products.html</a>

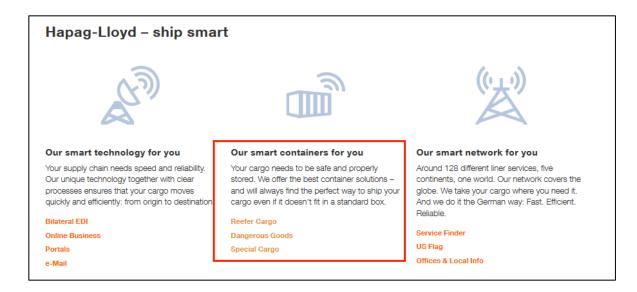


Figure 4<sup>4</sup>

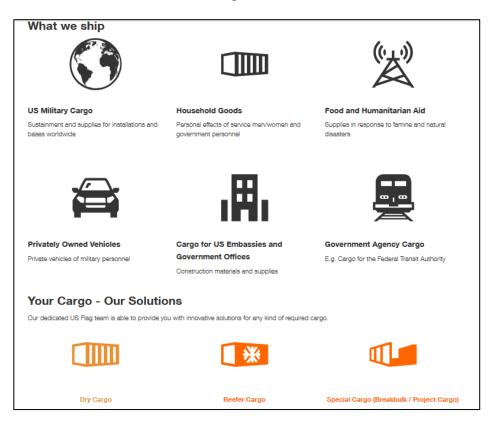


Figure 5<sup>5</sup>

<sup>&</sup>lt;sup>4</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products.html">https://www.hapag-lloyd.com/en/products.html</a>

<sup>&</sup>lt;sup>5</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products/us-flag/bydeparture.html#from=north">https://www.hapag-lloyd.com/en/products/us-flag/bydeparture.html#from=north</a> america&to

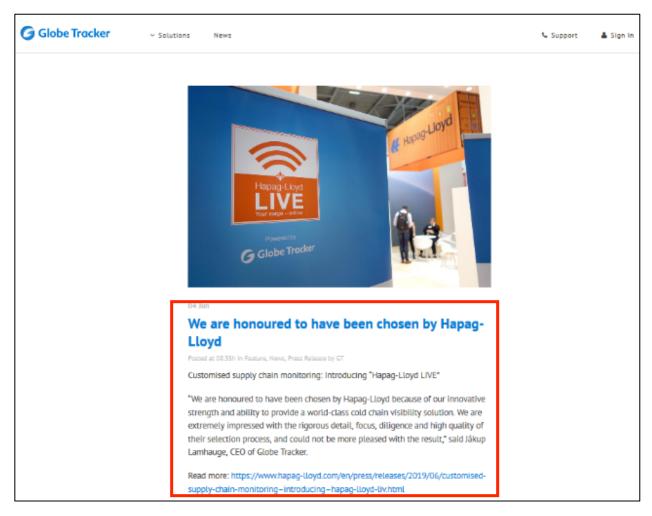


Figure 6<sup>6</sup>

<sup>&</sup>lt;sup>6</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/we-are-honoured-to-have-been-chosen-by-hapag-lloyd/">https://www.globetracker.com/we-are-honoured-to-have-been-chosen-by-hapag-lloyd/</a>

## Press Release



Telekom Group and Ericsson will also be supporting this project by providing global connectivity and state-of-the art IoT infrastructure for seamless integration into existing Hapag-Lloyd software and services. "We are honoured to have been chosen by Hapag-Lloyd because of our innovative strength and ability to provide a world-class cold chain visibility solution. We are extremely impressed with the rigorous detail, focus, diligence and high quality of their selection process, and could not be more pleased with the result," said Jákup Lamhauge, CEO of Globe Tracker.

Visitors to "transport logistic" in Munich are invited to learn more about "Hapag-Lloyd LIVE" and other digital initiatives at our daily info hour from 11:00 a.m. to 12:00 p.m. directly at our booth (#217) in Hall B3.

Find more information here: https://www.hapaglloyd.com/en/products/cargo/reefer/overview-reefer.html

### Press contacts

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#### About Hapag-Lloyd

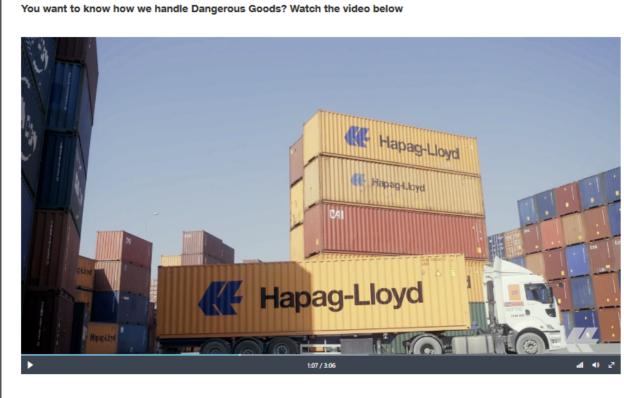
With a fleet of 235 modern container ships and a total transport capacity of 1.7 million TEU, Hapag-Lloyd is one of the world's leading liner shipping companies. The Company has around 12,800 employees and 398 offices in 128 countries. Hapag-Lloyd has a container capacity of approximately 2.5 million TEU – including one of the largest and most modern fleets of reefer containers. A total of 121 liner services worldwide ensure fast and reliable connections between more than 600 ports on all the continents. Hapag-Lloyd is one of the leading operators in the Transatlantic, Middle East, Latin America and Intra-America trades.

### About Globe Tracker ApS

Globe Tracker is a privately held Danish company that is specialized in supply chain tracking, monitoring and cutting-edge sensor technology, providing true end-to-end supply chain visibility. Globe Tracker has offices in Denmark, the United States, localand, the Farce Islands and Canada.

Figure 7<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/content/dam/website/downloads/press\_and\_media/publications/PR\_HapagLloydLIVEEN.pdf">https://www.hapag-lloyd.com/content/dam/website/downloads/press\_and\_media/publications/PR\_HapagLloydLIVEEN.pdf</a>, Page 2



### Our Offer

- \* One of the first liner shipping companies to set up a dedicated dangerous goods department
- · A global network of regional Dangerous Goods experts make sure your cargo gets the special attention it needs
- An excellent IT-setup developed for smooth processing of dangerous goods shipments
- Our outstanding "Cargo Patrol" software provides an extra layer of security by automatically identifying undeclared or suspicious bookings
- · Standardised global processes and strict internal guidelines that in some cases go beyond legal requirements
- · Comprehensive global service network

Figure 8<sup>8</sup>

<sup>&</sup>lt;sup>8</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products/cargo/dg/safety-first.html">https://www.hapag-lloyd.com/en/products/cargo/dg/safety-first.html</a>

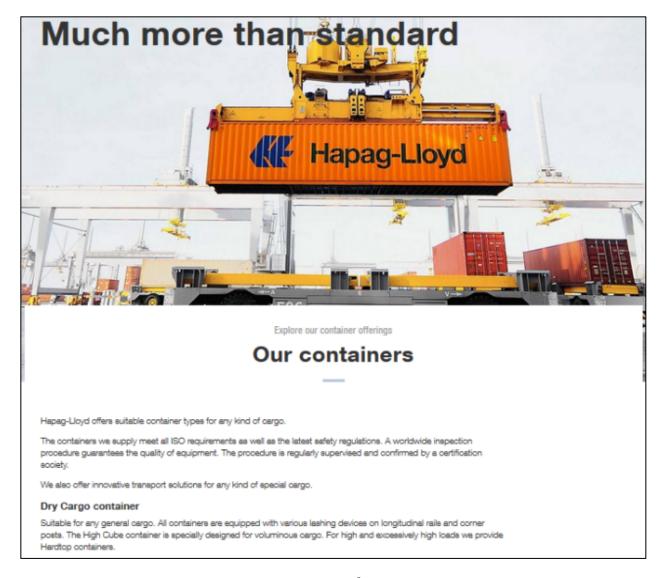


Figure 9<sup>9</sup>

51. Upon information and belief, Defendants provide a global positioning device, wherein the global positioning device is located in, on, or at, the shipment conveyance device, and further wherein the global positioning device determines a position or location of the shipment conveyance device. For example, Defendants provide a pre-installed Globe Tracker (GT) Communications Unit ("memory device") for real time GPS location. Defendant's customers accesses "Hapag-Lloyd LIVE" application and/or portal for real time container monitoring.

<sup>&</sup>lt;sup>9</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products/fleet/container.html">https://www.hapag-lloyd.com/en/products/fleet/container.html</a>

The smart containers are installed with subscription tracking services provided by Globe Tracker International for asset tracking, monitoring and/or remote management. The smart containers are fitted with GT Sense Device i.e. GT Communications Unit and GT Wireless Peripheral devices. GT Communications Unit includes a GPS geo-spatial positioning device ("global positioning device") to determine a position or location of the smart container (*See* Figure 6 above). See Figures 10-17 below, which are screenshots of webpages found on <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.



Figure 10<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Source, as visited on December 9, 2020: <a href="https://www.hapag-lloyd.com/en/products/cargo/reefer/hapag-lloyd-live.html">https://www.hapag-lloyd.com/en/products/cargo/reefer/hapag-lloyd-live.html</a>

# A modern reefer fleet



Hapag-Lloyd has continuously invested in reefer equipment over the past years, ensuring that we are one of the largest reefer carriers in the market. We are there for you when you need to get your cargo from point A to point B when cargo care and quality matters to you.

We also offer all of the technologies that you've come to expect from a first-class reefer carrier:

Controlled Atmosphere - control the ripening process of your fruit and extend your product's shelf life.

Cold Treatment - your perishables must meet quarantine requirements.

Our cold treatment process allows for avoidance of pesticide treatments and a more streamlined approval process with national authorities at destination

High Value Pharmaceuticals – We understand that when transporting your high value cargo, the safety of your cargo is of the utmost importance to you. That's why we employ a "high value process" which involves a thorough risk analysis to ensure that you are making the best decision for the transportation of your cargo.

Hapag-Lloyd LIVE - Real-time GPS location, power-off alerts, temperature profiles – these are just a few of the features the Hapag-Lloyd LIVE reefer monitoring solution will offer. In the future, Hapag-Lloyd will outfit its entire reefer fleet with Hapag-Lloyd LIVE monitoring devices.

Figure 11<sup>11</sup>

Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/products/cargo/reefer/overview-reefer.html">https://www.hapag-lloyd.com/en/products/cargo/reefer/overview-reefer.html</a>



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JUN 4, 2019

# Customised supply chain monitoring: Introducing "Hapag-Lloyd LIVE"

Real-time GPS location, temperature information, power-off alerts – these are just a few of the features that "Hapag-Lloyd LIVE" will offer. Today, at the "transport logistic" international trade fair in Munich, Hapag-Lloyd is introducing its new real-time container monitoring program "Hapag-Lloyd LIVE". In an initial step, the company is equipping its entire reefer fleet of some 100,000 containers. As the program is designed to fit customers' needs, Hapag-Lloyd intends to develop commercial products in close cooperation with its customers in order to adapt the solution even further.

The product features of "Hapag-Lloyd LIVE" will be gradually released for use as the entire reefer fleet is being outfitted. Furthermore, some "Hapag-Lloyd LIVE" features may also be made available upon request to dry container oustomers to add value through enhanced supply chain transparency.

"With our corporate 'Strategy 2023', we have set ourselves the goal of becoming number one for quality. Customers expect more reliable supply chains, so the industry needs to change and invest sufficiently. It is imperative that we understand and fulfil our oustomers' needs faster than our competitors," says Juan Carlos Duk, Managing Director Global Commercial Development at Hapag-Lloyd. "Inviting our customers to further shape our real-time monitoring products right from the beginning will give them an opportunity to receive products that are tailor-made for their needs – while giving us a chance to deliver the best-possible service at the same time."

Figure 12<sup>12</sup>

<sup>&</sup>lt;sup>12</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/press/releases/2019/06/customised-supply-chain-monitoring--introducing--hapag-lloyd-liv.html">https://www.hapag-lloyd.com/en/press/releases/2019/06/customised-supply-chain-monitoring--introducing--hapag-lloyd-liv.html</a>

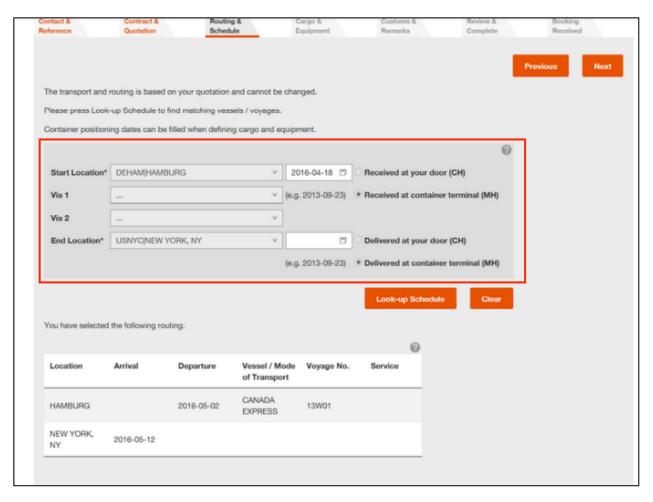


Figure 13<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/online-business/olb-user-guide/booking/routing-schedule.html">https://www.hapag-lloyd.com/en/online-business/olb-user-guide/booking/routing-schedule.html</a>

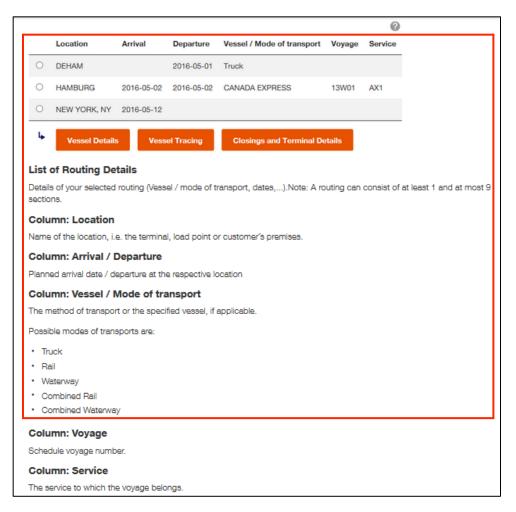


Figure 14<sup>14</sup>

<sup>&</sup>lt;sup>14</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/online-business/olb-user-guide/booking/routing-schedule.html">https://www.hapag-lloyd.com/en/online-business/olb-user-guide/booking/routing-schedule.html</a>

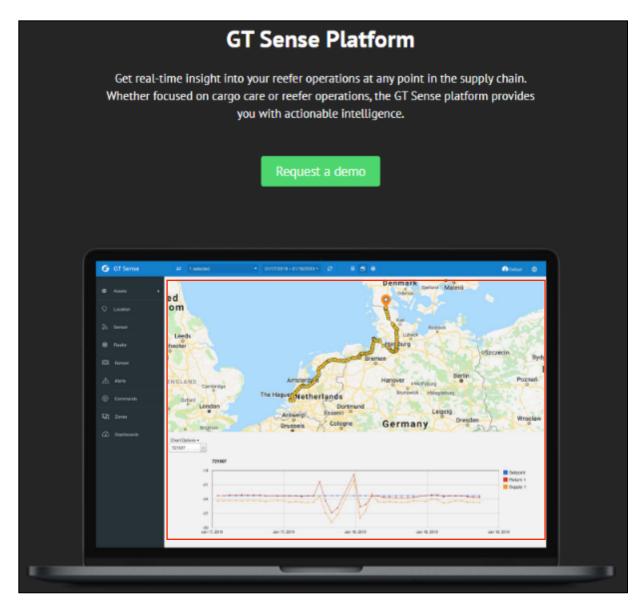


Figure 15<sup>15</sup>

<sup>&</sup>lt;sup>15</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>



Figure 16<sup>16</sup>

<sup>&</sup>lt;sup>16</sup> Source, as visited on December 10, 2020: <u>https://www.globetracker.com/gt-sense-reefer/</u>

# **Features and Benefits**

The benefits of real-time remote reefer monitoring and management are vast; and vary based on your operations.

Globe Tracker assigns a Customer Success Manager (CSM) that works with customers over the long term to maximize these benefits to fit their individual needs.

Schedule a meeting to learn more about how these benefits apply to you.

## **Remote Monitoring and Control**

- Remote monitoring and control of all major reefer types including Carrier, Thermo King, Daikin, and StarCool. Powered by RTE.
- Monitor location via GPS.
- Read and control set-point.
- Monitor temperature in real-time and report temperature excursion alerts.
- Run Remote PTI.
- 3<sup>rd</sup> party systems integration available.

# Figure 17<sup>17</sup>

52. Upon information and belief, Defendants provides a processor, wherein the processor generates a message in response to an occurrence of the event or in response to a request for information regarding the shipment conveyance device, wherein the request for information is automatically received by the receiver, wherein the message contains information regarding a position or location of the shipment conveyance device. For example, the GT Communications Unit (includes a processor) integrated with GT Wireless Peripherals measures information related to smart container including one or more of, but not limited to, door, humidity, light, vibration, temperature, shock, motion, buzzer and jamming

<sup>&</sup>lt;sup>17</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

experienced by the smart container and therefore, processes information regarding the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact, shock and damage and in response to the detected event, sends alerts ("message") containing information about the event to the customers of Defendants. For example, Defendants utilize GT Sense Platform and/or "Hapag-Lloyd LIVE" to provide its customers a dashboard/portal where its customers track their shipments and view information and alerts ("message") regarding the shipment as well as the shipment conveyance device, and therefore, provides a message in response to the occurrence of an event or in response to a request for information regarding the shipment conveyance device. A processor is necessarily required to provide such functionality and information (*See* Figures 6, 10, 13 and 14 above). See also Figures 18-22 below, which are screenshots of webpages found on www.hapag-lloyd.com.

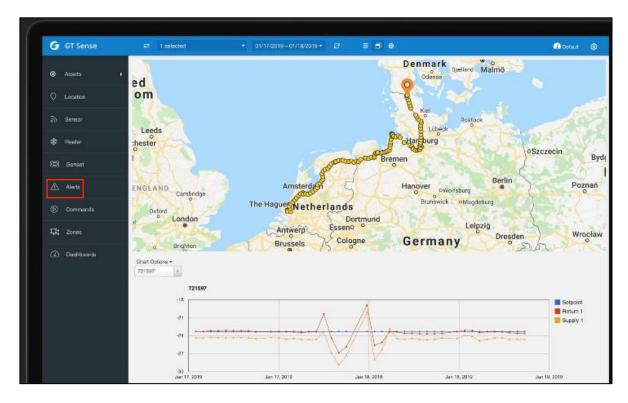


Figure 18<sup>18</sup>



Figure 19<sup>19</sup>

<sup>&</sup>lt;sup>18</sup> Source, as visited on December 9, 2020: <a href="https://www.hapag-lloyd.com/en/products/cargo/reefer/hapag-lloyd-live.html">https://www.hapag-lloyd.com/en/products/cargo/reefer/hapag-lloyd-live.html</a>

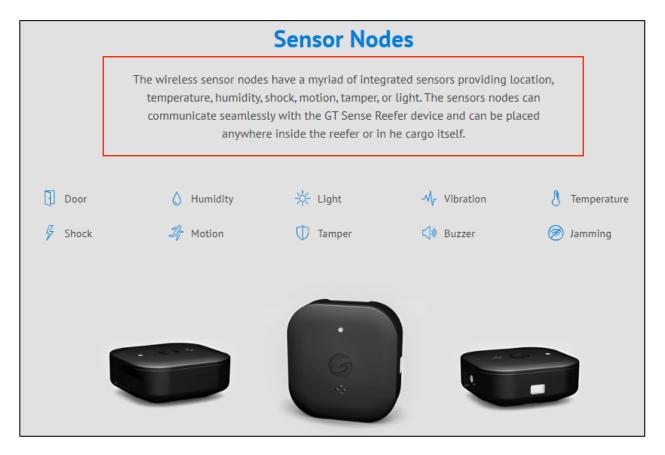


Figure 20<sup>20</sup>

<sup>&</sup>lt;sup>19</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

<sup>&</sup>lt;sup>20</sup> Source, as visited on December 10, 2020: https://www.globetracker.com/gt-sense-reefer/

## Remote Monitoring and Control

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- Read and control set-point.
- Monitor temperature in real-time and report temperature excursion alerts.
- Run Remote PTI.
- 3<sup>rd</sup> party systems integration available.

# Cargo Safety and Compliance

- Automate and improve compliance with applicable food and pharma safety regulations.
- Mitigate load-loss or spoilage.
- Quickly identify theft, delays and deviations.
- Identify and react to cargo impact events.
- Shock and Damage Alerts.
- Remote data log file upload.

Figure 21<sup>21</sup>

<sup>&</sup>lt;sup>21</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

## **Improved Operations**

- · Calculate dwell times by geozone.
- Gate In/Out based on geozones.
- Excess detention and demurrage reports.
- Real-time reefer alarms.
- Monitor plug-in times and terminal compliance to SLAs.
- Monitor usage and run times.
- Significantly reduce or eliminate manual inspections, and reduce risks caused by human error.
- Detect operational weak spots, allocate accountability, and adjust management accordingly.

## Improved M&R

- Automate and optimize reefer maintenance and service operations for more seamless operations, and maximize asset lifecycle.
- React in real-time to minimize or preempt equipment issues for more seamless operations.
- Remote software upgrades.
- Reduction in M&R costs and equipment management.
- Fast and simple installation with iOS or Android smartphone app.

# Figure 22<sup>22</sup>

53. Upon information and belief, Defendants provide a transmitter, wherein the transmitter is located in, on, or at, the shipment conveyance device, and further wherein the transmitter transmits the message to a communication device associated with an owner of the shipment conveyance device, a receiver of the shipment conveyance device, or an individual authorized to receive the message. For example, the GT Communications Unit, integrated

<sup>&</sup>lt;sup>22</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

with GT Wireless Peripherals, is located inside the smart container ("shipment conveyance device") and relays information in order to display information regarding the shipment conveyance device and alerts ("message") onto a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the GT Communication Unit comprises a transmitter for transmitting a message to a communication device associated with at least an owner or a receiver of the shipment conveyance device (*See* Figures 12 and 19-22 above).

54. Upon information and belief, Defendants provide a sensor, wherein the sensor monitors or measures a temperature during a shipment or a transportation of the shipment conveyance device, a shock exerted on the shipment conveyance device, an impact exerted on the shipment conveyance device. For example, the GT Communications Unit is integrated with GT Wireless Peripherals which include at least one or more of, but not limited to, a vibration sensor, temperature sensor, shock sensor, motion sensor and tamper sensor for measuring at least one or more of, but not limited to, temperature, shock, impact, motion and tampering experienced by the smart container during transportation. Therefore, the GT Communications Unit integrated with GT Wireless Peripherals comprises sensors that monitor and measure at least one or more of, but not limited to, temperature, shock, impact and force experienced by the shipment conveyance device. See Figures 23-28 below, which are screenshots of webpages found on <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.

### Remote Reefer Monitoring

Our Remote Reefer Monitoring system offers additional transparency and high-level safety for your temperature-sensitive and high-value reefer cargo, with a focus on interchange locations (e.g. terminals) and inland transport (e.g. barge, rail, truck). The new tracking technology comes as a full service from Hapag-Lloyd with installation of the GPS device connected to the reefer control panel. The technology provides 24/7 monitoring for every important parameter like supply and return air, humidity, ventilation, power-off periods and Cold Treatment transports. Remote Reefer Monitoring can trigger alerts and initiate a response from our reefer experts and engineers.

### **Cold Treatment**

Cold Treatment is a special post-harvest process for perishable products to meet quarantine requirements. By maintaining the goods at a specific temperature for a predetermined, uninterrupted period, Cold Treatment or Cold Sterilisation aims to eliminate insects such as the fruit fly. With the Cold Treatment process, pesticide treatments can be avoided. Reefer containers are fitted with temperature probes to measure the cargo pulp temperature. Temperatures are recorded and presented to the national authorities at the destination prior to the release of the cargo. If the Cold Treatment protocol requirements are fulfilled, the national authorities will grant import approval.



### **High Value Pharmaceuticals**

The pharmaceutical industry is a global industry with a steadily increasing demand for reefer container transportation. Pharmaceutical transports often involve high-value cargoes. Hapag-Lloyd applies a special high-value process for all reefer cargo exceeding a value of USD 500,000 per container. Within this process a dedicated expert team consisting of container engineers, cargo and insurance specialists evaluate the feasibility of each high-value business prior to acceptance to ensure safety precautions are met.

Figure 23<sup>23</sup>

Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/16228">https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/16228</a> Reefer Broschure Keep cool We Care update WEB.pdf, Page 5

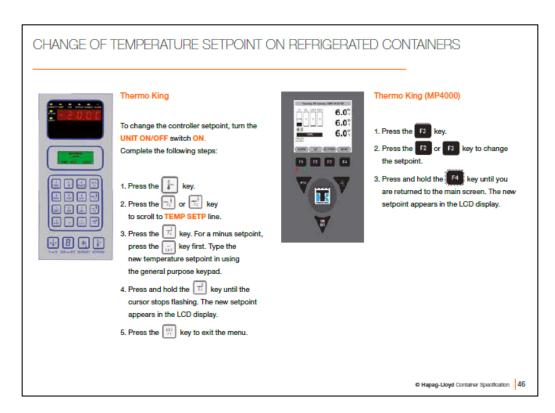


Figure 24<sup>24</sup>

<sup>&</sup>lt;sup>24</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/17038\_Update\_Container\_Specification\_engl\_sR\_GB.pdf">https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/17038\_Update\_Container\_Specification\_engl\_sR\_GB.pdf</a>, Page 46

# Controlled Atmosphere (CA)

With the ability to change the composition of the air in a reefer and thus to control the ripening process of 'living' cargo such as fruit or plants, the products reach their destination both considerably fresher and in better quality. Products can be transported over greater distances, opening up now market potential. This makes our refrigerated containers a real cost-effective alternative to airfreight. We can offer the flowing Controlled Atmosphere technologies:

#### ExtraFresh

A technology designed to control and preserve the desired transport atmosphere for fruits and vegetables. Hapag-Lloyd ExtraFresh takes advantage of the natural fruit respiration process to slow down the ripening and thus maintain the eargo's quality and extend the product's shelf life. Hapag-Lloyd ExtraFresh containers are equipped with oxygen (O<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) sensors, membrane technology and an automatic fresh air wentilation system. The latest controlled atmosphere technology to provide the optimum transport conditions for your fruits and vegetables.

#### ExtraFresh Plus

Extrafresh Plus is preferred for commodities requiring increased CO<sub>2</sub> levels, for example blueberries and stone fruits. A full CA service from the beginning of the transport to the final destination of the cargo. This technology allows for a pre-injection of an individual gas mix (N<sub>e</sub> and CO<sub>2</sub>) after which it utilizes the ExtraFresh CA system to maintain and actively control the CO<sub>2</sub> and CO<sub>2</sub> levels during transit. With ExtraFresh Plus Hapag-Lloyd offers an alternative for the Everfresh technology.

#### Air Exchange Management (AEM)

With technologies like AFAM+, AV+ or eAutofresh, the  $\mathrm{CO}_z$  content in the reefer container can be increased by up to ten per cent depending on cargo, by using the ventilation flaps. This results in a delayed ripening process. All the systems are suitable for climatic products that release  $\mathrm{CO}_z$  into the surrounding air.

#### Liventus & Maxtend

Liventus and Maxtend use the same principle as AFAM+ and eAutofresh. However, here an individual gas mixture is initially injected into the reefer. The use of these technologies provides additional quality assurance for the product.



Figure 25<sup>25</sup>

Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/16228\_Reefer\_Broschure\_Keep\_cool\_We\_Care\_update\_WEB.pdf">https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/16228\_Reefer\_Broschure\_Keep\_cool\_We\_Care\_update\_WEB.pdf</a>, Page 4

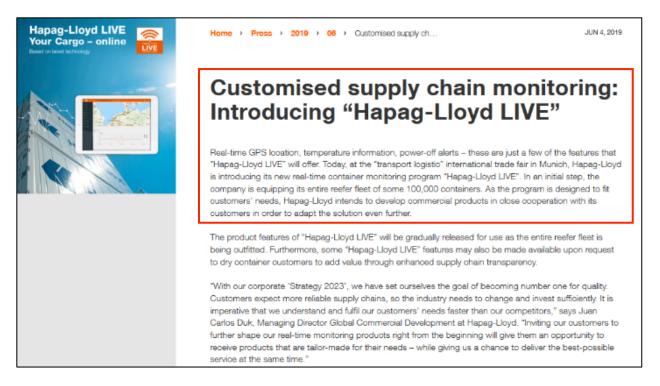


Figure 26<sup>26</sup>

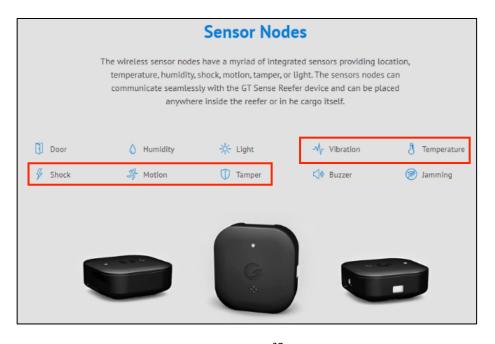


Figure 27<sup>27</sup>

<sup>&</sup>lt;sup>26</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/press/releases/2019/06/customised-supply-chain-monitoring--introducing--hapag-lloyd-liv.html">https://www.hapag-lloyd.com/en/press/releases/2019/06/customised-supply-chain-monitoring--introducing--hapag-lloyd-liv.html</a>

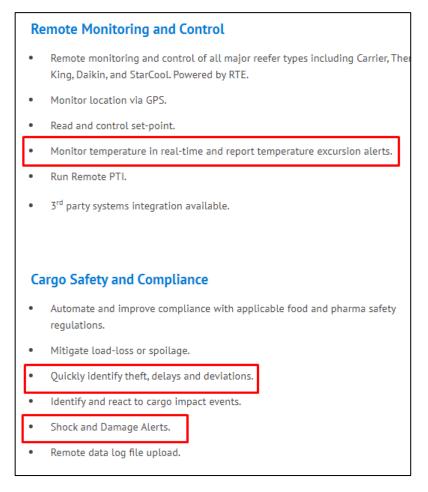


Figure 28<sup>28</sup>

Upon information and belief, Defendants also provide a message which contains information regarding a temperature during the shipment or the transportation, a change in a shipment or transportation temperature, or an impact or force exerted on the shipment conveyance device. For example, the GT Communications Unit, integrated with GT Wireless Peripherals and located inside smart container, transmits alerts ("message") related to temperature excursions to a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the message contains

<sup>&</sup>lt;sup>27</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

information regarding at least one of temperature of shipment and a change in shipment temperature. Further, the GT Communication Unit, integrated with GT Wireless Peripherals and located inside the smart container, measures information including, but not limited to, shock, motion, tamper and vibration experienced by the smart container. Therefore, the message contains information regarding an impact or force exerted on the shipment conveyance device (*See* Figures 24 and 26-28 above).

56. Upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a deviation from a pre-determined shipment or transportation route associated with a shipment or a transportation of or involving the shipment conveyance device. For example, the smart containers are fitted with GT Communications Unit which includes a GPS geo-spatial positioning device to determine a geo-fencing parameter, position/location and/or deviations in route ("transportation route associated with a shipment") of the smart container. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Hapag-Lloyd and/or the customer to receive alerts if the smart container deviates from the planned route. Therefore, GT Communication Unit integrated with GT Wireless Peripherals detects events related to deviation from a pre-determined transportation route (See Figures and 15 above). See Also Figures 29 and 30 below, which are screenshots of webpages found on <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.



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Figure 29<sup>29</sup>

<sup>&</sup>lt;sup>29</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/press/releases/2019/06/customised-supply-chain-monitoring--introducing--hapag-lloyd-liv.html">https://www.hapag-lloyd.com/en/press/releases/2019/06/customised-supply-chain-monitoring--introducing--hapag-lloyd-liv.html</a>

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- Remote monitoring and control of all major reefer types including Carrier, Thermo King, Daikin, and StarCool. Powered by RTE.
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### Cargo Safety and Compliance

- Automate and improve compliance with applicable food and pharma safety regulations.
- · Mitigate load-loss or spoilage.
- Quickly identify theft, delays and deviations.
- Identify and react to cargo impact events.
- Shock and Damage Alerts.
- Remote data log file upload.

Figure 30<sup>30</sup>

Upon information and belief, Defendants further provide an apparatus wherein the processor detects an occurrence giving rise to an insurance claim regarding the shipment conveyance device, and further wherein the message includes insurance claim information. For example, the GT Communication Unit, integrated with GT Wireless Peripherals, transmits alerts related to events including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact,

<sup>&</sup>lt;sup>30</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

shock and damage experienced by the shipment. Further, the GT Communication Unit notifies Defendants' customer when a cargo is damaged during transport. Based on the notification ("message"), Defendants' customers assess their loss and file an insurance claim accordingly. Therefore, the GT Communication Unit integrated with GT Wireless Peripherals detects occurrences giving rise to an insurance claim regarding the shipment conveyance device and transmits messages including insurance claim information. Upon information and belief, Defendants provide the feature of filing an insurance claim to its customers in the USA. See Figures 31 and 32 below, which are screenshots of webpages found on <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.



Figure 31<sup>31</sup>

<sup>&</sup>lt;sup>31</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/landingpage/cargo-insurance.html">https://www.hapag-lloyd.com/en/landingpage/cargo-insurance.html</a>

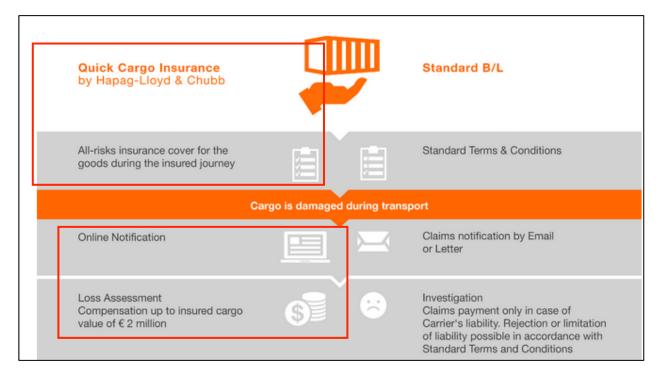


Figure  $32^{32}$ 

- 58. To the extent Defendants continue, and have continued, their infringing activities noted above in an infringing manner post-notice of the '109 Patent, such infringement is necessarily willful and deliberate.
- 59. On information and belief, Defendants have a policy or practice of not reviewing the patents of others. Further on information and belief, Defendants instruct its employees to not review the patents of others for clearance or to assess infringement thereof. As such, Defendants have been willfully blind to the patent rights of Plaintiff.

<sup>&</sup>lt;sup>32</sup> Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/en/landingpage/cargo-insurance.html">https://www.hapag-lloyd.com/en/landingpage/cargo-insurance.html</a>

60. Each of Defendants' aforesaid activities has been without authority and/or license from Plaintiff.

#### **COUNT II**

### (Infringement of U.S. Patent No. 9,847,029)

- 61. Plaintiff incorporates the above paragraphs by reference.
- 62. Defendants have been on actual notice of the '029 Patent at least as early as the date it received service of this Original Complaint.
- 63. On information and belief, Defendants own and control the operation of the Accused Instrumentalities and generates substantial financial revenues therefrom.
- 64. Upon information and belief, Defendants have directly infringed and continues to directly infringe at least Claims 2, 12, 15, 18 and 19 of the '029 Patent by making, using, importing, selling, and/or, offering for sale the Accused Instrumentalities.
- Defendants, with knowledge of the '029 Patent, also infringe at least Claims 2, 12, 15, 18 and 19 of the '029 Patent by inducing others to infringe the '029 Patent. In particular, Defendants intend to induce its customers to infringe the '029 Patent by encouraging its customers to use the Accused Instrumentalities in a manner that results in infringement.
- Defendants also induce others, including its customers, to infringe at least Claims 2, 12, 15, 18 and 19 of the '029 Patent by providing technical support for the use of the Accused Instrumentalities.
- 67. As described above (*see* ¶ 50), and upon information and belief, Defendants make, use, sell and offer for sale an apparatus, comprising, a shipment conveyance device, wherein the shipment conveyance device is a smart container, a pallet, or a piece of luggage. For example, Defendants provide smart containers including but not limited to Reefer Cargo, Dry

Cargo and/or Special Cargo (each being a "shipment conveyance device") for shipping and/or delivering goods, products, items, and/or other objects which are installed with Globe Tracker (GT) Communications Units provided by Globe Tracker International.

- As described above (see ¶ 51), and upon information and belief, Defendants provide a global positioning device, wherein the global positioning device is located in, on, or at, the shipment conveyance device, and further wherein the global positioning device determines a position or location of the shipment conveyance device. For example, Defendants provide a pre-installed Globe Tracker (GT) Communications Unit ("memory device") for real time GPS location. Defendant's customers accesses "Hapag-Lloyd LIVE" application and/or portal for real time container monitoring. The smart containers are installed with subscription tracking services provided by Globe Tracker International for asset tracking, monitoring and/or remote management. The smart containers are fitted with GT Sense Device i.e. GT Communications Unit and GT Wireless Peripheral devices. GT Communications Unit includes a GPS geo-spatial positioning device ("global positioning device") to determine a position or location of the smart container.
- 69. As described above (*see* ¶ 52), and upon information and belief, Defendants also provide a processor, wherein the processor processes information regarding the shipment conveyance device in response to an occurrence of an event or in response to a request for information regarding the shipment conveyance device, and further wherein the processor generates a message in response to the occurrence of the event or in response to the request for information regarding the shipment conveyance device. For example, the GT Communications Unit (includes a processor) integrated with GT Wireless Peripherals measures information related to smart container including one or more of, but not limited to,

door, humidity, light, vibration, temperature, shock, motion, buzzer and jamming experienced by the smart container and therefore, processes information regarding the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact, shock and damage and in response to the detected event, sends alerts ("message") containing information about the event to the customers of Defendants. For example, Defendants utilize GT Sense Platform and/or "Hapag-Lloyd LIVE" to provide its customers a dashboard/portal where its customers track their shipments and view information and alerts ("message") regarding the shipment as well as the shipment conveyance device, and therefore, provides a message in response to the occurrence of an event or in response to a request for information regarding the shipment conveyance device. A processor is necessarily required to provide such functionality and information.

70. As described above (*see* ¶ 53), and upon information and belief, Defendants provide a transmitter, wherein the transmitter is located in, on, or at, the shipment conveyance device, and further wherein the transmitter transmits the message to a communication device associated with an owner of the shipment conveyance device, a receiver of the shipment conveyance device, or an individual authorized to receive the message. For example, the GT Communications Unit, integrated with GT Wireless Peripherals, is located inside the smart container ("shipment conveyance device") and relays information in order to display information regarding the shipment conveyance device and alerts ("message") onto a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the GT Communication Unit

- comprises a transmitter for transmitting a message to a communication device associated with at least an owner or a receiver of the shipment conveyance device.
- 71. As described above (*see* ¶ 54), and upon information and belief, Defendant provides a sensor, wherein the sensor monitors or measures a temperature during a shipment or a transportation of the shipment conveyance device, a shock exerted on the shipment conveyance device, an impact exerted on the shipment conveyance device, or a force exerted on the shipment conveyance device. For example, the GT Communications Unit is integrated with GT Wireless Peripherals which include at least one or more of, but not limited to, a vibration sensor, temperature sensor, shock sensor, motion sensor and tamper sensor for measuring at least one or more of, but not limited to, temperature, shock, impact, motion and tampering experienced by the smart container during transportation. Therefore, the GT Communications Unit integrated with GT Wireless Peripherals comprises sensors that monitor and measure at least one or more of, but not limited to, temperature, shock, impact and force experienced by the shipment conveyance device.
- 72. As described above (*see* ¶ 55), and upon information and belief, Defendants also provide a message which contains information regarding a temperature during the shipment or the transportation, a change in a shipment or transportation temperature, or an impact or force exerted on the shipment conveyance device. For example, the GT Communications Unit, integrated with GT Wireless Peripherals and located inside smart container, transmits alerts ("message") related to temperature excursions to a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the message contains information regarding at least one of temperature of shipment and a change in shipment temperature. Further, the GT Communication Unit, integrated with GT Wireless Peripherals and located inside the smart container, measures

information including, but not limited to, shock, motion, tamper and vibration experienced by the smart container. Therefore, the message contains information regarding an impact or force exerted on the shipment conveyance device.

- 73. As described above (*see* ¶ 56), and upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a deviation from a pre-determined shipment or transportation route associated with a shipment or a transportation of or involving the shipment conveyance device. For example, the smart containers are fitted with GT Communications Unit which includes a GPS geo-spatial positioning device to determine a geo-fencing parameter, position/location and/or deviations in route ("transportation route associated with a shipment") of the smart container. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Hapag-Lloyd and/or the customer to receive alerts if the smart container deviates from the planned route. Therefore, GT Communication Unit integrated with GT Wireless Peripherals detects events related to deviation from a pre-determined transportation route.
- 74. To the extent Defendants continue, and have continued, their infringing activities noted above in an infringing manner post-notice of the '029 Patent, such infringement is necessarily willful and deliberate.
- 75. On information and belief, Defendants have a policy or practice of not reviewing the patents of others. Further on information and belief, Defendants instruct its employees to not review the patents of others for clearance or to assess infringement thereof. As such, Defendants have been willfully blind to the patent rights of Plaintiff.
- 76. Each of Defendants' aforesaid activities has been without authority and/or license from Plaintiff.

#### **COUNT III**

### (Infringement of U.S. Patent No. 7,482,920)

- 77. Plaintiff incorporates the above paragraphs by reference.
- 78. Defendants have been on actual notice of the '920 Patent at least as early as the date it received service of this Original Complaint.
- 79. On information and belief, Defendants own and control the operation of the Accused Instrumentalities and generates substantial financial revenues therefrom.
- 80. Upon information and belief, Defendants have directly infringed and continue to directly infringe at least Claims 1, 5, 9, 11, 12, 14 and 16 of the '920 Patent by making, using, importing, selling, and/or, offering for sale the Accused Instrumentalities.
- Defendants, with knowledge of the '920 Patent, also infringe at least Claims 1, 5, 9, 11, 12, 14 and 16 of the '920 Patent by inducing others to infringe the '920 Patent. In particular, Defendants intend to induce its customers to infringe the '920 Patent by encouraging its customers to use the Accused Instrumentalities in a manner that results in infringement.
- Defendants also induce others, including its customers, to infringe at least Claims 1, 5, 9, 11,12, 14 and 16 of the '920 Patent by providing technical support for the use of the Accused Instrumentalities.
- 83. As described above (*see* ¶ 50), and upon information and belief, Defendants make, use, sell and offer for sale an apparatus, comprising, a shipment conveyance device, wherein the shipment conveyance device is a shipping container, a pallet, or a piece of luggage. For example, Defendants provide smart containers including but not limited to Reefer Cargo, Dry Cargo and/or Special Cargo (each being a "shipment conveyance device") for shipping

and/or delivering goods, products, items, and/or other objects which are installed with Globe Tracker (GT) Communications Units provided by Globe Tracker International.

84. Upon information and belief, Defendants provide a memory device, wherein the memory device is located in, on, or at, the shipment conveyance device, wherein the memory device stores information regarding a description of a good, product, or item, being shipped or transported via or which is contained in or on the shipment conveyance device, and origination information, sender information, shipper information, destination information, receiver information, handling instruction information, delivery instruction information, invoice information, packing slip information, delivery time information, or payment instruction information, regarding the shipment conveyance device. For example, Hapag-Lloyd provides a pre-installed Globe Tracker (GT) Communications Unit ("memory device") for real time GPS location, temperature information and/or power-off alerts. The real time container monitoring is accessed by Defendants' customers on "Hapag-Lloyd LIVE" application and/or portal provided by Globe Tracker. Defendants' containers are fitted with the GT Communications Unit (provided as GT Sense Device by Globe Tracker Technologies) integrated with GT Wireless Peripheral devices (GT Wireless sensor nodes such as temperature sensor, door sensor, tamper sensor, vibration sensor, motion sensor, shock sensor, etc.). For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least an identification of Defendants (since it communicates position of the container and measurements from the sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor to Defendants' server), and therefore stores at least one or more of origination information, sender information, and shipper information

regarding the shipment conveyance device. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least an identification of Defendants' container (since it communicates position of the container and measurements from the sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor to Defendants' server), and therefore stores at least one or more of origination information, sender information, and shipper information regarding the shipment conveyance device. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least an identification of Defendants' customer (since it communicates position of the container and measurements from the sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor to Defendants' server and Defendants (who may have multiple customers availing Defendants' services at any given time) correlates the information to the particular customer in order to provide updates to the customer), and therefore stores at least one or more of origination information, sender information, shipper information, destination information and receiver information regarding the shipment conveyance device. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least a description of a good, product, or item, being shipped via the shipment conveyance device, because it identifies the position/location and sends the measurements from sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor, of each individual shipment to Defendants' server and/or Defendants/ customer (who may have multiple shipments in transit at a given time). For example, the GT

Communications Unit integrated with GT Wireless Peripherals stores measurements from one or more of door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor, and therefore stores a description of a good, product, or item, being shipped via the shipment conveyance device. Further, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Defendants and/or the customer to receive alerts if the shipment deviates from the planned route. Therefore, GT Communications Unit integrated with GT Wireless Peripherals stores at least destination information regarding the shipment conveyance device. Further, the GT Communications Unit integrated with GT Wireless Peripherals stores measurements and alerts regarding tampering, shocks, vibrations, temperature, gases and other handling parameters – and therefore stores at least handling instruction information for the shipment conveyance device. *See* Figures 6, 7, 10, 11, 13-16, 20 and 23-26 above. See also Figures 33 and 34 below, which are screenshots of webpages found on www.hapag-lloyd.com.

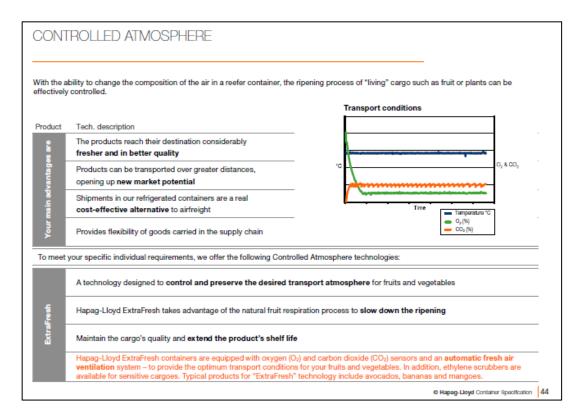


Figure 33<sup>33</sup>

Source, as visited on December 10, 2020: <a href="https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/17038\_Update\_Container\_Specification\_engl\_sRGB.pdf">https://www.hapag-lloyd.com/content/dam/website/downloads/pdf/17038\_Update\_Container\_Specification\_engl\_sRGB.pdf</a>, Page 44

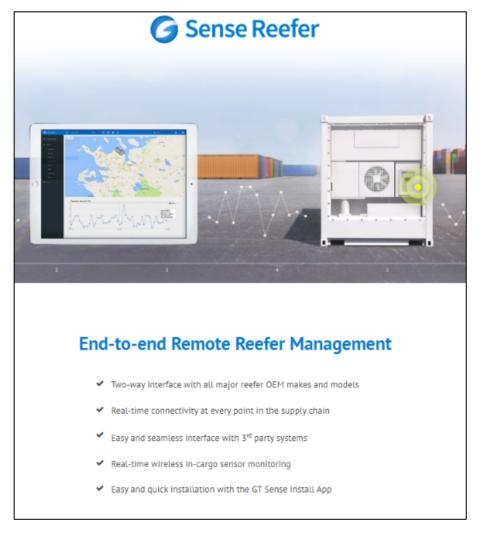


Figure 34<sup>34</sup>

85. As described above (*see* ¶ 51), and upon information and belief, Defendants provide a global positioning device, wherein the global positioning device is located in, on, or at, the shipment conveyance device, and further wherein the global positioning device determines a position or location of the shipment conveyance device. For example, Defendants provide a pre-installed Globe Tracker (GT) Communications Unit ("memory device") for real time GPS

<sup>&</sup>lt;sup>34</sup> Source, as visited on December 10, 2020: <a href="https://www.globetracker.com/gt-sense-reefer/">https://www.globetracker.com/gt-sense-reefer/</a>

location. Defendant's customers accesses "Hapag-Lloyd LIVE" application and/or portal for real time container monitoring. The smart containers are installed with subscription tracking services provided by Globe Tracker International for asset tracking, monitoring and/or remote management. The smart containers are fitted with GT Sense Device i.e. GT Communications Unit and GT Wireless Peripheral devices. GT Communications Unit includes a GPS geo-spatial positioning device ("global positioning device") to determine a position or location of the smart container.

86. As described above (see  $\P$  52), and upon information and belief, Defendants also provide a processing device, wherein the processing device processes information regarding the shipment conveyance device in response to an occurrence of an event or in response to a request for information regarding the shipment conveyance device, and further wherein the processor generates a message in response to the occurrence of the event or in response to the request for information regarding the shipment conveyance device. For example, the GT Communications Unit (includes a processor) integrated with GT Wireless Peripherals measures information related to smart container including one or more of, but not limited to, door, humidity, light, vibration, temperature, shock, motion, buzzer and jamming experienced by the smart container and therefore, processes information regarding the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact, shock and damage and in response to the detected event, sends alerts ("message") containing information about the event to the customers of Defendants. For example, Defendants utilize GT Sense Platform and/or "Hapag-Lloyd LIVE" to provide its customers a dashboard/portal where its customers track their shipments and view information and alerts ("message") regarding the shipment as well as the shipment conveyance device, and therefore, provides a message in response to the occurrence of an event or in response to a request for information regarding the shipment conveyance device. A processing device is necessarily required to provide such functionality and information.

- 87. As described above (*see* ¶ 53), and upon information and belief, Defendants provide a transmitter, wherein the transmitter is located in, on, or at, the shipment conveyance device, and further wherein the transmitter transmits the message to a communication device associated with an owner of the shipment conveyance device, a receiver of the shipment conveyance device, or an individual authorized to receive the message. For example, the GT Communications Unit, integrated with GT Wireless Peripherals, is located inside the smart container ("shipment conveyance device") and relays information in order to display information regarding the shipment conveyance device and alerts ("message") onto a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the GT Communication Unit comprises a transmitter for transmitting a message to a communication device associated with at least an owner or a receiver of the shipment conveyance device.
- 88. As described above (*see* ¶ 54), and upon information and belief, Defendants provide a sensor, wherein the sensor monitors or measures a temperature during a shipment or a transportation of the shipment conveyance device, a shock exerted on the shipment conveyance device, an impact exerted on the shipment conveyance device, or a force exerted on the shipment conveyance device. For example, the GT Communications Unit is integrated with GT Wireless Peripherals which include at least one or more of, but not limited to, a vibration sensor, temperature sensor, shock sensor, motion sensor and tamper sensor for measuring at

least one or more of, but not limited to, temperature, shock, impact, motion and tampering experienced by the smart container during transportation. Therefore, the GT Communications Unit integrated with GT Wireless Peripherals comprises sensors that monitor and measure at least one or more of, but not limited to, temperature, shock, impact and force experienced by the shipment conveyance device.

- 89. As described above (*see* ¶ 55), and upon information and belief, Defendants also provide a message which contains information regarding a temperature during the shipment or the transportation, a change in a shipment or transportation temperature, or an impact or force exerted on the shipment conveyance device. For example, the GT Communications Unit, integrated with GT Wireless Peripherals and located inside smart container, transmits alerts ("message") related to temperature excursions to a dashboard/portal used by Defendants' customers. Therefore, the message contains information regarding at least one of temperature of shipment and a change in shipment temperature. Further, the GT Communication Unit, integrated with GT Wireless Peripherals and located inside the smart container, measures information including, but not limited to, shock, motion, tamper and vibration experienced by the smart container. Therefore, the message contains information regarding an impact or force exerted on the shipment conveyance device.
- 90. As described above (*see* ¶ 56), and upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a deviation from a pre-determined shipment or transportation route associated with a shipment or a transportation of or involving the shipment conveyance device. For example, the smart containers are fitted with GT Communications Unit which includes a GPS geo-spatial positioning device to determine a geo-fencing parameter, position/location and/or deviations in route ("transportation route

associated with a shipment") of the smart container. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Hapag-Lloyd and/or the customer to receive alerts if the smart container deviates from the planned route. Therefore, GT Communication Unit integrated with GT Wireless Peripherals detects events related to deviation from a pre-determined transportation route.

91. Upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a shipment or transportation temperature which deviates from a shipment or transportation temperature requirement. For example, the GT Communication Unit, integrated with GT Wireless Peripherals, transmits alerts related to temperature excursion inside a container to Defendants' customers, and therefore, detects events including, but not limited to, deviation in shipment temperature (*See* Figures 23, 24 and 26 above). See also Figure 35 below, which is a screenshot of a webpage found on <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.

#### Remote Monitoring and Control

- Remote monitoring and control of all major reefer types including Carrier, Thermo King, Daikin, and StarCool. Powered by RTE.
- Monitor location via GPS.
- · Read and control set-point.
- Monitor temperature in real-time and report temperature excursion alerts.
- Run Remote PTI.
- 3<sup>rd</sup> party systems integration available.

#### Cargo Safety and Compliance

- Automate and improve compliance with applicable food and pharma safety regulations.
- · Mitigate load-loss or spoilage.
- Quickly identify theft, delays and deviations.
- Identify and react to cargo impact events.
- Shock and Damage Alerts.
- Remote data log file upload.

Figure 35<sup>35</sup>

92. Upon information and belief, Defendants further provide an apparatus wherein the event is a detection of an impact experienced by the shipment conveyance device, a mishandling of the shipment conveyance device, and an accident involving the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact, shock and damage experienced by the shipping container. Therefore, the GT Communication Unit integrated with GT Wireless Peripherals

<sup>&</sup>lt;sup>35</sup> Source, as visited on December 10, 2020: https://www.globetracker.com/gt-sense-reefer/

detects events including at least one of an impact, a force, a mishandling, a dropping and an accident experienced by the shipment conveyance device. See Figure 36 below, which is a screenshot of a webpage found on <a href="https://www.hapag-lloyd.com">www.hapag-lloyd.com</a>.

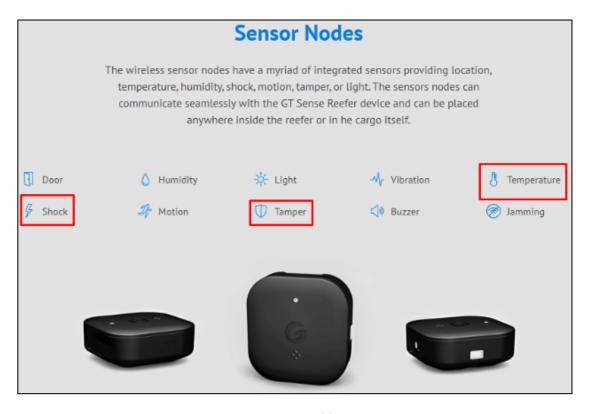


Figure  $36^{36}$ 

- 93. To the extent Defendants continue, and have continued, their infringing activities noted above in an infringing manner post-notice of the '920 Patent, such infringement is necessarily willful and deliberate.
- 94. On information and belief, Defendants have a policy or practice of not reviewing the patents of others. Further on information and belief, Defendants instruct its employees to not review

<sup>&</sup>lt;sup>36</sup> Source, as visited on December 10, 2020: https://www.globetracker.com/gt-sense-reefer/

- the patents of others for clearance or to assess infringement thereof. As such, Defendants have been willfully blind to the patent rights of Plaintiff.
- 95. Each of Defendants' aforesaid activities has been without authority and/or license from Plaintiff.

## **COUNT IV**

### (Infringement of U.S. Patent No. 10,796,268)

- 96. Plaintiff incorporates the above paragraphs by reference.
- 97. Defendants have been on actual notice of the '268 Patent at least as early as the date it received service of this Original Complaint.
- 98. On information and belief, Defendants own and control the operation of the Accused Instrumentalities and generates substantial financial revenues therefrom.
- 99. Upon information and belief, Defendants have directly infringed and continue to directly infringe at least Claims 1, 8, 10 and 12 of the '268 Patent by making, using, importing, selling, and/or, offering for sale the Accused Instrumentalities.
- 100. Defendants, with knowledge of the '268 Patent, also infringe at least Claims 1, 8, 10 and 12 of the '268 Patent by inducing others to infringe the '268 Patent. In particular, Defendants intend to induce its customers to infringe the '268 Patent by encouraging its customers to use the Accused Instrumentalities in a manner that results in infringement.
- 101. Defendants also induce others, including its customers, to infringe at least Claims 1, 8, 10 and 12 of the '268 Patent by providing technical support for the use of the Accused Instrumentalities.
- 102. As described above ( $see \ \P \ 50$ ), and upon information and belief, Defendants make, use, sell and offer for sale an apparatus, comprising, a shipment conveyance device, wherein the

shipment conveyance device is a shipping container, a pallet, or a piece of luggage. For example, Defendants provide smart containers including but not limited to Reefer Cargo, Dry Cargo and/or Special Cargo (each being a "shipment conveyance device") for shipping and/or delivering goods, products, items, and/or other objects which are installed with Globe Tracker (GT) Communications Units provided by Globe Tracker International.

- 103. As described above (see ¶ 51), and upon information and belief, Defendants provide a global positioning device, wherein the global positioning device is located in, on, or at, the shipment conveyance device, and further wherein the global positioning device determines a position or location of the shipment conveyance device. By way of example, Defendants provide a pre-installed Globe Tracker (GT) Communications Unit ("memory device") for real time GPS location. Defendant's customers accesses "Hapag-Lloyd LIVE" application and/or portal for real time container monitoring. The smart containers are installed with subscription tracking services provided by Globe Tracker International for asset tracking, monitoring and/or remote management. The smart containers are fitted with GT Sense Device i.e. GT Communications Unit and GT Wireless Peripheral devices. GT Communications Unit includes a GPS geo-spatial positioning device ("global positioning device") to determine a position or location of the smart container.
- 104. As described above (*see* ¶ 52), and upon information and belief, Defendants also provide a processing device, wherein the processing device processes information regarding the shipment conveyance device in response to an occurrence of an event or in response to a request for information regarding the shipment conveyance device, and further wherein the processor generates a message in response to the occurrence of the event or in response to the request for information regarding the shipment conveyance device. For example, the GT

Communications Unit (includes a processor) integrated with GT Wireless Peripherals measures information related to smart container including one or more of, but not limited to, door, humidity, light, vibration, temperature, shock, motion, buzzer and jamming experienced by the smart container and therefore, processes information regarding the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact, shock and damage and in response to the detected event, sends alerts ("message") containing information about the event to the customers of Defendants. For example, Defendants utilize GT Sense Platform and/or "Hapag-Lloyd LIVE" to provide its customers a dashboard/portal where its customers track their shipments and view information and alerts ("message") regarding the shipment as well as the shipment conveyance device, and therefore, provides a message in response to the occurrence of an event or in response to a request for information regarding the shipment conveyance device. A processing device is necessarily required to provide such functionality and information.

105. As described above (*see* ¶ 53), and upon information and belief, Defendants provide a transmitter, wherein the transmitter is located in, on, or at, the shipment conveyance device, and further wherein the transmitter transmits the message to a communication device associated with an owner of the shipment conveyance device, a receiver of the shipment conveyance device, or an individual authorized to receive the message. For example, the GT Communications Unit, integrated with GT Wireless Peripherals, is located inside the smart container ("shipment conveyance device") and relays information in order to display information regarding the shipment conveyance device and alerts ("message") onto a

dashboard/portal used by Hapag-Lloyd's customers. Therefore, the GT Communication Unit comprises a transmitter for transmitting a message to a communication device associated with at least an owner or a receiver of the shipment conveyance device.

- 106. As described above (*see* ¶ 54), and upon information and belief, Defendants provide a sensor, wherein the sensor monitors or measures a temperature during a shipment or a transportation of the shipment conveyance device, a shock exerted on the shipment conveyance device, an impact exerted on the shipment conveyance device, or a force exerted on the shipment conveyance device. For example, the GT Communications Unit is integrated with GT Wireless Peripherals which include at least one or more of, but not limited to, a vibration sensor, temperature sensor, shock sensor, motion sensor and tamper sensor for measuring at least one or more of, but not limited to, temperature, shock, impact, motion and tampering experienced by the smart container during transportation. Therefore, the GT Communications Unit integrated with GT Wireless Peripherals comprises sensors that monitor and measure at least one or more of, but not limited to, temperature, shock, impact and force experienced by the shipment conveyance device.
- 107. As described above (*see* ¶ 55), and upon information and belief, Defendants also provide a message which contains information regarding a temperature during the shipment or the transportation, a change in a shipment or transportation temperature, or an impact or force exerted on the shipment conveyance device. For example, the GT Communications Unit, integrated with GT Wireless Peripherals and located inside smart container, transmits alerts ("message") related to temperature excursions to a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the message contains information regarding at least one of temperature of shipment and a change in shipment temperature. Further, the GT Communication Unit,

integrated with GT Wireless Peripherals and located inside the smart container, measures information including, but not limited to, shock, motion, tamper and vibration experienced by the smart container. Therefore, the message contains information regarding an impact or force exerted on the shipment conveyance device.

- 108. As described above (*see* ¶ 56), and upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a deviation from a pre-determined shipment or transportation route associated with a shipment or a transportation of or involving the shipment conveyance device. For example, the smart containers are fitted with GT Communications Unit which includes a GPS geo-spatial positioning device to determine a geo-fencing parameter, position/location and/or deviations in route ("transportation route associated with a shipment") of the smart container. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Hapag-Lloyd and/or the customer to receive alerts if the smart container deviates from the planned route. Therefore, GT Communication Unit integrated with GT Wireless Peripherals detects events related to deviation from a pre-determined transportation route.
- 109. To the extent Defendants continue, and have continued, their infringing activities noted above in an infringing manner post-notice of the '268 Patent, such infringement is necessarily willful and deliberate.
- 110. On information and belief, Defendants have a policy or practice of not reviewing the patents of others. Further on information and belief, Defendants instruct its employees to not review the patents of others for clearance or to assess infringement thereof. As such, Defendants have been willfully blind to the patent rights of Plaintiff.

111. Each of Defendants' aforesaid activities has been without authority and/or license from Plaintiff.

#### **COUNT V**

## (Infringement of U.S. Patent No. 7,253,731)

- 112. Plaintiff incorporates the above paragraphs by reference.
- 113. Defendants have been on actual notice of the '731 Patent at least as early as the date it received service of this Original Complaint.
- 114. On information and belief, Defendants own and control the operation of the Accused Instrumentalities and generates substantial financial revenues therefrom.
- 115. Upon information and belief, Defendants have directly infringed and continue to directly infringe at least Claims 1, 5, 9, 11, 12, 14 and 16 of the '731 Patent by making, using, importing, selling, and/or, offering for sale the Accused Instrumentalities.
- 116. Defendants, with knowledge of the '731 Patent, also infringe at least Claims 1, 5, 9, 11, 12, 14 and 16 of the '731 Patent by inducing others to infringe the '731 Patent. In particular, Defendants intend to induce its customers to infringe the '731 Patent by encouraging its customers to use the Accused Instrumentalities in a manner that results in infringement.
- 117. Defendants also induce others, including its customers, to infringe at least Claims 11, 5, 9, 11, 12, 14 and 16 of the '268 Patent by providing technical support for the use of the Accused Instrumentalities.
- 118. As described above (*see* ¶ 50), and upon information and belief, Defendants make, use, sell and offer for sale an apparatus, comprising, a shipment conveyance device, wherein the shipment conveyance device is a shipping container, a pallet, or a piece of luggage. For example, Defendants provide smart containers including but not limited to Reefer Cargo, Dry

Cargo and/or Special Cargo (each being a "shipment conveyance device") for shipping and/or delivering goods, products, items, and/or other objects which are installed with Globe Tracker (GT) Communications Units provided by Globe Tracker International.

As described above (see ¶ 84), and upon information and belief, Defendants provide a 119. memory device, wherein the memory device is located in, on, or at, the shipment conveyance device, wherein the memory device stores information regarding a description of a good, product, or item, being shipped or transported via or which is contained in or on the shipment conveyance device, and origination information, sender information, shipper information, destination information, receiver information, handling instruction information, delivery instruction information, invoice information, packing slip information, delivery time information, or payment instruction information, regarding the shipment conveyance device. For example, Hapag-Lloyd provides a pre-installed Globe Tracker (GT) Communications Unit ("memory device") for real time GPS location, temperature information and/or poweroff alerts. The real time container monitoring is accessed by Defendants' customers on "Hapag-Lloyd LIVE" application and/or portal provided by Globe Tracker. Defendants' containers are fitted with the GT Communications Unit (provided as GT Sense Device by Globe Tracker Technologies) integrated with GT Wireless Peripheral devices (GT Wireless sensor nodes such as temperature sensor, door sensor, tamper sensor, vibration sensor, motion sensor, shock sensor, etc.). For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least an identification of Defendants (since it communicates position of the container and measurements from the sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor to Defendants' server), and

therefore stores at least one or more of origination information, sender information, and shipper information regarding the shipment conveyance device. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least an identification of Defendants' container (since it communicates position of the container and measurements from the sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor to Defendants' server), and therefore stores at least one or more of origination information, sender information, and shipper information regarding the shipment conveyance device. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least an identification of Defendants' customer (since it communicates position of the container and measurements from the sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor to Defendants' server and Defendants (who may have multiple customers availing Defendants' services at any given time) correlates the information to the particular customer in order to provide updates to the customer), and therefore stores at least one or more of origination information, sender information, shipper information, destination information and receiver information regarding the shipment conveyance device. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores at least a description of a good, product, or item, being shipped via the shipment conveyance device, because it identifies the position/location and sends the measurements from sensors including but not limited to door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor, of each individual shipment to Defendants' server and/or

Defendants/ customer (who may have multiple shipments in transit at a given time). For example, the GT Communications Unit integrated with GT Wireless Peripherals stores measurements from one or more of door sensor, humidity sensor, light sensor, vibration sensor, temperature sensor, shock sensor, motion sensor, tamper sensor and jamming sensor, and therefore stores a description of a good, product, or item, being shipped via the shipment conveyance device. Further, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Defendants and/or the customer to receive alerts if the shipment deviates from the planned route. Therefore, GT Communications Unit integrated with GT Wireless Peripherals stores at least destination information regarding the shipment conveyance device. Further, the GT Communications Unit integrated with GT Wireless Peripherals stores measurements and alerts regarding tampering, shocks, vibrations, temperature, gases and other handling parameters – and therefore stores at least handling instruction information for the shipment conveyance device.

120. As described above (*see* ¶ 51), and upon information and belief, Defendants provide a global positioning device, wherein the global positioning device is located in, on, or at, the shipment conveyance device, and further wherein the global positioning device determines a position or location of the shipment conveyance device. For example, Defendants provide a preinstalled Globe Tracker (GT) Communications Unit ("memory device") for real time GPS location. Defendant's customers accesses "Hapag-Lloyd LIVE" application and/or portal for real time container monitoring. The smart containers are installed with subscription tracking services provided by Globe Tracker International for asset tracking, monitoring and/or remote management. The smart containers are fitted with GT Sense Device i.e. GT Communications Unit and GT Wireless Peripheral devices. GT Communications Unit

includes a GPS geo-spatial positioning device ("global positioning device") to determine a position or location of the smart container.

As described above (see  $\P$  52), and upon information and belief, Defendants also provide a processing device, wherein the processing device processes information regarding the shipment conveyance device in response to an occurrence of an event or in response to a request for information regarding the shipment conveyance device, and further wherein the processor generates a message in response to the occurrence of the event or in response to the request for information regarding the shipment conveyance device. For example, the GT Communications Unit (includes a processor) integrated with GT Wireless Peripherals measures information related to smart container including one or more of, but not limited to, door, humidity, light, vibration, temperature, shock, motion, buzzer and jamming experienced by the smart container and therefore, processes information regarding the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, load-loss, theft, delay, deviation in planned route, cargo impact, shock and damage and in response to the detected event, sends alerts ("message") containing information about the event to the customers of Defendants. For example, Defendants utilize GT Sense Platform and/or "Hapag-Lloyd LIVE" to provide its customers a dashboard/portal where its customers track their shipments and view information and alerts ("message") regarding the shipment as well as the shipment conveyance device, and therefore, provides a message in response to the occurrence of an event or in response to a request for information regarding the shipment conveyance device. A processing device is necessarily required to provide such functionality and information.

- 122. As described above (*see* ¶ 53), and upon information and belief, Defendants provide a transmitter, wherein the transmitter is located in, on, or at, the shipment conveyance device, and further wherein the transmitter transmits the message to a communication device associated with an owner of the shipment conveyance device, a receiver of the shipment conveyance device, or an individual authorized to receive the message. For example, the GT Communications Unit, integrated with GT Wireless Peripherals, is located inside the smart container ("shipment conveyance device") and relays information in order to display information regarding the shipment conveyance device and alerts ("message") onto a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the GT Communication Unit comprises a transmitter for transmitting a message to a communication device associated with at least an owner or a receiver of the shipment conveyance device.
- As described above (*see* ¶ 54), and upon information and belief, Defendants provide a sensor, wherein the sensor monitors or measures a temperature during a shipment or a transportation of the shipment conveyance device, a shock exerted on the shipment conveyance device, an impact exerted on the shipment conveyance device, or a force exerted on the shipment conveyance device. For example, the GT Communications Unit is integrated with GT Wireless Peripherals which include at least one or more of, but not limited to, a vibration sensor, temperature sensor, shock sensor, motion sensor and tamper sensor for measuring at least one or more of, but not limited to, temperature, shock, impact, motion and tampering experienced by the smart container during transportation. Therefore, the GT Communications Unit integrated with GT Wireless Peripherals comprises sensors that monitor and measure at least one or more of, but not limited to, temperature, shock, impact and force experienced by the shipment conveyance device.

- 124. As described above (*see* ¶ 55), and upon information and belief, Defendants also provide a message which contains information regarding a temperature during the shipment or the transportation, a change in a shipment or transportation temperature, or an impact or force exerted on the shipment conveyance device. For example, the GT Communications Unit, integrated with GT Wireless Peripherals and located inside smart container, transmits alerts ("message") related to temperature excursions to a dashboard/portal used by Hapag-Lloyd's customers. Therefore, the message contains information regarding at least one of temperature of shipment and a change in shipment temperature. Further, the GT Communication Unit, integrated with GT Wireless Peripherals and located inside the smart container, measures information including, but not limited to, shock, motion, tamper and vibration experienced by the smart container. Therefore, the message contains information regarding an impact or force exerted on the shipment conveyance device.
- 125. As described above (*see* ¶ 56), and upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a deviation from a pre-determined shipment or transportation route associated with a shipment or a transportation of or involving the shipment conveyance device. For example, the smart containers are fitted with GT Communications Unit which includes a GPS geo-spatial positioning device to determine a geo-fencing parameter, position/location and/or deviations in route ("transportation route associated with a shipment") of the smart container. For example, the GT Communications Unit integrated with GT Wireless Peripherals stores geofencing parameters allowing Hapag-Lloyd and/or the customer to receive alerts if the smart container deviates from the planned route. Therefore, GT Communication Unit integrated with GT Wireless Peripherals detects events related to deviation from a pre-determined transportation route.

- 126. As described above (*see* ¶ 91), and upon information and belief, Defendants further provide an apparatus wherein the event is a detection of a shipment or transportation temperature which deviates from a shipment or transportation temperature requirement. For example, the GT Communication Unit, integrated with GT Wireless Peripherals, transmits alerts related to temperature excursion inside a container to Defendants' customers, and therefore, detects events including, but not limited to, deviation in shipment temperature.
- 127. As described above (*see* ¶ 92), and upon information and belief, Defendants further provide an apparatus wherein the event is a detection of at least one of of an impact experienced by the shipment conveyance device, a force experienced the shipment conveyance device, a mishandling of the shipment conveyance device, a dropping of the shipment conveyance device, and an accident involving the shipment conveyance device. For example, the GT Communication Unit integrated with GT Wireless Peripherals detects an event including one or more of, but not limited to, tampering of cargo, jamming, deviation in temperature, loadloss, theft, delay, deviation in planned route, cargo impact, shock and damage experienced by the shipping container. Therefore, the GT Communication Unit integrated with GT Wireless Peripherals detects events including at least one of an impact, a force, a mishandling, a dropping and an accident experienced by the shipment conveyance device.
- 128. To the extent Defendants continue, and have continued, their infringing activities noted above in an infringing manner post-notice of the '731 Patent, such infringement is necessarily willful and deliberate.
- 129. On information and belief, Defendants have a policy or practice of not reviewing the patents of others. Further on information and belief, Defendants instruct its employees to not review

the patents of others for clearance or to assess infringement thereof. As such, Defendants have been willfully blind to the patent rights of Plaintiff.

130. Each of Defendants' aforesaid activities has been without authority and/or license from Plaintiff.

### PRAYER FOR RELIEF

WHEREFORE, Transcend respectfully requests the Court enter judgment against Defendants:

- 1. Declaring that Defendants have infringed each of the Transcend Patents;
- 2. Declaring that Defendants' infringement of each of the Transcend Patents has been willful and deliberate;
- Awarding Transcend compensatory damages as a result of Defendants' infringement of the Transcend Patents;
- 4. Awarding Transcend treble damages and pre-judgment interest under 35 U.S.C. § 284 as a result of Defendants' willful and deliberate infringement of the Transcend Patents;
- 5. Granting a permanent injunction pursuant to 35 U.S.C. § 283, enjoining Defendants from further acts of infringement with respect to the Transcend Patents;
- 6. Awarding Transcend its costs, attorneys' fees, expenses, and interest;
- 7. Awarding Transcend ongoing post-trial royalties; and
- 8. Granting Transcend such further relief as the Court finds appropriate.

### **JURY DEMAND**

Transcend demands trial by jury, under Fed. R. Civ. P. 38.

Dated: December 29, 2020

Respectfully Submitted /s/ Thomas Fasone III
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