# IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF VIRGINIA

HL KLEMOVE CORP.	)
Plaintiff,	) )
v.	)
FORAS TECHNOLOGIES LTD.	) Case No
Defendant.	) ) )

#### COMPLAINT FOR DECLARATORY JUDGMENT

1. Plaintiff HL Klemove Corp. ("HLK" or "Plaintiff") brings this Complaint against Defendant Foras Technologies Ltd. ("Foras" or "Defendant"). In support of this Complaint for Declaratory Judgment, Plaintiff alleges as follows:

#### **NATURE OF THE ACTION**

2. This is an action for declaratory judgment of non-infringement of U.S. Patent No. 7,502,958 ("the '958 Patent" or "Asserted Patent") under the Federal Declaratory Judgment Act, 28 U.S.C. §§ 2201 and 2022, and the patent laws of the United States, 35 § 101 et seq., and for other relief the Court deems just and proper. The '958 Patent is attached hereto as Exhibit 1. This lawsuit follows a litigation campaign Foras has initiated against automotive customers, including Plaintiff's customer, in which Foras alleges the customer's use of certain of Plaintiff's radar products infringe the '958 Patent. In addition, Foras has attempted to serve a subpoena on Plaintiff. Based on Foras' activities and allegations, as described further below, Plaintiff

reasonably apprehends that Foras accuses Plaintiff of infringing, directly or indirectly, at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent.

- 3. Plaintiff is an original equipment manufacturer focused on autonomous driving and mobility solutions. Plaintiff's products include radars, cameras, lidar, control units, adaptive cruise control, lane centering assist systems, highway assist systems and parking assist systems, among others. Automobile manufacturers incorporate Plaintiff's software and hardware products, also known as Advanced Driver Assistance Systems (ADAS), in their automobiles. Plaintiff's ADAS products, including radar-based ADAS products, provide customers with robust range measurement and object detection for adaptive cruise control, blind spot detection, lane change assistance, parking assistance and cross traffic assistance applications.
- 4. Plaintiff's customers are among the world's most innovative automotive manufacturers. Of the companies Foras has sued for infringement of the '958 Patent, Kia Corporation ("Kia") is one of Plaintiff's customers.
- 5. Foras is a patent monetization entity. On information and belief, Foras neither makes products nor invests in research & development. Foras' business is litigation. Foras contends, in its complaint filed in *Foras Technologies Ltd. v. Kia Corporation* et al., Case No. 2:23-cv-00219-JRG (the "*Kia* case"), that it is the sole owner by assignment of all right, title, and interest in the '958 Patent, including the right to recover for past, present, and future infringement. The complaint in the *Kia* case is attached hereto as Exhibit 2. The '958 Claim Chart, which was attached to the complaint in the *Kia* case as Exhibit 5, is attached hereto as Exhibit 3.
- 6. Foras has serially filed federal lawsuits in a piecemeal fashion, against many of the world's largest automotive manufacturers and original equipment manufacturers.

7. A list of the current district court cases brought by Foras involving the '958 Patent, identified by case name, date filed, and the presiding judge is as follows:

	Case (Including party, case number and jurisdiction)	Defendant Companies	Filing Date	Judge
1	Foras Technologies Ltd. v. Toyota Motor North America, Inc., 2-23-cv- 00150-JRG (EDTX)	Toyota Motor N.A., Inc. and Denso Corp.	4/5/2023	Hon. Rodney Gilstrap
2	Foras Technologies Limited v. Kia Corporation, 2-23-cv-00219-JDG (EDTX)  (Consolidated with 2:23-cv-00150-JRG)	Kia America, Inc. and Kia Corp.	5/18/2023	Hon. Rodney Gilstrap
3	Foras Technologies Ltd. v. Bayerische Motoren Werke AG, 6-23-cv-00386-RP (WDTX)	Bayerische Motoren Werke AG and Robert Bosch GmbH	5/19/2023	Hon. Robert Pitman
4	Foras Technologies Limited v. Nissan Motor Company, Ltd., 1-23-cv-00640-RP (WDTX)	Nissan Motor Company, Ltd. and ZF Friedrichshafen AG	6/6/2023	Hon. Robert Pitman
5	Foras Technologies Limited v. Volkswagen AG, 2-23-cv-00314-JRG (EDTX)	Aptiv PLC, Valeo SA, and Volkswagen AG	6/28/2023	Hon. Rodney Gilstrap
6	Foras Technologies Ltd. v. Toyota Motor North America, Inc., 2-23-cv- 00321-JRG (EDTX)  (Severing Toyota Motor N.A., Inc. from 2-23-cv- 00150-JRG and staying case)	Toyota Motor N.A., Inc.	7/12/2023	Hon. Rodney Gilstrap

8. In the *Kia* case, through its complaint and subsequently served infringement contentions, which are attached hereto as Exhibit 4 (Preliminary Infringement Contentions Cover

Pleading) and Exhibit 5 (Preliminary Infringement Contentions Exhibit A), Foras alleges that certain Kia automobiles, including the Kia K5, Telluride, and Seltos, include an MRR-20 Mid-Range Radar (containing an Infineon SAK-TC297TA chipset) and/or a Hella RS4 Lange Change Assist Radar (containing an Infineon SAK-TC264DA chipset) infringe claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent. *See* Ex. 2 ¶¶ 14-15; Ex. 3 *passim*; Ex. 4 ¶ 14-16; Ex. 5 *passim*. Plaintiff is the supplier of the MRR-20 Mid-Range Radar and the Hella RS4 Lane Change Assist Radar, also known as the Blind Spot Detection Radar Generation 4.0 (BSD GEN4.0). Kia is a customer of Plaintiff.

- 9. Plaintiff's customers, including Kia, have entered into agreements with Plaintiff, giving the customers access to and ability to use Plaintiff's ADAS products. These agreements contain provisions relating to allegations of infringement of third-party intellectual property, including patents. As a result of Foras' litigation against Plaintiff's customer, Plaintiff's customer has demanded indemnity from Plaintiff.
- 10. Because Foras' infringement allegations against Plaintiff's customer are predicated on the customer's incorporation of and/or use of Plaintiff's products in automobiles that the customer imports, makes, offers for sale and/or sells, an actual and substantial controversy, ripe for adjudication, exists as to the alleged infringement of the '958 Patent.
- 11. Plaintiff seeks a declaratory judgment that its products do not infringe at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent, and as a result, incorporation of those products by its customers into automobiles that the customers make, import, offer to sell, sell and/or use does not infringe the '958 Patent.
- 12. Plaintiff seeks a declaratory judgment in this action so that the non-infringement of the '958 Patent by making, importing, offering for sale, selling or using Plaintiff's products

can be adjudicated as between Foras, the alleged assignee of the '958 Patent, and Plaintiff, the original equipment manufacturer and supplier of the radar products identified as the accused instrumentalities in the *Kia* case. In so doing, Plaintiff seeks to enable the customer-suit-exception to pause all active litigation by Foras against Plaintiff's customer, Kia, for alleged infringement of the '958 Patent.

#### **THE PARTIES**

- 13. Plaintiff HLK is a corporation organized under the laws of the Republic of Korea with its principal place of business at 224 Harmony-ro, Yeonsu-gu, Incheon, Republic of Korea.
- 14. Upon information and belief, Defendant Foras is a private company limited by shares organized and existing under the law of Ireland, with its principal place of business at The Hyde Building, Suite 23, The Park, Carrickmines, Dublin 18, Ireland.

# PATENT ASSERTED AGAINST PLAINTIFF'S CUSTOMERS

- 15. The '958 Patent relate to certain methods and systems for detecting and recovering from a loss of lockstep for a pair of processors. As described herein, the Foras allegations of infringement regarding the '958 Patent are directed towards the methods allegedly performed by Plaintiff's product(s).
- 16. All the methods and systems described in the '958 Patent are directed to steps allegedly performed by Plaintiff's product. These methods, however, are directed to only a small part of the Plaintiff's product, which is only a small part of the Plaintiff's costumers' products.
- 17. The '958 patent, Exhibit 1, is titled "System And Method For Providing Firmware Recoverable Lockstep Protection." United States Patent and Trademark Office ("USPTO") assignment records indicate the '958 Patent was originally assigned to Hewlett-Packard Development Company, L.P. when it was filed on October 25, 2004, and was later assigned to a

series of companies before being finally assigned to Foras on February 11, 2022. On its face, the '958 Patent claims priority to October 25, 2004.

18. The '958 Patent purports to improve known methods by using firmware to involve the operating system in recovering from detected errors to avoid crashing the system in the case of a recoverable fault. It discloses "a method [of] detecting loss of lockstep for a pair of processors," "triggering, by firmware, an operating system to idle the processors, and recovering, by the firmware, lockstep between the pair of processors." Ex. 1 ('958 Patent at 3:50-55). "After lockstep is recovered between the pair of processors, the method further comprises triggering, by the firmware, the operating system to recognize the processors as being available for receiving instructions." *Id.* at 3:55-59.

#### JURISDICTION AND VENUE

- 19. The foregoing paragraphs 1-18 are incorporated as if set forth herein in their entirety.
- 20. This Court has jurisdiction over the subject matter of these claims under the patent laws of United States pursuant to 28 U.S.C. §§ 1331 and 1338(a). Additionally, this Court has subject-matter jurisdiction over Plaintiff's request for declaratory relief under 28 U.S.C. §§ 2201 and 2202.
- 21. An actual controversy exists between Plaintiff, on the one hand, and Foras, on the other, as to whether Plaintiff's products infringe at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent. Foras has alleged, through its complaint against Kia Corporation (Exhibits 2 and 3) and subsequent preliminary infringement contentions, (Exhibits 4 and 5), that one of Plaintiff's customers, Kia Corporation, infringes at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent by

using and/or incorporating Plaintiff's ADAS radar products into automobiles that Kia Corporation, makes, uses, sells, offers for sale and/or imports.

- 22. This Court has personal jurisdiction over Foras under 35 U.S.C. § 293, which provides that, in cases involving a patentee that does not reside in the United States, the United States District Court for the Eastern District of Virginia "shall have the same jurisdiction to take any action respecting the patent or rights thereunder that it would have if the patentee were personally within the jurisdiction of the court," assuming that "no person" has been designated within "the Patent and Trademark Office ... on whom may be served process or notice of proceedings affecting the patent or rights thereunder." On information and belief, Foras does not reside in the United States and has not filed a written designation of an agent in the United States on whom may be served process or notice of proceedings affecting the '958 Patent or the rights thereunder.
- 23. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1391 because "there is no district in which [this] action may otherwise be brought" and Foras is subject to this Court's personal jurisdiction under 35 U.S.C. § 293.
- 24. Assignment to the Alexandria Division is proper under Local Civil Rule 3(c) because the United States Patent Office is located in Alexandria, Virginia and venue and personal jurisdiction exist in this division of the judicial district.

#### FACTUAL BACKGROUND

25. Foras filed suit against Plaintiff's customer on May 18, 2023. *See* Exs. 2 & 3. On that date, Foras filed a lawsuit against Kia for alleged infringement of the '958 Patent in the United States District Court for the Eastern District of Texas: *Foras Technologies Limited v. Kia Corporation et al*, 2-23-cv-00219 (EDTX). Foras had earlier filed suit against Toyota Motor

North America, Inc. and Denso Corp. on April 5, 2023: Foras Technologies Ltd. v. Toyota Motor North America, Inc., 2-23-cv-00150-JRG (EDTX). The Eastern District of Texas consolidated the -219 and -150 cases on June 13, 2023. In addition, Foras has filed the following cases in either the Eastern or Western Districts of Texas: Foras Technologies Ltd. v. Bayerische Motoren Werke AG et al, 6-23-cv-00386 (WDTX) on May 19, 2023; Foras Technologies Limited v. Nissan Motor Company, Ltd. et al, 1-23-cv-00640 (WDTX) on June 6, 2023; and Foras Technologies Limited v. Volkswagen AG et al, 2-23-cv-00314 (EDTX) on June 28, 2023. On July 12, 2023, the Eastern District of Texas granted a joint motion to sever and stay Foras' case against Toyota Motor North America, Inc., Foras Technologies Ltd. v. Toyota Motor North America, Inc., 2-23-cv-00321 (EDTX).

26. In its complaint against Kia, Foras asserted that Kia infringes by making, using, offering for sale, selling and/or importing "certain products and services, including without limitation the Kia K5, Telluride, and Seltos which include a Mando MRR-20 Mid-Range Radar (containing an Infineon SAK-TC297TA chipset) and/or Hella RS4 Lange Change Assist Radar (containing an Infineon SAK-TC264DA chipset) ('Accused Products'), that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '958 Patent." Ex. 2 ¶ 14. Foras further asserted that the "Accused Products" infringe at least claim 19 of the '958 Patent as described in a claim chart attached to its complaint. Ex. 2 ¶ 15 & Ex. 3 passim. Both the complaint and attached claim chart refer extensively to the HLK radar products, and their associated Infineon-supplied microcontrollers, in alleging that claim 19 is infringed. Ex. 2 ¶¶ 14-15 & Ex. 3 passim. Other than alleging that certain Kia automobiles include the HLK radar products, see Ex. 2 ¶ 14 & Ex. 3 at 1, neither the complaint nor attached claim chart assert that the Kia automobiles play any role in the alleged infringement.

- 27. On information and belief, Foras' allegations of infringement of the '958 Patent are premised on its customer's use and/or incorporation of Plaintiff's products, which Foras alleges perform loss of lockstep detection and recovery, as recited in the '958 patent claims.

  Foras alleges that Plaintiff's products satisfy every limitation of at least claim 19 of the '958 Patent.
- 28. Foras further alleges that Plaintiff's customer "ha[s] and continue[s] to make, use, offer for sale, sell, and/or import certain products and services" that incorporate Plaintiff's products "that directly infringe, literally and/or under the doctrine of equivalents, one or more claims of the '958 Patent." Foras' allegations of infringement are solely based on the customer's use and/or incorporation of Plaintiff's products and do not specify that any other structure or methods are required to effectuate the alleged infringement.
- 29. On July 21, 2023, Foras served Kia with infringement contentions in which it asserted that certain Kia automobiles, "including, but not limited to Kia K5, Telluride, Seltos, and Sorento automobiles" that contain HLK's radar products infringe at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent. Ex. 4 at 2. As with the claim chart attached to Foras' complaint, Exhibit A to the Preliminary Infringement Contentions identifies the Kia automobiles only in the prefatory language to the chart. Ex. 5 at 1. Thereafter, Foras' infringement allegations focus extensively and exclusively on the HLK radar products, and their associated Infineon-supplied microcontrollers, in alleging infringement of claims 1, 2, 3, 6, 8, 19 and 20. Ex. 5 at 1-91.
- 30. Foras seeks, as relief in its lawsuit against Kia Corporation for alleged infringement of the '958 Patent, (1) an award of damages (past, present, and future); (2) costs and expenses; (3) pre-judgment and post-judgment interest; (4) payment of compulsory ongoing licensing fees; (5) an accounting and supplemental damages for infringing products released after

the filing of this case that are not colorably different from the specifically identified products accused of infringement; and (6) reasonable attorneys' fees.

- 31. On November 2, 2023, Foras attempted to serve a subpoena for the production of documents on HLK by delivering the subpoena to a California-based subsidiary, HL Klemove America Corp. Attached hereto as Exhibit 6 is a copy of the subpoena. The subpoena seeks, among other documents, source code, technical documents, schematics and bills of materials for HLK's products including lockstep processors.
- 32. Since being served with the complaint, Kia Corporation requested that HLK indemnify it for the alleged infringement of the '958 Patent. The lawsuit against Kia Corporation asserting infringement of the '958 Patent remains pending.
- 33. Foras' allegations that the HLK radar products infringe at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent, presented through its complaint in the *Kia* case as well as its infringement contentions, Foras' lawsuits against similarly situated original equipment manufacturers, such as Denso Corp., Robert Bosch GmbH, ZF Friedrichshafen AG, Aptiv PLLC, and Valeo SA, and the subpoena that Foras attempted to serve on HLK, have created a reasonable apprehension that Foras contends that HLK infringes directly or indirectly at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent.

#### FIRST CLAIM FOR RELIEF

## (Declaratory Judgment that Plaintiff Does Not Infringe the '958 Patent)

- 34. Plaintiff repeats and re-alleges each and every allegation contained in paragraphs1–33 of this Complaint as if fully set forth herein.
- 35. In view of the facts and allegations set forth above, there is an actual, justiciable, substantial, and immediate controversy within the meaning of 28 U.S.C. § 2201 between Plaintiff and Defendant regarding whether Plaintiff's products infringe at least claims 1, 2, 3, 6, 8, 19 and 20 of the '958 Patent and/or contribute to or induce its customers to infringe.
- 36. Plaintiff does not infringe the '958 Patent because its products, including the MRR-20 Mid-Range Radars and Hella RS4 Lane Change Assist Radar (also known as the Blind Spot Detection Radar Generation 4.0 (BSD GEN4.0)), do not perform the methods recited in claims 1, 2, 3, 6 or 8. In addition, Plaintiff does not make, sell, use or import products that contain the computer executable firmware code recited in claims 19 and 20.
- 37. More specifically, Plaintiff's products, the MRR-20 Mid-Range Radars and Hella RS4 Lane Change Assist Radar (also known as the Blind Spot Detection Radar Generation 4.0 (BSD GEN4.0)), do not practice or include all of the claimed elements, either literally or under the doctrine of equivalents, including at least the following, each of which Foras asserts are required by claims 1 and 19 of the '958 Patent, the only independent claims Foras asserts are infringed:
  - a. determine whether lockstep is recoverable;
  - b. trigger an operating system to idle a lockstep pair of processors;
  - c. recover lockstep for a pair of lockstep processors; or

d. trigger an operating system to recognize that a lockstep pair or processors
has recovered lockstep.

# **DEMAND FOR A JURY TRIAL**

38. In accordance with Federal Rules of Civil Procedure 38, Plaintiff demands a jury trial on all issues and claims so triable.

## **RESERVATION OF RIGHTS**

39. Plaintiff hereby reserves its right to supplement with additional claims or defenses as discovery proceeds in this matter.

#### **PLAINTIFF'S PRAYER FOR RELIEF**

- 40. Plaintiff respectfully requests this Court grant judgment and relief as follows:
- (a) Declaring that Plaintiff does not directly or indirectly infringe any claim of the '958 Patent, either literally or under the doctrine of equivalents;
- (b) Order that this case is "exceptional" pursuant to 35 U.S.C. § 285 entitling Plaintiff an award of its reasonable and necessary attorneys' fees, expenses, and costs, and pre-judgment interest thereon;
- (c) Order awarding Plaintiff its costs of suit incurred in this action; and
- (d) Granting to Plaintiff such other and further relief as this Court deems just and proper.

Dated: December 11, 2023 Respectfully submitted,

<u>/s/ Kolya D. Glick</u>

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