IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE

ENGLE GRANGE, LLC	)	
	)	
Plaintiff,	)	
	)	Case No.:
v.	)	
	)	**JURY TRIAL DEMANDED**
FORD MOTOR COMPANY and FORD GLOBAL TECHNOLOGIES, LLC	)	
	)	
Defendant.	)	

COMPLAINT

Plaintiff Engle Grange, LLC ("Plaintiff" or "Engle Grange") by counsel, for its Complaint against Ford Motor Company ("Ford") and Ford Global Technologies, LLC ("FGTL") (collectively, "Defendants") alleges as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement under 35 U.S.C. § 271, *et seq*.

2. This action arises out of the activities of Defendants in manufacturing, using, selling, offering for sale, and/or importing into the United States products that infringe United States Patent Nos. 10,442,397 ("the '397 Patent"), 8,548,645 ("the '645 Patent"), and 10,077,021 ("the '021 Patent") (collectively, the "Asserted Patents") and/or Defendants' activities inducing others in the United States to infringe, or contributing to infringement in the United States of the Asserted Patents.

PARTIES

3. Plaintiff Engle Grange, LLC is a limited liability company organized and existing under the laws of the State of Texas.

4. Defendant Ford Motor Company is a Delaware corporation with its principal place of business at One American Road in Dearborn, Michigan. Ford designs and manufactures automobiles.

5. Defendant Ford Global Technologies, LLC is a limited liability company organized and existing under the laws of the State of Delaware with its principal place of business at 330 Town Center Drive, Suite 800 in Dearborn, Michigan. FGTL manages intellectual properties.

JURISDICTION AND VENUE

6. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338.

7. This Court has personal jurisdiction over Defendants because Defendants are organized and/or existing under the laws of the State of Delaware.

8. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because Defendants reside in the State of Delaware.

FACTS

A. The Asserted Patents

9. On October 15, 2019, the United States Patent and Trademark Office issued the ‘397 Patent, entitled “TWO STEP SMART KEY START SYSTEM” to Donna Long (“Long”), the inventor and a member of Engle Grange. A true and correct copy of the ‘397 Patent is attached hereto as Exhibit A.

10. On or around November 26, 2019, Long assigned the ‘397 Patent to Engle Grange.

11. Engle Grange is the owner of the ‘397 Patent.

12. The ‘397 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

13. On October 1, 2013 the United States Patent and Trademark Office issued the ‘645 Patent, entitled “TWO STEP KEYLESS START SYSTEM” to Long, the inventor. A true and correct copy of the ‘645 Patent is attached hereto as Exhibit B.

14. On or around November 26, 2019, Long assigned the ‘645 Patent to Engle Grange.

15. Engle Grange is the owner of the ‘645 Patent.

16. The ‘645 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

17. On September 18, 2018 the United States Patent and Trademark Office issued the ‘021 Patent, entitled “TWO STEP SMART KEY START SYSTEM” to Long, the inventor. A true and correct copy of the ‘021 Patent is attached hereto as Exhibit C.

18. On or around November 26, 2019, Long assigned the ‘021 Patent to Engle Grange.

19. Engle Grange is the owner of the ‘021 Patent.

20. The ‘021 Patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code.

21. The ‘397 and ‘021 Patents claim priority to the ‘645 Patent.

B. Ford Misappropriates the Technology Claimed in the ‘645 Patent

22. In or around January of 2014, Long presented, or caused to be presented, the technology contained in the ‘645 Patent to Ford in hopes of reaching an agreement whereby Ford would license the technology.

23. Subsequent to the January 2014 presentation, Long entered into discussions with Defendants regarding licensing of the ‘645 Patent. These discussions were not fruitful; Long declined to license the technology to Defendants.

24. Long’s denial of licensing rights to Defendants has not impeded their infringing practice of the inventions claimed in the Asserted Patents. Defendants manufacture, import into the United States, use, offer to sell, and/or sell products, including but not limited to, automobiles equipped with Ford’s Intelligent Access (collectively, “the infringing products”) that infringe one or more of the claims of the Asserted Patents.

C. Ford’s Infringing Conduct

25. Ford Intelligent Access with Push-Button Start is a so-called “keyless entry” system that allows owners of cars with the feature equipped to unlock the vehicle’s doors, start the ignition, and drive the vehicle without removing the mobile key fob from their pocket or purse. Using radio frequencies, a processor in the car or truck senses when the key fob is nearby and, upon appropriate authentication of the key, will lock, unlock, or start the vehicle based on the driver’s input.

26. On information and belief, the radio frequency broadcast by the Intelligent Access key fob contains a code which is authenticated by a processor or controller in the vehicle.

27. Each Ford consumer vehicle is equipped with a “vehicle movement activator,” or gear shift, which enables the driver to select whether the vehicle will move forward or reverse following application of the brake and a shift to that gear. The infringing products also have an engine, transmission, and brake system.

28. Ford vehicles equipped with Intelligent Access perform at least two wireless authentications of the mobile key’s code after the driver enters the vehicle. The first

authentication occurs when the driver depresses the brake pedal and operates the push button start. The vehicle determines whether or not the key fob is in the car and will not start unless the sensors detect that the key is located inside of the vehicle.

29. The second authentication occurs after the vehicle has been started when the driver attempts to shift out of park. On information and belief, after the vehicle is started and prior to allowing the operator to engage "Drive" or "Reverse," the vehicle's processor or controller again determines whether the key is in the car.

30. If the Intelligent Access key is not in the car during the second authentication, the processor or controller will not enable operation of the gear shift (the vehicle's movement selector) and the vehicle will be prevented from moving from a stationary position. If the Intelligent Access key is in the car, the processor will enable operation of the gear shift following the second authentication.

31. On information and belief, owners of Ford vehicles equipped with the Intelligent Access system have actually used the system in an infringing way. This is because owners of Ford vehicles equipped with Intelligent Access cannot operate their vehicles without using the system.

32. Defendants knew that owners of Ford vehicles equipped with Intelligent Access would actually use the system in an infringing way at least because, as described above, the vehicles were designed to disable operation without use of the system. At least for this same reason, Defendants intended that owners of Ford vehicles equipped with Intelligent Access would actually use the system in an infringing way.

33. Knowledge of the required use as alleged in the preceding paragraph combined with Defendants' discussions with Long regard to licensing her technology demonstrate

Defendants' actual knowledge (1) of the existence of Long's rights in the technology and her patent and (2) that owners of the vehicles would use them in an infringing manner.

34. The infringing products infringe at least Claims 17, 18, 19, 22, 23, 24, 25, 26, 27, and 30 of the '397 Patent. The infringing products infringe Claim 1 of the '645 Patent. In addition, the infringing products infringe at least Claims 4, 5, 6, 7, 12, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 27 of the '021 Patent.

COUNT I
INFRINGEMENT OF THE '397 PATENT

35. Plaintiff repeats and incorporates each of the allegations contained in the preceding paragraphs of this Complaint as if fully set forth herein.

36. Defendants have infringed and continue to willfully infringe one or more claims of the '397 Patent in violation of 35 U.S.C. §§ 271(a) through (c).

37. Defendants have been on notice of Plaintiff's rights in the invention described by the '397 Patent since at least as early as January of 2014, and have begun, or continued, since that time to directly infringe, contribute to infringement, and/or induce others to infringe the '397 Patent as alleged herein.

38. Defendants are, on information and belief, inducing infringement of one or more claims of the '397 Patent by, without limitation, making, using, importing, selling and/or offering for sale the accused products for use by customers and others and also providing those customers and others with technical support and services, as well as detailed explanations, instructions and information as to uses of the accused products that promote and demonstrate how to use the accused products in a manner that would infringe the '397 Patent. In addition, on information and belief, the accused products cannot be operated in a manner that does not infringe, and Defendants intentionally designed the products in such a manner.

39. On information and belief, Defendants specifically intended to induce infringement by their customers and others by at least the acts set forth in the preceding paragraphs, knowing such acts would cause infringement. Upon information and belief, Defendants' customers and others have infringed and are continuing to infringe the '397 Patent.

40. Defendants have and continue to directly infringe one or more claims of the '397 Patent, including at least Claims 17, 18, 19, 22, 23, 24, 25, 26, 27, and 30, by among other things, making, using, offering to sell, selling, and/or importing into the United States the infringing products without consent or authorization of Plaintiff.

41. Claim 17 of the '397 Patent claims the following:

> 17. A system for operating a vehicle comprising:
>
> a mobile device comprising an electronic code;
>
> a processor configured to authenticate the electronic code; and
>
> a vehicle movement activator,
>
> wherein the processor is configured to perform a primary authentication of the electronic code of the mobile device before the vehicle is started and a secondary authentication of the electronic code of the mobile device within the vehicle when a vehicle operator attempts to cause the vehicle to move from a stationary position, and
>
> wherein the processor is configured to enable operation of the vehicle movement activator following the secondary authentication of the one electronic code of the mobile device.

42. Claim 18 of the '397 Patent claims the following:

> 18. The system of claim 17, wherein the primary authentication of the electronic code enabling activation of the vehicle movement activator comprises detection of the mobile device within the passenger compartment of the vehicle.

43. Claim 19 of the '397 Patent claims the following:

19. The system of claim 17, wherein the primary authentication of the electronic code enabling use of the vehicle movement activator comprises detection of the mobile device within the passenger compartment of the vehicle when a person is within the passenger compartment of the vehicle.

44. Claim 22 of the ‘397 Patent claims the following:

22. The system of claim 17, wherein the mobile device communicates wirelessly with the processor.

45. Claim 23 of the ‘397 Patent claims the following:

23. The system of claim 17, wherein operation of the vehicle movement activator is prevented when a brake system is activated with the vehicle started in the absence of the second authentication of the electronic key code.

46. Claim 25 of the ‘397 Patent claims the following:

25. A system for operating a vehicle comprising:

a key code;

a processor configured to authenticate the key code; and

a vehicle movement activator,

wherein the processor is configured to perform a primary authentication of the key code before the vehicle is started and a secondary authentication of the key code before movement of the vehicle from a stationary position,

wherein the processor is configured to enable operation of the vehicle movement activator following the secondary authentication of the key code.

47. Claim 26 of the ‘397 Patent claims the following:

26. The system of claim 25, wherein the secondary authentication of the key code enabling activation of the vehicle movement activator comprises detection of a mobile device within the passenger compartment of the vehicle.

48. Claim 27 of the ‘397 Patent claims the following:

> 27. The system of claim 25, wherein the secondary authentication of the key code enabling use of the vehicle movement activator comprises detection of a mobile device within the passenger compartment of the vehicle when a person is within the passenger compartment of the vehicle.

49. Claim 30 of the '397 Patent claims the following:

> 30. The system of claim 25, wherein operation of the vehicle movement activator is prevented when a brake system is activated with the vehicle started in the absence of the second authentication of the key code.

50. Defendants, by making, using, offering to sell, and/or selling, or importing into the United States, the infringing products, including, but not limited to, the Mustang, Fusion, Explorer, and Expedition, infringe at least Claims 17, 18, 19, 22, 23, 24, 25, 26, 27, and 30 of the '397 Patent.

51. Because of Defendants' willful acts of infringement, Plaintiff has suffered, is suffering, and will continue to suffer irreparable injury unless Defendants are enjoined from continuing their unlawful infringing conduct.

52. As a result of Defendants' willful infringement of the '397 Patent, Plaintiff is entitled to an award of compensatory and exemplary damages in an amount to be determined at trial.

COUNT II
INFRINGEMENT OF THE '645 PATENT

53. Plaintiff repeats and incorporates each of the allegations contained in the preceding paragraphs of this Complaint as if fully set forth herein.

54. Defendants have infringed and continue to willfully infringe one or more claims of the '645 Patent in violation of 35 U.S.C. §§ 271(a) through (c).

55. Defendants have been on notice of Plaintiff's rights in the invention described by the '645 Patent since at least as early as January of 2014, and have begun, or continued, since

that time to directly infringe, contribute to infringement, and/or induce others to infringe the '645 Patent as alleged herein.

56. Defendants are, on information and belief, inducing infringement of one or more claims of the '645 Patent by, without limitation, making, using, importing, selling and/or offering for sale the accused products for use by customers and others and also providing those customers and others with technical support and services, as well as detailed explanations, instructions and information as to uses of the accused products that promote and demonstrate how to use the accused products in a manner that would infringe the '645 Patent. In addition, on information and belief, the accused products cannot be operated in a manner that does not infringe, and Defendants intentionally designed the products in such a manner.

57. On information and belief, Defendants specifically intended to induce infringement by their customers and others by at least the acts set forth in the preceding paragraphs, knowing such acts would cause infringement. Upon information and belief, Defendants' customers and others have infringed and are continuing to infringe the '645 Patent.

58. Defendants have and continue to directly infringe Claim 1 of the '645 Patent, by among other things, making, using, offering to sell, selling, and/or importing into the United States the infringing products without consent or authorization of Plaintiff.

59. Claim 1 of the '645 Patent claims the following:

> 1. A smart key system for an automobile having an engine, transmission, and brake pedal including a coded key fob able to be detected and authenticated within a passenger compartment and authenticated by a smart key system controller and enabling an ignition switch to start said engine, said automobile also including a transmission operating lever enabling shifting said transmission into gear, and a lever lock preventing movement of said transmission lever to shift into gear until said brake pedal is depressed, the improvement wherein a two step key fob authentication is required in which said smart key controller detects and authenticates the presence of a key fob at the time said engine is started

> and again attempts to detects and authenticate the presence of the coded key fob in said passenger compartment whenever said brake pedal is depressed which only if said coded key fob is detected and authenticated causes operation of said transmission lever lock actuator to release said lock lever and thereby allow said transmission lever to be moved to shift said transmission into gear, said smart key controller preventing operation of said transmission lever lock actuator to release said lock lever even when said brake pedal is depressed with said engine started in the absence of detection and authentication of said key fob, whereby said transmission lever is locked after starting said engine and release of said depressed brake pedal to prevent driving said automobile after said engine is initially started and said brake pedal is depressed by a driver without said key fob being located in said passenger compartment after starting of said engine.

60. Defendants, by making, using, offering to sell, and/or selling, or importing into the United States, the infringing products, including, but not limited to, the Mustang, Fusion, Explorer, and Expedition, infringe Claim 1 of the ‘645 Patent.

61. Because of Defendants’ willful acts of infringement, Plaintiff has suffered, is suffering, and will continue to suffer irreparable injury unless Defendants are enjoined from continuing their unlawful infringing conduct.

62. As a result of Defendants’ willful infringement of the ‘645 Patent, Plaintiff is entitled to an award of compensatory and exemplary damages in an amount to be determined at trial.

COUNT III
INFRINGEMENT OF THE ‘021 PATENT

63. Plaintiff repeats and incorporates each of the allegations contained in the preceding paragraphs of this Complaint as if fully set forth herein.

64. Defendants have infringed and continue to willfully infringe one or more claims of the ‘021 Patent in violation of 35 U.S.C. §§ 271(a) through (c).

65. Defendants have been on notice of Plaintiff’s rights in the invention described by the ‘021 Patent since at least as early as January of 2014, and have begun, or continued, since

that time to directly infringe, contribute to infringement, and/or induce others to infringe the '021 Patent as alleged herein.

66. Defendants are, on information and belief, inducing infringement of one or more claims of the '021 Patent by, without limitation, making, using, importing, selling and/or offering for sale the accused products for use by customers and others and also providing those customers and others with technical support and services, as well as detailed explanations, instructions and information as to uses of the accused products that promote and demonstrate how to use the accused products in a manner that would infringe the '021 Patent. In addition, on information and belief, the accused products cannot be operated in a manner that does not infringe, and Defendants intentionally designed the products in such a manner.

67. On information and belief, Defendants specifically intended to induce infringement by their customers and others by at least the acts set forth in the preceding paragraphs, knowing such acts would cause infringement. Upon information and belief, Defendants' customers and others have infringed and are continuing to infringe the '021 Patent.

68. Defendants have and continue to directly infringe at least Claims 4, 5, 6, 7, 12, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 27 of the '021 Patent, by among other things, making, using, offering to sell, selling, and/or importing into the United States the infringing products without consent or authorization of Plaintiff.

69. Claim 4 of the '021 Patent claims the following:

> 4. A system for operating a vehicle comprising:
>
> a key comprising at least one electronic code; and a controller configured to authenticate and detect the key,
>
> wherein the vehicle comprises:
>
> a vehicle movement selector;

and a brake system,

wherein the controller is configured to perform a first detection and authentication of the at least one electronic code at the time the vehicle starter activation is attempted and a second detection and authentication of the at least one electronic code upon activation of the brake system after the vehicle is started, and

wherein the controller is configured to enable use of the vehicle movement selector following the second detection and authentication of the at least one electronic code.

70. Claim 5 of the ‘021 Patent claims the following:

5. The system of claim 4, wherein the first detection and authentication of the at least one electronic code enabling activation of the vehicle starter comprises detection of the key within the passenger compartment of the vehicle.

71. Claim 6 of the ‘021 Patent claims the following:

6. The system of claim 4, wherein the second detection and authentication of the at least one electronic code enabling use of the vehicle movement selector comprises detection of the key within the passenger compartment of the vehicle.

72. Claim 7 of the ‘021 Patent claims the following:

7. The system of claim 4, wherein the second detection and authentication of the at least one electronic code enabling use of the vehicle movement selector comprises detection of the key within the passenger compartment of the vehicle when a person is within the passenger compartment of the vehicle.

73. Claim 12 of the ‘021 Patent claims the following:

12. The system of claim 4, wherein the key communicates wirelessly with the controller.

74. Claim 15 of the ‘021 Patent claims the following:

15. A system for starting and operating a vehicle comprising:

a detectable coded token;

a controller configured to detect and authenticate the detectable coded token and enable activation of a vehicle starter,

the vehicle comprising:

a vehicle movement selector; and

a brake system,

wherein the controller is configured to perform a first detection and authentication of the detectable coded token at the time the vehicle starter activation is attempted and a second detection and authentication of the detectable coded token upon activation of the brake system, and

wherein the controller is configured to only enable use of the vehicle movement selector following the second detection and authentication of the coded token.

75. Claim 16 of the ‘021 Patent claims the following:

16. The system of claim 15, wherein the controller prevents operation of the vehicle movement selector when the brake system is activated with the vehicle starter in the absence of detection and authentication of the detectable coded token.

76. Claim 17 of the ‘021 Patent claims the following:

17. The system of claim 15, wherein the vehicle movement selector is inoperable after starting the vehicle and deactivation of the brake system to prevent movement of the vehicle after the vehicle is initially started and the brake system is activated by a user without the detectable coded token being detected in a vehicle passenger compartment after starting the vehicle.

77. Claim 18 of the ‘021 Patent claims the following:

18. The system of claim 15, wherein the second detection and authentication of the detectable coded token enabling use of the vehicle movement selector comprises detection of the detectable coded token within a vehicle passenger compartment.

78. Claim 19 of the ‘021 Patent claims the following:

19. The system of claim 15, wherein the second detection and authentication of the detectable coded token enabling use of the vehicle

movement selector comprises detection of the detectable coded token within the passenger compartment of the vehicle when a person is within a vehicle passenger compartment.

79. Claim 20 of the ‘021 Patent claims the following:

20. A system for starting and operating a vehicle comprising:

a key;

a brake system; and

a controller configured to detect and authenticate the key,

wherein the controller is further configured to perform a first detection and authentication of the key when activation of the vehicle starter is attempted and a second detection and authentication of the key upon activation of the brake system with the vehicle in a stationary position, and

wherein the controller only enables vehicle movement following the second detection and authentication of the key.

80. Claim 21 of the ‘021 Patent claims the following:

21. The system of claim 20, wherein the controller prevents operation of a vehicle movement selector when the brake system is activated with the vehicle started in the absence of detection and authentication of the key.

81. Claim 22 of the ‘021 Patent claims the following:

22. The system of claim 20, wherein a vehicle movement selector is inoperable after starting the vehicle and deactivation of the brake system to prevent movement of the vehicle after the vehicle is initially started and the brake system is activated by a user without the key being detected in a vehicle passenger compartment after starting the vehicle.

82. Claim 23 of the ‘021 Patent claims the following:

23. The system of claim 20, wherein the second detection and authentication of the key enabling use of a vehicle movement selector comprises detection of the key within a vehicle passenger compartment.

83. Claim 24 of the ‘021 Patent claims the following:

> 24. The system of claim 20, wherein the second detection and authentication of the key enabling use of a vehicle movement selector comprises detection of the key within the passenger compartment of the vehicle when a person is within a vehicle passenger compartment.

84. Claim 27 of the ‘021 Patent claims the following:

> 27. The system of claim 20, wherein the key communicates wirelessly with the controller.

85. Defendants, by making, using, offering to sell, and/or selling, or importing into the United States, the infringing products, including, but not limited to, the Mustang, Fusion, Explorer, and Expedition, infringe at least Claims 4, 5, 6, 7, 12, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, and 27 of the ‘021 Patent.

86. Because of Defendants’ willful acts of infringement, Plaintiff has suffered, is suffering, and will continue to suffer irreparable injury unless Defendants are enjoined from continuing their unlawful infringing conduct.

87. As a result of Defendants’ willful infringement of the ‘021 Patent, Plaintiff is entitled to an award of compensatory and exemplary damages in an amount to be determined at trial.

JURY TRIAL DEMAND

Plaintiff hereby demands a trial by jury on all issues so triable.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff requests that a judgment be granted in its favor as follows:

A. That Defendants have infringed and continue to infringe one or more claims of the ’397 Patent in violation of 35 U.S.C. § 271(a) through (c);

B. That Defendants and all related parties (as defined in Fed. R. Civ. P 65(d)) are enjoined from further infringement of the ’397 Patent pursuant to 35 U.S.C. § 283;

C. That Defendants be ordered to account for and pay Plaintiff's actual and exemplary damages to compensate Plaintiff for Defendants' acts of willful infringement pursuant to 35 U.S.C. § 284;

D. That Plaintiff be granted pre-judgment and post-judgment interest on the damages caused by Defendants' infringing activities and other conduct complained of herein;

E. That this case be deemed exceptional and that Plaintiff be awarded its costs and reasonable attorneys' fees pursuant to 35 U.S.C. § 285 and other applicable statutes; and

F. That the Court grant such other and further relief as it may deem just and proper.

Dated: April 27, 2020

Respectfully submitted,

PHILLIPS MCLAUGHLIN & HALL, P.A.

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