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SIGNAL IP, INC.

8
9 **UNITED STATES DISTRICT COURT**
10 **CENTRAL DISTRICT OF CALIFORNIA**

11 SIGNAL IP, INC., a California
12 corporation,

13 Plaintiff,

14 vs.

15 AMERICAN HONDA MOTOR CO.,
INC, a California corporation; HONDA
16 OF AMERICA MFG., INC., an Ohio
corporation,

17 Defendants.
18

Case No. 2:14-cv-2454

**FIRST AMENDED COMPLAINT
FOR PATENT INFRINGEMENT**

JURY TRIAL DEMANDED

19 Plaintiff Signal IP, Inc. (“Signal IP” or “Plaintiff”) brings this First Amended
20 Complaint against Defendants American Honda Motor Co., Inc. and Honda of
21 America Mfg., Inc. (collectively, “Honda” or “Defendants”), as permitted by Fed. R.
22 Civ. P. 15(a)(2) and pursuant to written consent provided by Defendants on May 30,
23 2014 (Dkt. 21), alleging as follows:

24 **PARTIES**

25 1. Plaintiff Signal IP is a California corporation with its principal place of
26 business at 11100 Santa Monica Blvd., Suite 380, Los Angeles, CA 90025.

27 2. On information and belief, Defendant American Honda Motor Co., Inc.
28 is a California corporation with its principal place of business at 1919 Torrance

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1 Blvd., Torrance, CA 90501.

2 3. On information and belief, Defendant Honda of America Mfg., Inc. is
3 an Ohio corporation with its principal place of business at 24000 Honda Parkway,
4 Marysville, Ohio 43040.

5 **JURISDICTION, VENUE AND JOINDER**

6 4. This action arises under the patent laws of the United States, Title 35 of
7 the United States Code. This Court has subject matter jurisdiction pursuant to 28
8 U.S.C. §§ 1331 and 1338(a).

9 5. This Court has personal jurisdiction over Defendants. Defendants have
10 conducted extensive commercial activities and continue to conduct extensive
11 commercial activities within the State of California. Defendant American Honda
12 Motor Co., Inc. maintains its principal place of business within this judicial district.
13 Additionally, on information and belief, Defendants, directly and/or through
14 intermediaries (including Defendants’ entities, subsidiaries, distributors, sales
15 agents, partners and others), distribute, offer for sale, sell, and/or advertise their
16 products (including but not limited to the products and services that are accused of
17 infringement in this lawsuit) in the United States, in the State of California, and in
18 this judicial district, under the “Honda” and “Acura” brand names. Defendants have
19 purposefully and voluntarily placed one or more of their infringing products and
20 services into the stream of commerce with the expectation that the products and
21 services will be purchased or used by customers in California and within this
22 judicial district. Accordingly, Defendants have infringed Signal IP’s patents within
23 the State of California and in this judicial district as alleged in more detail below.

24 6. Venue is proper in this district under 28 U.S.C. §§ 1391 and 1400(b).

25 **BACKGROUND**

26 7. Signal IP, Inc. is a California corporation with a principal place of
27 business at 11100 Santa Monica Blvd., Suite 380, Los Angeles, CA 90025. It is the
28 owner of the entire right, title and interest in and to U.S. Patent Nos. 5,714,927;

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1 5,732,375; 6,434,486; 6,775,601; and 6,012,007 (the “Patents-in-Suit”), including
2 the right to recover for past, present and future infringement.

3 8. On information and belief, Defendants are direct or indirect
4 subsidiaries of global car manufacturer and distributor Honda Motor Company, Ltd.
5 (“Honda Limited”), which is headquartered in Japan. Honda Limited manufactures
6 and distributes cars under both the “Honda” and “Acura” brand names.

7 9. Defendants have had knowledge of each of the Patents-in-Suit, and
8 have had the specific knowledge that their products and services described below
9 infringe the Patents-in-Suit, since at least the filing of the complaint in this action on
10 April 1, 2014, which was served on defendant American Honda Motor Co., Inc. on
11 April 4, and on defendant Honda of America Mfg., Inc. on April 10, 2014. Signal
12 IP gives and has given Honda notice of its infringement of the Patents-in-Suit.

13 **FIRST CLAIM FOR RELIEF**

14 **(Infringement of the ‘927 Patent)**

15 10. Plaintiff incorporates all previous paragraphs of this complaint as if set
16 forth in full herein.

17 11. Signal IP is the owner of the entire right, title, and interest in and to
18 U.S. Patent No. 5,714,927 (the ‘927 Patent), entitled “Method of Improving Zone of
19 Coverage Response of Automotive Radar.” The ‘927 Patent was duly and legally
20 issued by the U.S. Patent and Trademark Office on February 3, 1998. A true and
21 correct copy of the ‘927 Patent is attached as Exhibit A.

22 12. On information and belief, Defendants have been and are directly
23 infringing, inducing others to infringe, and/or contributorily infringing, literally,
24 under the doctrine of equivalents, and/or jointly, one or more claims of the ‘927
25 Patent, including but not limited to claim 1 (“the ‘927 Patent Asserted Claims”), in
26 the State of California, in this judicial district, and elsewhere in the United States by,
27 among other things, importing, making, using, offering for sale, and/or selling in the
28 United States certain methods or systems disclosed and claimed in the ‘927 Patent,

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1 including but not limited to the Honda Blind Spot Information System, used in
2 products including but not limited to the Honda Accord, Civic, Crosstour, Odyssey,
3 Civic Hybrid, and Accord Hybrid, and in the Acura MDX, RLX/RL and TL
4 (collectively, the accused products and features are referred to herein as “the ‘927
5 Patent Accused Instrumentalities”).

6 13. The ‘927 Patent Accused Instrumentalities are described or have been
7 described at least in part online at:

8 <http://automobiles.honda.com/odyssey/interior.aspx>,
9 http://www.acura.com/features.aspx?model=mdx&context=exterior#blind_spot_inf
10 [ormation_system](http://www.acura.com/features.aspx?model=mdx&context=exterior#blind_spot_inf), and
11 http://owners.honda.com/utility/download?path=/static/pdfs/2013/Odyssey/13_Odys
12 [sey_trg_touring_BSI.pdf&ei=MqEZU9uLBcSHrgfgn4HYCg&usg=AFQjCNHMC6](http://owners.honda.com/utility/download?path=/static/pdfs/2013/Odyssey/13_Odys)
13 [VgyMzOZM75V-F5U940nC6Szg&bvm=bv.62578216,d.bmk&cad=rja](http://owners.honda.com/utility/download?path=/static/pdfs/2013/Odyssey/13_Odys).

14 14. As described below, Honda includes a radar system where a host
15 vehicle uses radar to detect a target vehicle in a blind spot of the host vehicle driver
16 which improves the perceived zone of coverage response of automotive radar.
17 Honda determines the relative speed of the host and target vehicles and selects a
18 variable sustain time as a function of relative vehicle speed. Honda detects target
19 vehicle presence and produces an alert command. Honda activates an alert signal in
20 response to the alert command. At the end of the alert command, Honda determines
21 whether the alert signal was active for a threshold time and if the alert signal was
22 active for the threshold time, Honda sustains the alert signal for the variable sustain
23 time, where the zone of coverage appears to increase according to the variable
24 sustain time.

25 15. According to Defendants’ websites or documentation, Honda’s Blind
26 Spot Information System (BSI) uses “a pair of sensors, one on each rear corner of
27 the vehicle” that “can detect a vehicle that may be positioned in the driver’s blind
28 spot.” Additionally, “a graphic indicator located on the interior garnish near the

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1 appropriate side-view mirror alerts the driver.”

2 16. Further according to Defendants’ websites, Honda’s BSI system “also
3 includes a maximum speed difference threshold, so the alert will not activate as you
4 drive past parked cars.” Additionally, “If the system detects a vehicle in an adjacent
5 lane in the ... ‘alert zone’ ... an indicator will appear on that side’s windshield
6 pillar. The pillar light will flash if the driver activates the turn signal in the direction
7 where a vehicle has been detected.”

8 17. Further according to Defendants’ websites or documentation, in
9 Honda’s BSI system, “When a vehicle is detected in your blind spot, the blind spot
10 indicator turns on and stays lit until the area is clear. When your turn signal is on
11 and a vehicle is detected, the blind spot indicator blinks until the area is clear or the
12 turn signal is off.”

13 18. Further according to Defendants’ websites or documentation, in
14 Honda’s BSI system, “A radar sensor on each corner of the rear bumper alerts you
15 when it detects a vehicle in your left or right blind spots.”

16 19. In addition to their own direct infringement, Defendants have also been
17 and are inducing and/or contributing to the direct infringement of the ‘927 Patent by
18 at least, but not limited to, customers of Defendants, partners of Defendants, and/or
19 end-users of Defendants’ products, including but not limited to the ‘927 Patent
20 Accused Instrumentalities (“the ‘927 Patent Third Party Infringers”), who directly
21 implement, use or otherwise participate in the use of the ‘927 Patent Accused
22 Instrumentalities, which have no substantial non-infringing uses, by at least the
23 following affirmative acts: (1) advertising in public and marketing the features,
24 benefits and availability of the ‘927 Patent Accused Instrumentalities; (2) promoting
25 the adoption and use of the ‘927 Accused Instrumentalities; and (3) providing
26 instructions on how to use the ‘927 Patent Accused Instrumentalities.

27 20. Defendants indirectly infringe by actively, knowingly, and/or
28 intentionally inducing or contributing to infringement of one or more of the claims

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1 of the '927 Patent, including but not limited to the '927 Patent Asserted Claims, by a
2 third party, including but not limited to the '927 Patent Third Party Infringers, who
3 directly implement, use or otherwise participate in the use of the '927 Patent
4 Accused Instrumentalities. On information and belief, Defendants actively,
5 knowingly, and/or intentionally induce the use of the '927 Patent Accused
6 Instrumentalities by the '927 Patent Third Party Infringers, and provide or otherwise
7 implement material components of one or more claims of the '927 Patent, including
8 but not limited to the '927 Patent Asserted Claims, which were especially made or
9 adapted for use in the infringement of the '927 Patent claims, including but not
10 limited to the '927 Patent Asserted Claims, and are not a staple article or commodity
11 of commerce suitable for substantial non-infringing uses. Defendants know and
12 have known that the combination for which their infringing components, including
13 but not limited to the '927 Patent Accused Instrumentalities, were especially made
14 or adapted are both patented and infringing.

15 21. Defendants' infringement of the '927 Patent has been and continues to
16 be willful, rendering this case exceptional within the meaning of 35 U.S.C. § 285.
17 With knowledge of the Patents-in-Suit, as described above, Defendants have
18 continued their infringing actions, as described above, despite an objectively high
19 likelihood (and affirmative allegations) that these actions constitute infringement of
20 the Patents-in-Suit. This objectively defined risk was known to Defendants, and so
21 obvious that it should have been known to Defendants.

22 22. Unless enjoined by this Court, Defendants will continue to infringe the
23 '927 Patent.

24 23. As a direct and proximate result of the Defendants' conduct, Plaintiff
25 has suffered, and will continue to suffer, irreparable injury for which it has no
26 adequate remedy at law. Plaintiff also has been damaged and, until an injunction
27 issues, will continue to be damaged in an amount yet to be determined.

28

SECOND CLAIM FOR RELIEF

(Infringement of the ‘375 Patent)

24. Plaintiff incorporates all previous paragraphs of this complaint as if set forth in full herein.

25. Signal IP is the owner of the entire right, title, and interest in and to U.S. Patent No. 5,732,375 (the ‘375 Patent), entitled “Method of Inhibiting or Allowing Airbag Deployment.” The ‘375 Patent was duly and legally issued by the U.S. Patent and Trademark Office on March 24, 1998. A true and correct copy of the ‘375 Patent is attached as Exhibit B.

26. On information and belief, Defendants have been and are directly infringing, inducing others to infringe, and/or contributorily infringing, literally, under the doctrine of equivalents, and/or jointly, one or more claims of the ‘375 Patent, including but not limited to claim 1 (“the ‘375 Patent Asserted Claims”), in the State of California, in this judicial district, and elsewhere in the United States by, among other things, importing, making, using, offering for sale, and/or selling in the United States certain methods or systems disclosed and claimed in the ‘375 Patent, including but not limited to the Occupant Positioning Detection System (OPDS) used in products including but not limited to the Honda Accord, CR-V, CR-Z, Civic, Crosstour, Fit, Insight, Odyssey, Pilot, Ridgeline, Element, FCX, Fit EV, Civic Hybrid, Insight Hybrid, Accord Hybrid, CR-Z Hybrid, and the Acura ILX, MDX, RDX, RXL/RL, TL, TSX, TSX Sedan, TSX Sport Wagon, and ILX Hybrid (collectively, the accused products and features are referred to herein as “the ‘375 Patent Accused Instrumentalities”).

27. The ‘375 Patent Accused Instrumentalities are described or have been described at least in part online at:

<http://corporate.honda.com/safety/details.aspx?id=technology>,

<http://techinfo.honda.com/rjanisis/pubs/OM/9B0606/9B0606O00025A.pdf>,

<http://automobiles.honda.com/images/information/owner->

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1 resources/SafetyEquipment.pdf,
2 http://parts.sonshonda.com/showAssembly.aspx?ukey_assembly=270304&ukey_pr
3 [oduct=1746685](http://www.oemacuraparts.com/auto-), and <http://www.oemacuraparts.com/auto->
4 [parts/2014/acura/ilx/interior-bumper/front-seat-components-](http://www.oemacuraparts.com/auto-parts/2014/acura/ilx/interior-bumper/front-seat-components-)
5 [r/?trim=base&engine=5-speed-automatic](http://www.oemacuraparts.com/auto-parts/2014/acura/ilx/interior-bumper/front-seat-components-r/?trim=base&engine=5-speed-automatic).

6 28. As described below, Honda provides airbag control in a vehicle having
7 an array of force sensors on the passenger seat coupled to a controller for
8 determining whether to allow airbag deployment based on sensed force. Honda
9 measures the force detected by each sensor and calculates the total force of the
10 sensor array. Honda allows deployment if the total force is above a total threshold
11 force. Honda defines a plurality of seat areas, and has at least one sensor located in
12 each seat area. Honda determines the existence of a local pressure area when the
13 calculated total force is concentrated in one of said seat areas. Honda calculates a
14 local force as the sum of forces sensed by each sensor located in the seat area in
15 which the total force is concentrated. Honda allows deployment if the local force is
16 greater than a predefined seat area threshold force.

17 29. According to Defendants' websites or documentation, the Front Side
18 Airbags with Passenger-Side Occupant Position Detection System (OPDS) system
19 operates such that "In the event of a moderate-to-severe side impact, the side airbag
20 inflates to help protect the driver's or front passenger's upper body. The Occupant
21 Position Detection System (OPDS) utilizes sensors in the front passenger's seatback
22 to detect the height and seating position of the occupant. If a child or small-statured
23 adult is leaning into the deployment path of the side airbag, sensors deactivate it."

24 30. Further according to Defendants' websites or documentation, "The
25 driver's advanced front airbag system includes a seat position sensor under the seat.
26 If the seat is too far forward, the airbag will inflate with less force, regardless of the
27 severity of the impact." Additionally, "The passenger's advanced front airbag
28 system has weight sensors under the seat. Although Honda does not encourage

1 carrying an infant or small child in the front, if the sensors detect the weight of an
2 infant or small child, the system will automatically turn the passenger’s front airbag
3 off.”

4 31. Further according to Defendants’ websites or documentation, “To
5 prevent airbag-caused injuries to infants and small children improperly placed in
6 front, if sensors detect the weight on the seat is about the weight of an infant or
7 small child in a child safety seat, the passenger’s front airbag will automatically shut
8 off.” Further, “If sensors detect up to about 67 lbs (the weight of an infant or small
9 child) on the front passenger’s seat, the airbag will automatically turn off.”

10 32. Further according to Defendants’ websites or documentation, “... if
11 sensors detect up to about 67 pounds – the approximate weight of an infant or child
12 and their safety seat – the control unit automatically shuts the airbag off, and the
13 Passenger Airbag Off indicator comes on.” Further, “In addition, if weight on the
14 seat is close to the upper or lower threshold, the indicator may flicker on and off.”

15 33. Further according to Defendants’ websites or documentation, Honda
16 products contain “sensor assembly, weight” inner and outer components, and
17 “sensor seat weight” components near or adjacent to the seat.

18 34. In addition to their own direct infringement, Defendants have also been
19 and are inducing and/or contributing to the direct infringement of the ‘375 Patent by
20 at least, but not limited to, customers of Defendants, partners of Defendants, and/or
21 end-users of Defendants’ products, including but not limited to the ‘375 Patent
22 Accused Instrumentalities (“the ‘375 Patent Third Party Infringers”), who directly
23 implement, use or otherwise participate in the use of the ‘375 Patent Accused
24 Instrumentalities, which have no substantial non-infringing uses, by at least the
25 following affirmative acts: (1) advertising in public and marketing the features,
26 benefits and availability of the ‘375 Patent Accused Instrumentalities; (2) promoting
27 the adoption and use of the ‘375 Accused Instrumentalities; and (3) providing
28 instructions on how to use the ‘375 Patent Accused Instrumentalities.

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1 35. Defendants indirectly infringe by actively, knowingly, and/or
2 intentionally inducing or contributing to infringement of one or more of the claims
3 of the '375 Patent, including but not limited to the '375 Patent Asserted Claims, by a
4 third party, including but not limited to the '375 Patent Third Party Infringers, who
5 directly implement, use or otherwise participate in the use of the '375 Patent
6 Accused Instrumentalities. On information and belief, Defendants actively,
7 knowingly, and/or intentionally induce the use of the '375 Patent Accused
8 Instrumentalities by the '375 Patent Third Party Infringers, and provide or otherwise
9 implement material components of one or more claims of the '375 Patent, including
10 but not limited to the '375 Patent Asserted Claims, which were especially made or
11 adapted for use in the infringement of the '375 Patent claims, including but not
12 limited to the '375 Patent Asserted Claims, and are not a staple article or commodity
13 of commerce suitable for substantial non-infringing uses. Defendants know and
14 have known that the combination for which their infringing components, including
15 but not limited to the '375 Patent Accused Instrumentalities, were especially made
16 or adapted are both patented and infringing.

17 36. Defendants' infringement of the '375 Patent has been and continues to
18 be willful, rendering this case exceptional within the meaning of 35 U.S.C. § 285.
19 With knowledge of the Patents-in-Suit, as described above, Defendants have
20 continued their infringing actions, as described above, despite an objectively high
21 likelihood (and affirmative allegations) that these actions constitute infringement of
22 the Patents-in-Suit. This objectively defined risk was known to Defendants, and so
23 obvious that it should have been known to Defendants.

24 37. Unless enjoined by this Court, Defendants will continue to infringe the
25 '375 Patent.

26 38. As a direct and proximate result of the Defendants' conduct, Plaintiff
27 has suffered, and will continue to suffer, irreparable injury for which it has no
28 adequate remedy at law. Plaintiff also has been damaged and, until an injunction

1 issues, will continue to be damaged in an amount yet to be determined.

2 **THIRD CLAIM FOR RELIEF**

3 **(Infringement of the ‘486 Patent)**

4 39. Plaintiff incorporates all previous paragraphs of this complaint as if set
5 forth in full herein.

6 40. Signal IP is the owner of the entire right, title, and interest in and to
7 U.S. Patent No. 6,434,486 (the ‘486 Patent), entitled “Technique for Limiting the
8 Range of an Object Sensing System in a Vehicle.” The ‘486 Patent duly and legally
9 issued by the U.S. Patent and Trademark Office on August 13, 2002. A true and
10 correct copy of the ‘486 Patent is attached as Exhibit C.

11 41. On information and belief, Defendants have been and are directly
12 infringing, inducing others to infringe, and/or contributorily infringing, literally,
13 under the doctrine of equivalents, and/or jointly, one or more claims of the ‘486
14 Patent, including but not limited to claim 21 (“the ‘486 Patent Asserted Claims”), in
15 the State of California, in this judicial district, and elsewhere in the United States by,
16 among other things, importing, making, using, offering for sale, and/or selling in the
17 United States certain methods or systems disclosed and claimed in the ‘486 Patent,
18 including but not limited to: (1) the Honda Forward Collision Warning System, used
19 in products including but not limited to the Honda Accord, Civic, Crosstour, Fit,
20 Odyssey, Civic Hybrid, and Accord Hybrid; (2) the Collision Mitigation Braking
21 System (CMBS), used in products including but not limited to the Honda Accord,
22 Civic, Crosstour, Fit, Odyssey, Civic Hybrid, and Accord Hybrid Acura MDX and
23 RLX/RL; and (3) the Parking Sensor System used in products including but not
24 limited to the Honda CR-V, Civic, Crosstour, Odyssey, Pilot, Civic Hybrid, and
25 Acura ILX, MDX, RLX/RL, and ILX Hybrid (collectively, the accused products
26 and features are referred to herein as “the ‘486 Patent Accused Instrumentalities”).

27 42. The ‘486 Patent Accused Instrumentalities are described or have been
28 described at least in part online at:

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1 http://www.haccord.org/forward_collision_warning_fcw_-185.html,
2 [http://www.honda.ca/Content/honda.ca/en/2014/accord_coupe/ex_10238/GenericLi
3 nk/TechnologyReferenceGuide_EN.pdf](http://www.honda.ca/Content/honda.ca/en/2014/accord_coupe/ex_10238/GenericLink/TechnologyReferenceGuide_EN.pdf),
4 [https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&cad=rja
9 &ved=0CDIQFjACOAo&url=http%3A%2F%2Fowners.honda.com%2Futility%2Fdownload%3Fpath%3D%2Fstatic%2Fpdfs%2F2014%2FAccord%2520Hybrid%2F2014_Accord_Hybrid_Tour_ForwardCollision.pdf&ei=a1viUt-
10 9PIKNrgeizIHICw&usg=AFQjCNEqwPWXFuNC9M3eR9M_to4IGbV6og&bvm=
11 bv.59930103,d.bmk](https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&cad=rja&ved=0CDIQFjACOAo&url=http%3A%2F%2Fowners.honda.com%2Futility%2Fdownload%3Fpath%3D%2Fstatic%2Fpdfs%2F2014%2FAccord%2520Hybrid%2F2014_Accord_Hybrid_Tour_ForwardCollision.pdf&ei=a1viUt-
5 &ved=0CDIQFjACOAo&url=http%3A%2F%2Fowners.honda.com%2Futility%2Fdownload%3Fpath%3D%2Fstatic%2Fpdfs%2F2014%2FAccord%2520Hybrid%2F2014_Accord_Hybrid_Tour_ForwardCollision.pdf&ei=a1viUt-
6 2014_Accord_Hybrid_Tour_ForwardCollision.pdf&ei=a1viUt-
7 9PIKNrgeizIHICw&usg=AFQjCNEqwPWXFuNC9M3eR9M_to4IGbV6og&bvm=
8 bv.59930103,d.bmk), <http://www-nrd.nhtsa.dot.gov/pdf/esv/esv19/05-0148-O.pdf>,
12 <http://techinfo.honda.com/rjanisis/pubs/OM/HJ0606/HJ0606O00277A.pdf>,
13 <http://www.acurinfo.com/tech-858.html>,
14 [http://owners.honda.com/vehicles/information/2014/Odyssey/features/Parking-
15 Sensor-System/2](http://owners.honda.com/vehicles/information/2014/Odyssey/features/Parking-Sensor-System/2), [http://owners.honda.com/vehicles/information/2014/Accord-
16 Coupe/features/Forward-Collision-Warning/3](http://owners.honda.com/vehicles/information/2014/Accord-Coupe/features/Forward-Collision-Warning/3), and
17 <http://techinfo.honda.com/rjanisis/pubs/QS/3W14TOQS.pdf>.

18 43. As described below, Honda limits the range of an object sensing system
19 such that certain objects detected by the sensing system that are not in a vehicle path
20 do not cause the sensing system to provide an alarm. Honda determines a desired
21 warning distance based upon the current steering angle. Honda determines a current
22 distance to a sensed object. Honda provides an alarm only if the sensed object is
23 within the desired warning distance.

24 44. According to Defendants’ websites or documentation, the Forward
25 Collision Warning system (FCWS) “Alerts you when it detects the possibility of
26 your vehicle colliding with the vehicle in front of yours. If the system determines a
27 collision is possible, it gives both visual and audible alerts, including a heads-up
28 warning that flashes on the windshield.”

45. Further according to Defendants’ websites or documentation, the
FCWS has Long, Normal, or Short warning settings for when warning starts, and

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1 “may give warnings of potential collisions when your vehicle speed is above 10mph
2 (15 km/h).” Further, “FCW cannot detect all objects ahead and may not detect a
3 given object; accuracy of the system will vary based on weather, speed and other
4 factors. FCW does not include a braking function. It is always your responsibility
5 to safely operate the vehicle and avoid collisions.”

6 46. Further according to Defendants’ websites or documentation, “If the
7 radar sensor in the front grille detects a vehicle in front of you when your vehicle
8 speed is 16 km/h or higher – and it determines there is a likelihood of a frontal
9 collision – the system provides you with the following visual and audible warnings:
10 With the FCW Distance set to Short: the heads-up light near the windshield flashes
11 continuously; the FCW indicator flashes continuously; a beep sounds continuously
12 until you take preventative action; With the FCW Distance set to Normal or Long:
13 the head-up light near the windshield and FCW indicator flash twice; if you do not
14 take action to prevent a collision and the distance to the other vehicle becomes
15 sufficiently close, BRAKE flashes on the MID, the FCW indicator and heads-up
16 light flash, and a beep sounds continuously until you take preventative action.”

17 47. Further according to Defendants’ websites or documentation, Honda’s
18 Collision Mitigation Brake System (CMBS) is used to determine the distance
19 between two vehicles by taking inputs from the radar sensor mounted in front of the
20 vehicle along with the data from a yaw rate sensor as well.

21 48. Further according to Defendants’ websites or documentation, Honda’s
22 Parking Sensor System “lets you know the approximate distance between your
23 vehicle and most obstacles while you are parking. When the system is on and your
24 vehicle is nearing an obstacle, you will hear beeping and see parking messages in
25 the multi-information display.” Further, “Each corner sensor is capable of sensing
26 an obstacle only when your vehicle is 20 in (50 cm) or closer. The rear center
27 sensor senses an obstacle that is behind your vehicle 70 in (1.8 m) or closer.”

28 49. Further according to Defendants’ websites or documentation, “The rear

1 center and corner sensors start to detect an obstacle when the shift lever is in “R”
2 and the vehicle speed is less than 5 mph (8 km/h). The front corner sensors start to
3 detect an obstacle when the shift lever is in any position other than “P” and the
4 vehicle speed is less than 5 mph (8 km/h).”

5 50. Further according to Defendants’ websites or documentation, “The
6 corner and center sensor monitor obstacles behind your vehicle, and the beeper and
7 audio/information screen let you know the approximate distance between your
8 vehicle and the obstacle.”

9 51. Further according to Defendants’ websites or documentation, the
10 Parking Sensor System “gauges the approximate distance between your vehicle and
11 most objects. When the system is on and your vehicle is approaching an object
12 while parking, you will hear an audible alert as well as see parking sensor indicators
13 on the navigation screen.”

14 52. In addition to their own direct infringement, Defendants have also been
15 and are inducing and/or contributing to the direct infringement of the ‘486 Patent by
16 at least, but not limited to, customers of Defendants, partners of Defendants, and/or
17 end-users of Defendants’ products, including but not limited to the ‘486 Patent
18 Accused Instrumentalities (“the ‘486 Patent Third Party Infringers”), who directly
19 implement, use or otherwise participate in the use of the ‘486 Patent Accused
20 Instrumentalities, which have no substantial non-infringing uses, by at least the
21 following affirmative acts: (1) advertising in public and marketing the features,
22 benefits and availability of the ‘486 Patent Accused Instrumentalities; (2) promoting
23 the adoption and use of the ‘486 Accused Instrumentalities; and (3) providing
24 instructions on how to use the ‘486 Patent Accused Instrumentalities.

25 53. Defendants indirectly infringe by actively, knowingly, and/or
26 intentionally inducing or contributing to infringement of one or more of the claims
27 of the ‘486 Patent, including but not limited to the ‘486 Patent Asserted Claims, by a
28 third party, including but not limited to the ‘486 Patent Third Party Infringers, who

1 directly implement, use or otherwise participate in the use of the ‘486 Patent
 2 Accused Instrumentalities. On information and belief, Defendants actively,
 3 knowingly, and/or intentionally induce the use of the ‘486 Patent Accused
 4 Instrumentalities by the ‘486 Patent Third Party Infringers, and provide or otherwise
 5 implement material components of one or more claims of the ‘486 Patent, including
 6 but not limited to the ‘486 Patent Asserted Claims, which were especially made or
 7 adapted for use in the infringement of the ‘486 Patent claims, including but not
 8 limited to the ‘486 Patent Asserted Claims, and are not a staple article or commodity
 9 of commerce suitable for substantial non-infringing uses. Defendants know and
 10 have known that the combination for which their infringing components, including
 11 but not limited to the ‘486 Patent Accused Instrumentalities, were especially made
 12 or adapted are both patented and infringing.

13 54. Defendants’ infringement of the ‘486 Patent has been and continues to
 14 be willful, rendering this case exceptional within the meaning of 35 U.S.C. § 285.
 15 With knowledge of the Patents-in-Suit, as described above, Defendants have
 16 continued their infringing actions, as described above, despite an objectively high
 17 likelihood (and affirmative allegations) that these actions constitute infringement of
 18 the Patents-in-Suit. This objectively defined risk was known to Defendants, and so
 19 obvious that it should have been known to Defendants.

20 55. Unless enjoined by this Court, Defendants will continue to infringe the
 21 ‘486 Patent.

22 56. As a direct and proximate result of the Defendants’ conduct, Plaintiff
 23 has suffered, and will continue to suffer, irreparable injury for which it has no
 24 adequate remedy at law. Plaintiff also has been damaged and, until an injunction
 25 issues, will continue to be damaged in an amount yet to be determined.

26 **FOURTH CLAIM FOR RELIEF**

27 **(Infringement of the ‘601 Patent)**

28 57. Plaintiff incorporates all previous paragraphs of this complaint as if set

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1 forth in full herein.

2 58. Signal IP is the owner of the entire right, title, and interest in and to
3 U.S. Patent No. 6,775,601 (the ‘601 Patent), entitled “Method and Control System
4 for Controlling Propulsion in a Hybrid Vehicle.” The ‘601 Patent was duly and
5 legally issued by the U.S. Patent and Trademark Office on August 10, 2004. A true
6 and correct copy of the ‘601 Patent is attached as Exhibit D.

7 59. On information and belief, Defendants have been and are directly
8 infringing, inducing others to infringe, and/or contributorily infringing, literally,
9 under the doctrine of equivalents, and/or jointly, one or more claims of the ‘601
10 Patent, including but not limited to claim 15 (“the ‘601 Patent Asserted Claims”), in
11 the State of California, in this judicial district, and elsewhere in the United States by,
12 among other things, importing, making, using, offering for sale, and/or selling in the
13 United States certain methods or systems for hybrid vehicles disclosed and claimed
14 in the ‘601 Patent, including but not limited to: (1) the hybrid versions of the Honda
15 Insight, Civic, CR-Z, and Fit; (2) the Sport Hybrid Intelligent Multi-Mode Drive (i-
16 MMD) System, used in products including but not limited to the 2014 Honda
17 Accord Hybrid and Plug-In Hybrid Accord; and (3) the Super Handling All-Wheel
18 Drive, used in products including but not limited to the Acura RLX Sport Hybrid
19 (collectively, the accused products and features are referred to herein as “the ‘601
20 Patent Accused Instrumentalities”).

21 60. The ‘601 Patent Accused Instrumentalities are described or have been
22 described at least in part online at: [http://automobiles.honda.com/civic-](http://automobiles.honda.com/civic-hybrid/performance.aspx)
23 [hybrid/performance.aspx](http://automobiles.honda.com/civic-hybrid/performance.aspx),
24 [http://corporate.honda.com/environment/hybridization.aspx?id=hybridization_syste](http://corporate.honda.com/environment/hybridization.aspx?id=hybridization_systems)
25 [ms, http://www.honda.co.nz/technology/emissions/ima/](http://www.honda.co.nz/technology/emissions/ima/),
26 <http://www.acura.com/modellanding.aspx?model=rlx&rlxsh=true&>,
27 [http://www.hondanews.com/channels/acura-automobiles-rlx/releases/2014-acura-](http://www.hondanews.com/channels/acura-automobiles-rlx/releases/2014-acura-rlx-sport-hybrid-sh-awd-powertrain)
28 [rlx-sport-hybrid-sh-awd-powertrain](http://www.hondanews.com/channels/acura-automobiles-rlx/releases/2014-acura-rlx-sport-hybrid-sh-awd-powertrain),

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1 <http://www.acura.com/modellanding.aspx?model=rlx&rlxsh=true&>,
2 <http://world.honda.com/automobile-technology/i-MMD/topic3/>,
3 <http://world.honda.com/automobile-technology/i-MMD/topic1/>,
4 [http://world.honda.com/news/2013/4130620Accord-Hybrid-Accord-Plug-in-](http://world.honda.com/news/2013/4130620Accord-Hybrid-Accord-Plug-in-Hybrid/index.html)
5 [Hybrid/index.html](http://world.honda.com/news/2013/4130620Accord-Hybrid-Accord-Plug-in-Hybrid/index.html), <http://automobiles.honda.com/civic-hybrid/performance.aspx>,
6 [http://corporate.honda.com/environment/hybridization.aspx?id=hybridization_syste](http://corporate.honda.com/environment/hybridization.aspx?id=hybridization_systems)
7 [ms](http://corporate.honda.com/environment/hybridization.aspx?id=hybridization_systems), <http://automobiles.honda.com/insight-hybrid/performance.aspx>,
8 [http://www.hondanews.com/channels/Noticias-en-Espanol/releases/2012-honda-](http://www.hondanews.com/channels/Noticias-en-Espanol/releases/2012-honda-civic-powertrains?l=en-US&mode=print)
9 [civic-powertrains?l=en-US&mode=print](http://www.hondanews.com/channels/Noticias-en-Espanol/releases/2012-honda-civic-powertrains?l=en-US&mode=print),
10 http://www.ae.pwr.wroc.pl/filez/20110606092416_HEV_Honda.pdf,
11 <http://world.honda.com/automobile-technology/IMA/ima03/>,
12 [http://world.honda.com/news/2013/4130620Accord-Hybrid-Accord-Plug-in-](http://world.honda.com/news/2013/4130620Accord-Hybrid-Accord-Plug-in-Hybrid/index.html)
13 [Hybrid/index.html](http://world.honda.com/news/2013/4130620Accord-Hybrid-Accord-Plug-in-Hybrid/index.html),
14 [https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-System-for-2014-Model-Year-Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3NiqbAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja)
15 [filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-System-for-2014-Model-Year-Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3NiqbAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja)
16 [00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-System-for-2014-Model-Year-Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3NiqbAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja)
17 [System-for-2014-Model-Year-](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-System-for-2014-Model-Year-Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3NiqbAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja)
18 [Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3Niq](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-System-for-2014-Model-Year-Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3NiqbAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja)
19 [bAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja](https://www.google.co.in/url?sa=t&rct=j&q=&esrc=s&source=web&cd=9&ved=0CE0QFjAI&url=http%3A%2F%2Fprius-pt.com%2Fcafe%2Fcfs-filesystemfile.ashx%2F__key%2FCommunityServer.Components.UserFiles%2F00.00.23.01.Honda%2FDevelopment-of-SPORT-HYBRID-i_2D00_MMD-Control-System-for-2014-Model-Year-Accord.pdf&ei=hJSWU9uDItHIuATGnIKoAg&usg=AFQjCNFolScwF3LHcL3NiqbAccAhMCTdZA&bvm=bv.68445247,d.c2E&cad=rja), and
20 <http://world.honda.com/automobile-technology/i-MMD/topic3/>.
21

22 61. As described below, Honda controls a propulsion system in a hybrid
23 vehicle including a traction motor and a propulsion unit. Honda maps respective
24 regions of relatively high and low efficiency in an efficiency map for the propulsion
25 unit. Honda senses a signal indicative of the regions of relatively high and low
26 efficiency. During conditions when the sensed signal indicates a region of low-
27 efficiency for the propulsion unit, Honda generates a signal configured to activate
28 the electric traction motor to drivingly propel the vehicle while de-engaging the

1 propulsion unit from propelling the vehicle. During conditions when the sensed
2 signal indicates a region of high-efficiency for the propulsion unit, Honda generates
3 a signal configured to deactivate the electric traction motor from drivingly
4 propelling the vehicle while re-engaging the propulsion unit to propel the vehicle.

5 62. According to Defendants’ websites or documentation, the Integrated
6 Motor Assist (IMA) System “couples a compact 110-hp, 8-valve, SOHC, i-VTEC 4-
7 cylinder engine with an ultra-thin electric motor for outstanding efficiency. Energy
8 that used to be wasted when applying brakes is captured and stored as electric
9 power. When the car accelerates, this stored energy is released, enhancing vehicle
10 performance while cutting down on fuel consumption.”

11 63. Further according to Defendants’ websites or documentation,
12 “Although the engine alone provides sufficient driving performance, when
13 additional power is required, a permanent-magnet electric motor mounted between
14 the engine and transmission provides power assist. Under certain conditions, the
15 electric motor can propel the car on its own. Together, the motor and engine
16 produce 110 hp @ 5500 rpm.”

17 64. Further according to Defendants’ websites or documentation, during
18 “low-speed cruising,” “the valves of all 4 cylinders of the engine are closed and
19 combustion halted. The motor alone powers the vehicle. Gasoline consumption is
20 reduced to zero, contributing to improved overall fuel efficiency.” Additionally,
21 during “gentle acceleration / high-speed cruising,” “engine efficiency is high. The
22 vehicle runs on engine power alone. The motor is deactivated, saving electric
23 power.”

24 65. Further according to Defendants’ websites or documentation, Honda
25 vehicles use “three electric motors: a single 35-kilowatt (47 hp) motor that is
26 integrated with the 7-speed Dual Clutch Transmission supplements the V-6 engine
27 in driving the front wheels, and a rear-mounted Twin Motor Unit (TMU) containing
28 two 27-kilowatt (36 hp) motors that dynamically distribute electric-motor torque to

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1 the rear wheels. Both the front and rear motors capture kinetic energy during
2 vehicle deceleration and braking and convert it to electricity to supply the Intelligent
3 Power Unit’s 72-cell, 1.3 kwh lithium-ion battery pack, located behind the rear
4 seatback. Together, the 310-horsepower V-6 engine and three electric motors
5 produce a total system output of 377 horsepower and 341 lb.-ft. of torque....”

6 66. Further according to Defendants’ websites or documentation, “Two
7 independent electric motors [] drive the rear wheels. Through a curve, they produce
8 positive and negative torque – also known as torque vectoring – to deliver
9 unprecedented cornering capabilities. Working in unison, the motors provide power
10 for standing starts, low-speed cruising, and when called upon, vigorous rolling
11 acceleration.”

12 67. Further according to Defendants’ websites or documentation, “working
13 with the gasoline engine, the powerful front electric motor supplies prodigious
14 torque during hard acceleration and extra fuel efficiency at low cruising speeds. The
15 power unit also houses the new Motor-integrated 7-Speed DCT (Dual Clutch
16 Transmission).”

17 68. Further according to Defendants’ websites or documentation, during
18 “launch acceleration,” “from a standing start, acceleration ... is swift and electric –
19 making use of the dual rear motors to drive the rear wheels. Unlike gasoline
20 engines, electric motors produce 100% of their torque the moment they are engaged.
21 It’s something you’ll appreciate as you watch the speedometer needle rapidly climb
22 north.”

23 69. Further according to Defendants’ websites or documentation, during
24 “high-speed cruising,” “At highway speeds the 310-hp V-6 gets the assignment—
25 with support from the front electric motor when essential. Variable Cylinder
26 Management (VCM) increases your fuel efficiency by allowing the engine to run on
27 only three cylinders. When you need to quickly pass an 18-wheeler, the VCM
28 system instantly fires all six cylinders, and the electric motors, if necessary. Pass

1 completed, the engine returns to three-cylinder power. The transition is
2 imperceptible, until you look at your average mpg.”

3 70. Further according to Defendants’ websites or documentation, during
4 “SH-AWD in Slippery Conditions,” “SH-AWD monitors speed, road conditions,
5 driver input and other factors to distribute power to the wheels with the most
6 traction.”

7 71. Further according to Defendants’ websites or documentation, Honda’s
8 i-MMD “combines high efficiency systems to dramatically increase the driving
9 distance by motor alone, even without starting the engine. No gasoline used = high
10 fuel efficiency.”

11 72. Further according to Defendants’ websites or documentation, Honda
12 supports different modes for different speeds. EV mode is used during low speed
13 scenarios and the vehicle is run using the motor alone. During high speed scenarios
14 the user can manually disengage the motor and run the vehicle using the engine
15 alone. In case of low speed scenarios, the Honda vehicle is run using the electric
16 motor alone. The engine is separated from the drive-train.

17 73. Further according to Defendants’ websites or documentation, the
18 Hybrid i-MMD features “a simple structure, this hybrid system comprises a newly
19 developed exclusive gasoline engine; an electric CVT enclosing two motors (drive
20 and generation) and a clutch directly linked to the gasoline engine; and a lithium-ion
21 battery that efficiently stores regenerated electricity. The system automatically
22 selects among three drive modes to maximize efficiency at all times. The result is
23 best-in-class acceleration responsiveness and ultra-high fuel economy. The three
24 drive modes are as follows: EV Drive: For off-the-line starts and normal cruising,
25 the battery provides power to the drive motor, which propels the vehicle. During
26 deceleration, this motor serves as a generator to regenerate electricity from kinetic
27 energy. Hybrid Drive: For acceleration, the gasoline engine operates in its high-
28 efficiency rpm range to turn the generation motor. This electricity flows to and turns

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1 the drive motor. When more powerful acceleration is needed, electricity from the
 2 battery combines with electricity from the generation motor to provide maximum
 3 torque instantaneously. The result is smooth, powerful acceleration. Engine Drive:
 4 For high-speed cruising on the highway, the clutch in the transmission directly links
 5 the output axis of the gasoline engine with the drive axis of the vehicle. This
 6 mechanism makes possible high-speed cruising at the optimal gear ratio and highly
 7 efficient operation of the Atkinson cycle engine.”

8 74. Further according to Defendants’ websites or documentation, the
 9 “Integrated Motor Assist (IMA®) System ... couples a compact 110-hp, 8-valve,
 10 SOHC, i-VTEC® 4-cylinder engine with an ultra-thin electric motor for outstanding
 11 efficiency. Energy that used to be wasted when applying brakes is captured and
 12 stored as electric power. When the car accelerates, this stored energy is released,
 13 enhancing vehicle performance while cutting down on fuel consumption.”
 14 Additionally, “Although the engine alone provides sufficient driving performance,
 15 when additional power is required, a permanent-magnet electric motor mounted
 16 between the engine and transmission provides power assist. Under certain
 17 conditions, the electric motor can propel the car on its own. Together, the motor and
 18 engine produce 110 hp @ 5500 rpm (SAE net).”

19 75. Further according to Defendants’ websites or documentation, “the CVT
 20 constantly adjusts to provide the most efficient drive ratio possible depending on
 21 torque load. Honda’s CVT provides better fuel economy and acceleration when
 22 compared to a conventional transmission.” Additionally, “Smart electronics
 23 measure accelerator pedal position, then adjust the throttle-body butterfly valve for
 24 the intake manifold, the gear ratio in the CVT, and the operation of the IMA to best
 25 suit the driving conditions. To determine the current driving conditions, the system
 26 monitors pedal position, throttle position, vehicle speed, engine speed, calculated
 27 road slope and engine vacuum. With this information, the Drive-by-Wire throttle
 28 system controls motor and engine power to maximize the output of the new

1 Lithium-Ion battery.”

2 76. Further according to Defendants’ websites or documentation, “The
3 Motor Control Module (MCM) is the central part in the Intelligent Power Unit. It
4 controls the Motor Power Inverter module (MPI) and does the battery management
5 for the battery pack. Furthermore, the MCM has a self diagnostic function and takes
6 care of the communication with external diagnostic tools.” Further, it receives a
7 number of input signals including “Torque requests.” “Based on the information the
8 MCM receives, and thus from the condition of the vehicle, it regulates the degree of
9 assistance from the electric motor as well as the amount of regenerative energy from
10 the engine. The regulation of the electric motor is based on the torque requests, via
11 the inverter. In addition, the MCM also calculates the load condition of the battery
12 pack and regulates the ventilator for the cooling.”

13 77. Further according to Defendants’ websites or documentation, “The
14 electric motor delivers maximum torque from zero rpm to assist with the engine, for
15 strong acceleration and reduced fuel consumption.” Additionally, during “Low-
16 speed cruising,” “the valves of all 4 cylinders of the engine are closed and
17 combustion halted. The motor alone powers the vehicle. Gasoline consumption is
18 reduced to zero, contributing to improved overall fuel efficiency.” Additionally,
19 during “Standing start,” “the electric motor delivers maximum torque from zero rpm
20 to assist the engine, for strong acceleration and reduced fuel consumption.”
21 Additionally, during “gentle acceleration / high-speed cruising,” “the engine
22 efficiency is high. The vehicle runs on engine power alone. The motor is
23 deactivated, saving electric power.”

24 78. Further according to Defendants’ websites or documentation, the
25 “Sport Hybrid i-MMD uses three different engine modes..... For off-the-line starts
26 and low- to mid-speed cruising, EV Drive uses the battery to provide power and the
27 drive motor to propel the vehicle. For acceleration, Hybrid Drive uses the gasoline
28 engine to generate electricity and the drive motor to propel the vehicle. Finally, for

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1 high-speed cruising, Engine Drive uses the gasoline engine to provide power
2 directly. By switching automatically among these three modes, Sport Hybrid i-
3 MMD is able to deliver fuel economy of 30.0 km/L.” Additionally, “the drive
4 motor is able to produce maximum torque in off-the-line starts and Sport Hybrid i-
5 MMD offers powerful acceleration performance and a completely new driving feel
6 along with a smooth, comfortable ride and exceptional quietness.”

7 79. Further according to Defendants’ websites or documentation, the
8 “major goals of power management control are to: (1) enhance fuel economy in
9 each drive mode; (2) Enhance fuel economy by switching the drive modes....”
10 Additionally, regarding these goals, “fuel economy performance can be enhanced by
11 taking into account the acceleration and deceleration intent of the driver and the
12 constraints and efficiency characteristics of each component.”

13 80. Further according to Defendants’ websites or documentation, “the
14 power management control obtains the acceleration and deceleration intent of the
15 driver (accelerator and brake pedal operations) and the power and torque limit
16 information from each component, and performs the appropriate cooperative power
17 control within the limit range.” Additionally, “Power management control first
18 calculates the target vehicle driving force from the acceleration and deceleration
19 intent of the driver and the motor torque limit requirement. Next, it calculates the
20 target engine power that matches the sum of the target motor power calculated from
21 the target vehicle driving force and the target battery power calculated from the
22 energy management control. The target engine power is corrected as necessary by
23 the battery power regulator. After that, the target engine speed and target engine
24 torque are calculated from the corrected target engine power. Here, the target
25 engine speed and torque values select the point at which the engine efficiency is
26 maximum.”

27 81. Further according to Defendants’ websites or documentation, in “EV
28 Drive - For off-the-line starts and normal cruising, the battery provides power to the

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1 drive motor, which propels the vehicle. During deceleration, this motor serves as a
2 generator to regenerate electricity from kinetic energy.” Additionally, in “Engine
3 Drive - For high-speed cruising on the highway, the clutch in the transmission
4 directly links the output axis of the gasoline engine with the drive axis of the
5 vehicle. This mechanism makes possible high-speed cruising at the optimal gear
6 ratio and highly efficient operation of the Atkinson cycle engine.”

7 82. In addition to their own direct infringement, Defendants have also been
8 and are inducing and/or contributing to the direct infringement of the ‘601 Patent by
9 at least, but not limited to, customers of Defendants, partners of Defendants, and/or
10 end-users of Defendants’ products, including but not limited to the ‘601 Patent
11 Accused Instrumentalities (“the ‘601 Patent Third Party Infringers”), who directly
12 implement, use or otherwise participate in the use of the ‘601 Patent Accused
13 Instrumentalities, which have no substantial non-infringing uses, by at least the
14 following affirmative acts: (1) advertising in public and marketing the features,
15 benefits and availability of the ‘601 Patent Accused Instrumentalities; (2) promoting
16 the adoption and use of the ‘601 Accused Instrumentalities; and (3) providing
17 instructions on how to use the ‘601 Patent Accused Instrumentalities.

18 83. Defendants indirectly infringe by actively, knowingly, and/or
19 intentionally inducing or contributing to infringement of one or more of the claims
20 of the ‘601 Patent, including but not limited to the ‘601 Patent Asserted Claims, by a
21 third party, including but not limited to the ‘601 Patent Third Party Infringers, who
22 directly implement, use or otherwise participate in the use of the ‘601 Patent
23 Accused Instrumentalities. On information and belief, Defendants actively,
24 knowingly, and/or intentionally induce the use of the ‘601 Patent Accused
25 Instrumentalities by the ‘601 Patent Third Party Infringers, and provide or otherwise
26 implement material components of one or more claims of the ‘601 Patent, including
27 but not limited to the ‘601 Patent Asserted Claims, which were especially made or
28 adapted for use in the infringement of the ‘601 Patent claims, including but not

1 limited to the '601 Patent Asserted Claims, and are not a staple article or commodity
2 of commerce suitable for substantial non-infringing uses. Defendants know and
3 have known that the combination for which their infringing components, including
4 but not limited to the '601 Patent Accused Instrumentalities, were especially made
5 or adapted are both patented and infringing.

6 84. Defendants' infringement of the '601 Patent has been and continues to
7 be willful, rendering this case exceptional within the meaning of 35 U.S.C. § 285.
8 With knowledge of the Patents-in-Suit, as described above, Defendants have
9 continued their infringing actions, as described above, despite an objectively high
10 likelihood (and affirmative allegations) that these actions constitute infringement of
11 the Patents-in-Suit. This objectively defined risk was known to Defendants, and so
12 obvious that it should have been known to Defendants.

13 85. Unless enjoined by this Court, Defendants will continue to infringe on
14 the '601 Patent.

15 86. As a direct and proximate result of the Defendants' conduct, Plaintiff
16 has suffered, and will continue to suffer, irreparable injury for which it has no
17 adequate remedy at law. Plaintiff also has been damaged and, until an injunction
18 issues, will continue to be damaged in an amount yet to be determined.

19 **FIFTH CLAIM FOR RELIEF**

20 **(Infringement of the '007 Patent)**

21 87. Plaintiff incorporates all previous paragraphs of this complaint as if set
22 forth in full herein.

23 88. Signal IP is the owner of the entire right, title, and interest in and to
24 U.S. Patent No. 6,012,007 (the '007 Patent), entitled "Occupant Detection Method
25 and Apparatus for Air Bag System." The '007 Patent was duly and legally issued by
26 the U.S. Patent and Trademark Office on January 4, 2000. A true and correct copy
27 of the '007 Patent is attached as Exhibit E.

28 89. On information and belief, Defendants have been and are directly

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1 infringing, inducing others to infringe, and/or contributorily infringing, literally,
2 under the doctrine of equivalents, and/or jointly, one or more claims of the '007
3 Patent, including but not limited to claim 1 (“the ‘007 Patent Asserted Claims”), in
4 the State of California, in this judicial district, and elsewhere in the United States by,
5 among other things, importing, making, using, offering for sale, and/or selling in the
6 United States certain methods or systems for hybrid vehicles disclosed and claimed
7 in the '007 Patent, including but not limited to the Supplemental Restraint System
8 (SRS) Airbags with weight sensors, used in products including but not limited to the
9 Honda Accord, CR-V, CR-Z, Civic, Crosstour, Fit, Insight, Odyssey, Pilot,
10 Ridgeline, Element, FCX, Fit EV, Civic Hybrid, Insight Hybrid, Accord Hybrid, and
11 CR-Z Hybrid, and Acura ILX, MDX, RDX, RLX/RL, TL, TSX, TSX Sedan, TSX
12 Sport Wagon, and ILX Hybrid (collectively, the accused products and features are
13 referred to herein as “the ‘007 Patent Accused Instrumentalities”).

14 90. The '007 Patent Accused Instrumentalities are described or have been
15 described at least in part online at:

16 <http://techinfo.honda.com/rjanisis/pubs/OM/9B0606/9B0606O00025A.pdf>,

17 [http://automobiles.honda.com/images/information/owner-](http://automobiles.honda.com/images/information/owner-resources/safetyequipment.pdf)
18 [resources/safetyequipment.pdf](http://automobiles.honda.com/images/information/owner-resources/safetyequipment.pdf), and

19 <http://techinfo.honda.com/rjanisis/pubs/OM/A51010/A51010OM.pdf>.

20 91. As described below, Honda includes a vehicle restraint system having a
21 controller for deploying air bags and means for selectively allowing deployment
22 according to the outputs of seat sensors responding to the weight of an occupant.
23 Honda determines measures represented by individual sensor outputs and calculates
24 from the sensor outputs a relative weight parameter. Honda establishes a first
25 threshold of the relative weight parameter and allows deployment when the relative
26 weight parameter is above the first threshold. Honda establishes a lock threshold
27 above the first threshold and sets a lock flag when the relative weight parameter is
28 above the lock threshold and deployment has been allowed for a given time. Honda

1 establishes an unlock threshold at a level indicative of an empty seat and clears the
2 flag when the relative weight parameter is below the unlock threshold for a time.
3 Honda allows deployment while the lock flag is set.

4 92. Federal Motor Vehicle Safety Standard No. 208 defines mandatory
5 testing to ensure occupant crash protection, including tests designed to ensure that
6 airbags are not deployed in a manner that would cause injury to infants, children, or
7 small-statured adults. NHTSA has not promulgated specific tests for rough road
8 conditions, such as tests designed to ensure that airbags do not turn off in the
9 presence of a small-statured adult who is bouncing as a result of riding on a rough
10 road. However, rough road performance is an area that all major vehicle
11 manufacturers must nonetheless consider and address in light of the full range of
12 real world conditions their vehicles will experience. Honda requires a mechanism to
13 ensure due care in addressing the effect of rough road and similar events on
14 occupant presence.

15 93. According to Defendants’ websites or documentation, “Advanced
16 Airbags: Both front airbags now have ‘advanced’ features. To help prevent airbag-
17 caused injuries to shorter drivers, the driver’s bag will inflate with the least force
18 necessary— even in a severe collision—if the driver is seated closer to the airbag
19 than recommended. To prevent airbag-caused injuries to infants and small children
20 improperly placed in front, if sensors detect the weight on the seat is about the
21 weight of an infant or small child in a child safety seat, the passenger’s front airbag
22 will automatically shut off.”

23 94. Further according to Defendants’ websites or documentation, “The
24 driver’s advanced front airbag system includes a seat position sensor under the seat.
25 If the seat is too far forward, the airbag will inflate with less force, regardless of the
26 severity of the impact. If there is a problem with the sensor, the SRS indicator will
27 come on, and the airbag will inflate in the normal manner regardless of the driver’s
28 seating position. The passenger’s advanced front airbag system has weight sensors

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1 under the seat. Although Honda does not encourage carrying an infant or small child
2 in front, if the sensors detect the weight of an infant or small child (up to about 65
3 lbs or 29 kg), the system will automatically turn the passenger’s front airbag off.”

4 95. Further according to Defendants’ websites or documentation, “The
5 passenger’s advanced front airbag system has weight sensors under the seat.
6 Although Honda does not encourage carrying an infant or small child in the front, if
7 the sensors detect the weight of an infant or small child, the system will
8 automatically turn the passenger’s front airbag off.” Additionally, “If the weight
9 sensors detect there is no passenger in the front seat, the airbag will be off.
10 However, the passenger airbag off indicator will not come on.” Additionally, the
11 side airbag indicator “alerts you that the passenger’s side airbag has been shut off
12 because weight sensors detect the weight of an infant or small child on the front
13 passenger’s seat. It doesn’t mean there is a problem with your side airbags. When
14 you turn the ignition switch to the ON (II) position, the indicator should come on
15 briefly and go off... If it doesn’t come on, stays on, or comes on while driving
16 without a passenger in the front seat, have the system checked.”

17 96. In addition to their own direct infringement, Defendants have also been
18 and are inducing and/or contributing to the direct infringement of the ‘007 Patent by
19 at least, but not limited to, customers of Defendants, partners of Defendants, and/or
20 end-users of Defendants’ products, including but not limited to the ‘007 Patent
21 Accused Instrumentalities (“the ‘007 Patent Third Party Infringers”), who directly
22 implement, use or otherwise participate in the use of the ‘007 Patent Accused
23 Instrumentalities, which have no substantial non-infringing uses, by at least the
24 following affirmative acts: (1) advertising in public and marketing the features,
25 benefits and availability of the ‘007 Patent Accused Instrumentalities; (2) promoting
26 the adoption and use of the ‘007 Accused Instrumentalities; and (3) providing
27 instructions on how to use the ‘007 Patent Accused Instrumentalities.

28 97. Defendants indirectly infringe by actively, knowingly, and/or

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1 intentionally inducing or contributing to infringement of one or more of the claims
2 of the '007 Patent, including but not limited to the '007 Patent Asserted Claims, by a
3 third party, including but not limited to the '007 Patent Third Party Infringers, who
4 directly implement, use or otherwise participate in the use of the '007 Patent
5 Accused Instrumentalities. On information and belief, Defendants actively,
6 knowingly, and/or intentionally induce the use of the '007 Patent Accused
7 Instrumentalities by the '007 Patent Third Party Infringers, and provide or otherwise
8 implement material components of one or more claims of the '007 Patent, including
9 but not limited to the '007 Patent Asserted Claims, which were especially made or
10 adapted for use in the infringement of the '007 Patent claims, including but not
11 limited to the '007 Patent Asserted Claims, and are not a staple article or commodity
12 of commerce suitable for substantial non-infringing uses. Defendants know and
13 have known that the combination for which their infringing components, including
14 but not limited to the '007 Patent Accused Instrumentalities, were especially made
15 or adapted are both patented and infringing.

16 98. Defendants' infringement of the '007 Patent has been and continues to
17 be willful, rendering this case exceptional within the meaning of 35 U.S.C. § 285.
18 With knowledge of the Patents-in-Suit, as described above, Defendants have
19 continued their infringing actions, as described above, despite an objectively high
20 likelihood (and affirmative allegations) that these actions constitute infringement of
21 the Patents-in-Suit. This objectively defined risk was known to Defendants, and so
22 obvious that it should have been known to Defendants.

23 99. Unless enjoined by this Court, Defendants will continue to infringe on
24 the '007 Patent.

25 100. As a direct and proximate result of the Defendants' conduct, Plaintiff
26 has suffered, and will continue to suffer, irreparable injury for which it has no
27 adequate remedy at law. Plaintiff also has been damaged and, until an injunction
28 issues, will continue to be damaged in an amount yet to be determined.

PRAYER FOR RELIEF

Wherefore, Signal IP respectfully requests that the Court enter judgment against Defendants as follows:

1. That Defendants have directly infringed the Patents-in-Suit;
2. That Defendants have contributorily infringed the Patents-in-Suit;
3. That Defendants have induced the infringement of the Patents-in-Suit;
4. That Defendants' infringement be adjudged willful and deliberate;
5. That Defendants and their affiliates, subsidiaries, officers, directors, employees, agents, representatives, successors, assigns, and all those acting in concert, participation, or privity with them or on their behalf, including customers, be enjoined from infringing, inducing others to infringe or contributing to the infringement of the Patents-in-Suit;
6. For damages, according to proof, for Defendants' infringement, together with pre-judgment and post-judgment interest, as allowed by law and that such damages be trebled as provided by 35 U.S.C. § 284;
7. That this Court determine that this is an exceptional case under 35 U.S.C. § 285 and an award of attorneys' fees and costs to Signal IP is warranted;
- and
8. For such other and further relief as the Court may deem just and proper.

Dated: June 13, 2014

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By: /s/ Ryan E. Hatch
 Randall J. Sunshine
 Ryan E. Hatch
 Jason L. Haas
 Attorneys for Plaintiff SIGNAL IP, INC.

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JURY DEMAND

Pursuant to Federal Rules of Civil Procedure Rule 38(b), Plaintiff Signal IP, Inc. respectfully demands a jury trial on any and all issues triable as of right by a jury in this action.

Dated: June 13, 2014

LINER LLP

By: /s/ Ryan E. Hatch
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