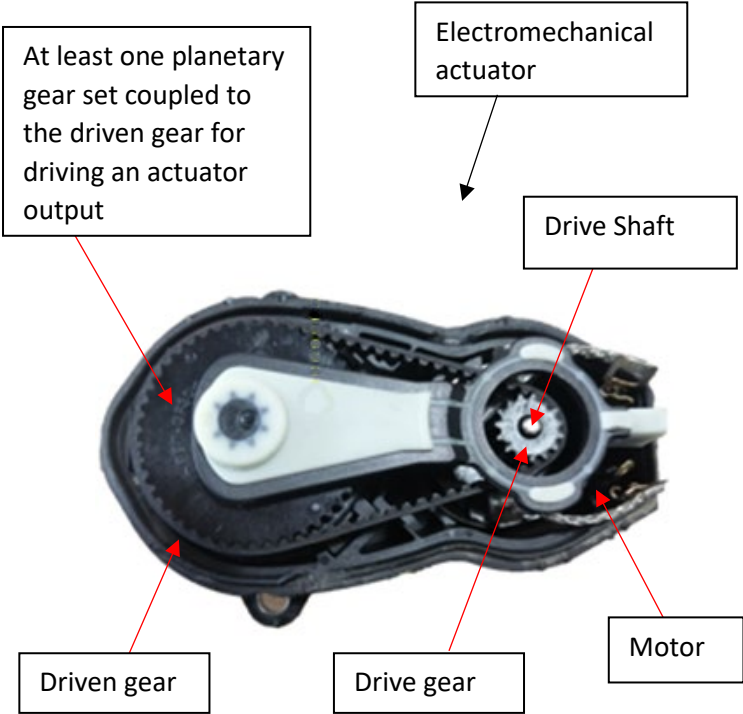


EXHIBIT A

Claim	Accused Actuator #1
5. An electrically actuated parking brake system comprising: a vehicle power source;	Defendants' Actuator #1 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source. Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 5 by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 5 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent. Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 5 by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial

	non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 5 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.
an electromechanical actuator comprising a motor having a drive shaft, a drive gear coupled to said drive shaft, a driven gear coupled to said drive gear, at least one planetary gear set coupled to said driven gear for driving an actuator output,	 The diagram shows a cross-section of an electromechanical actuator. It features a motor on the right side, which is connected to a drive shaft. The drive shaft has a drive gear at its end. This drive gear is meshed with a driven gear. The driven gear is part of a planetary gear set, which is shown with multiple planetary gears. A label points to one of these planetary gears, stating 'At least one planetary gear set coupled to the driven gear for driving an actuator output'. The entire assembly is housed within a black casing. Electromechanical actuator Drive Shaft At least one planetary gear set coupled to the driven gear for driving an actuator output Driven gear Drive gear Motor

and a sub-frame, said motor being mounted on said sub-frame, said actuator further comprising a component isolator having a spring constant and a damping constant, said isolator coupled between said motor and said sub-frame; and

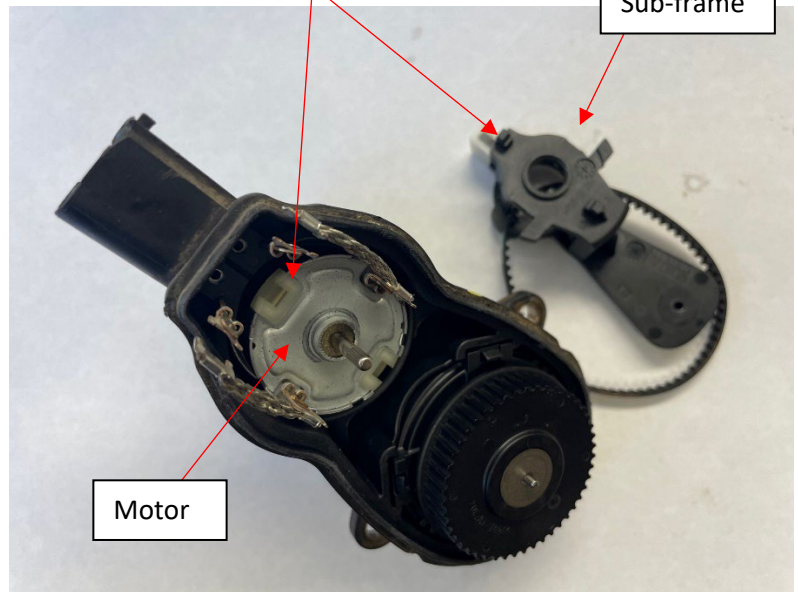
Electromechanical
actuator



Sub-frame

Motor
mounted to
the sub-frame

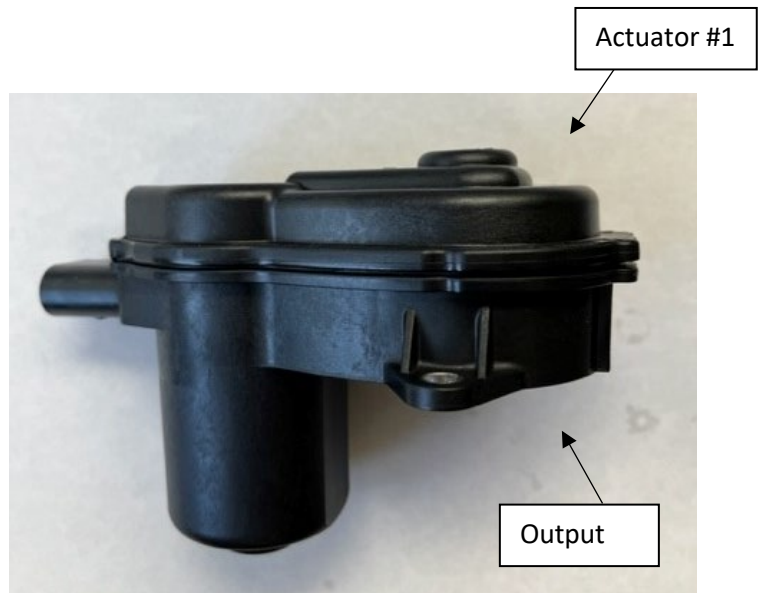
Component isolator with a
spring constant and a
damping constant coupled
between the motor and the
sub-frame



Sub-frame

Motor

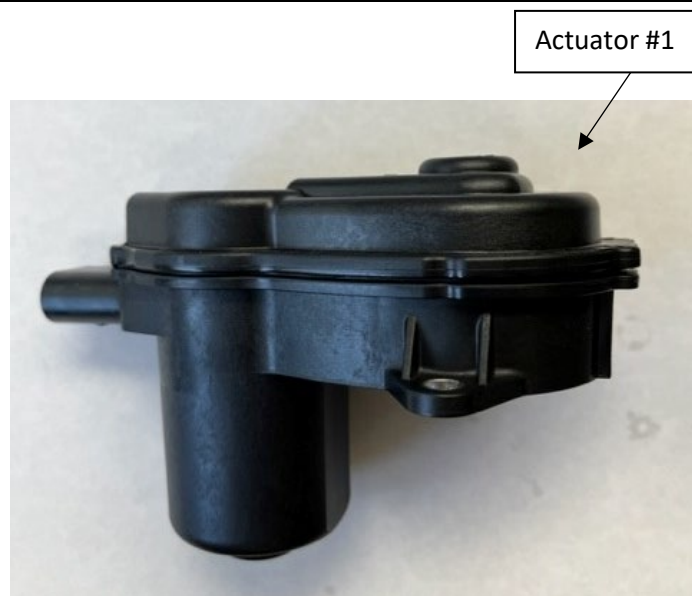
a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.



When Defendants' Actuator #1 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

8. An electrically actuated parking brake system comprising:

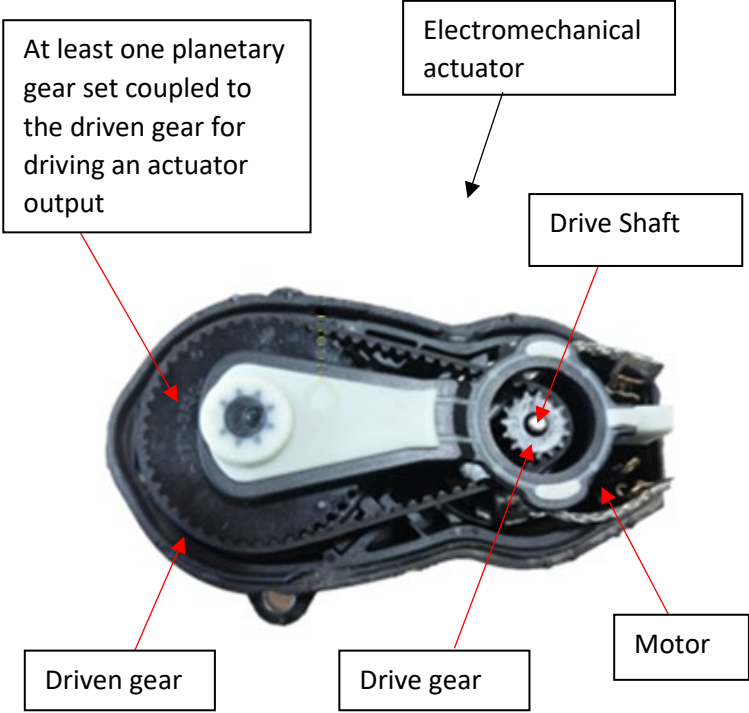
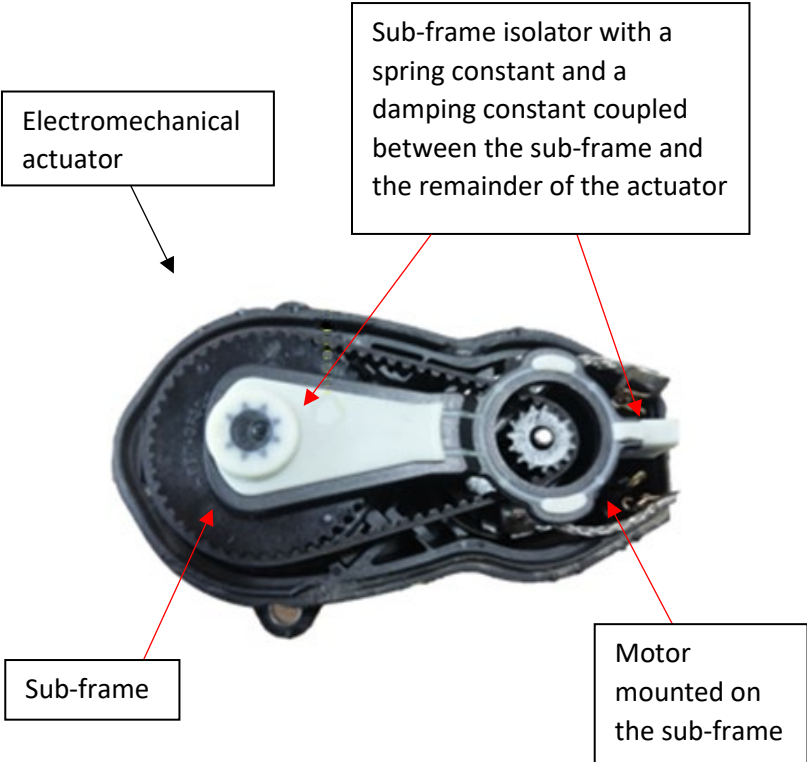
a vehicle power source;



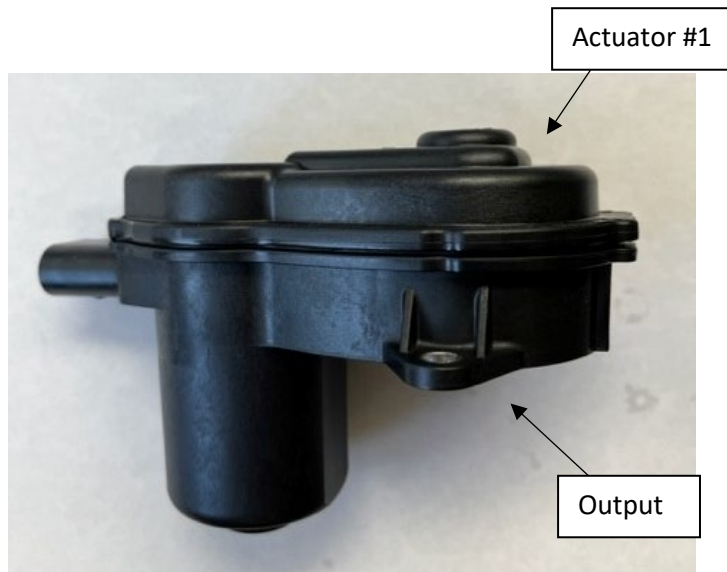
Defendants' Actuator #1 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 8 by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 8 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

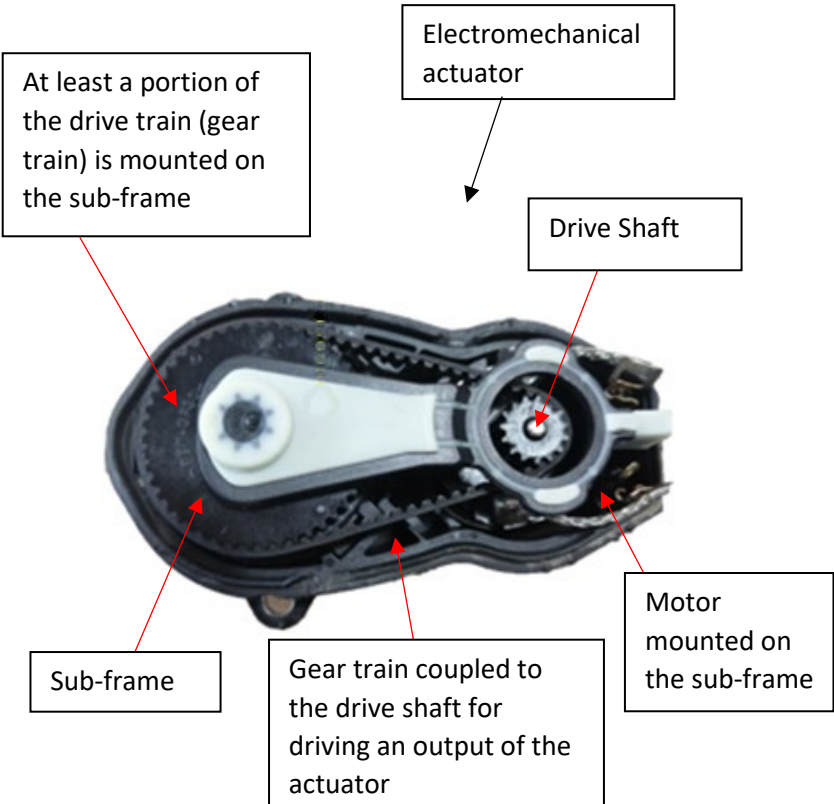
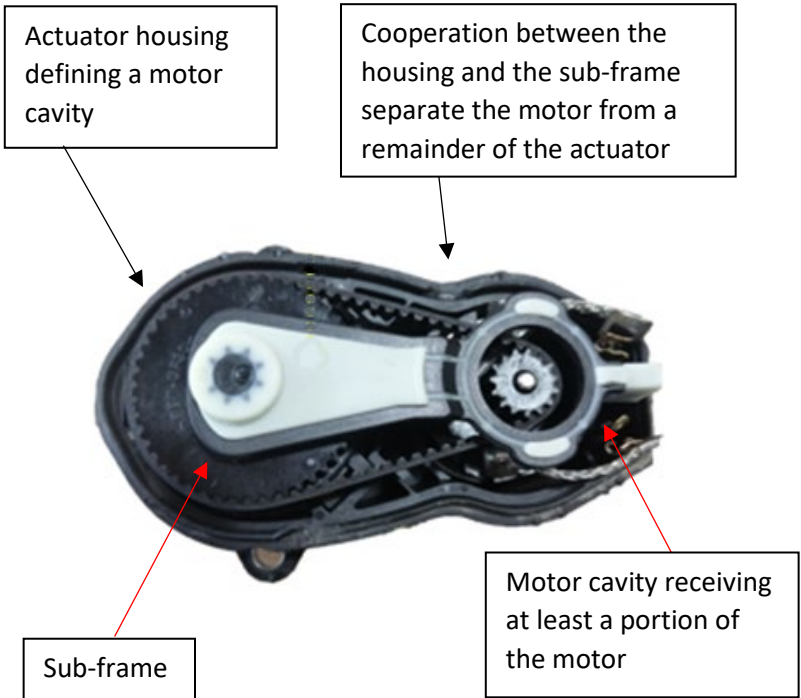
Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 8 by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 8 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.

an electromechanical actuator comprising a motor having a drive shaft, a drive gear coupled to said drive shaft, a driven gear coupled to said drive gear, at least one planetary gear set coupled to said driven gear for driving an actuator output, and	 At least one planetary gear set coupled to the driven gear for driving an actuator output Electromechanical actuator Drive Shaft Motor Drive gear Driven gear
a sub-frame, said motor being mounted on said sub-frame, said actuator further comprising a sub-frame isolator having a spring constant and a damping constant, said isolator coupled between said sub-frame and a remainder of said actuator; and	 Electromechanical actuator Sub-frame isolator with a spring constant and a damping constant coupled between the sub-frame and the remainder of the actuator Sub-frame Motor mounted on the sub-frame

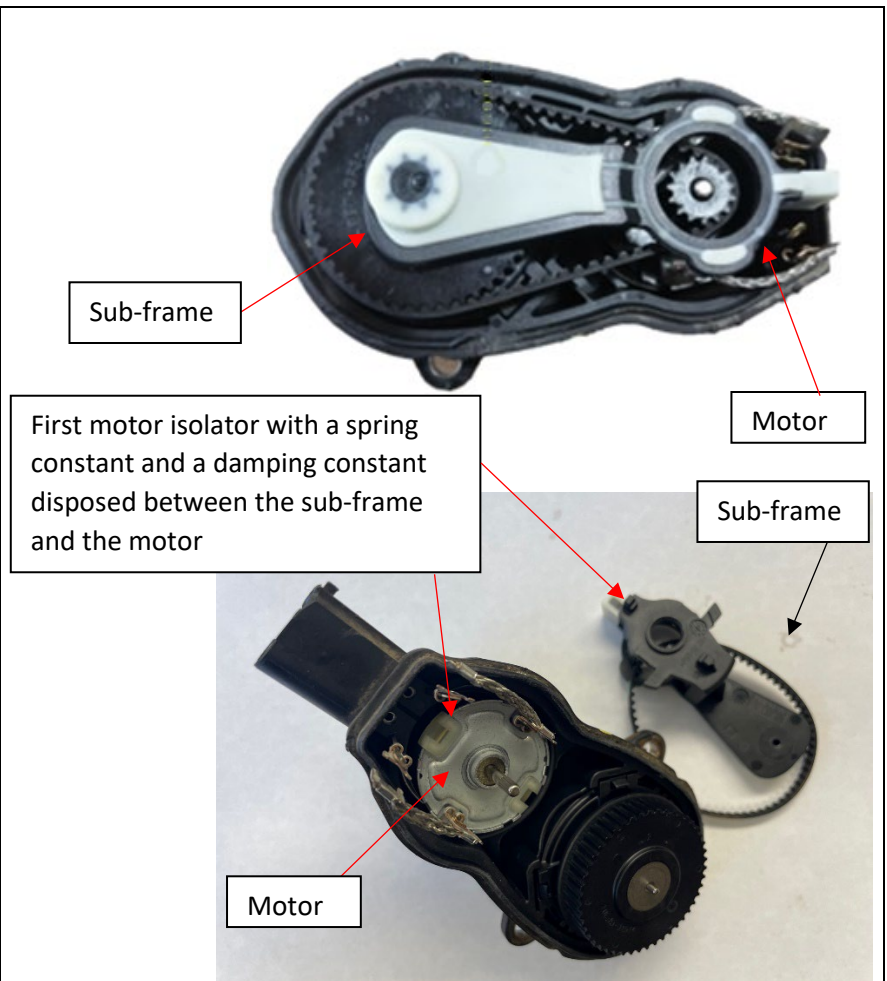
a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.



When Defendants' Actuator #1 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

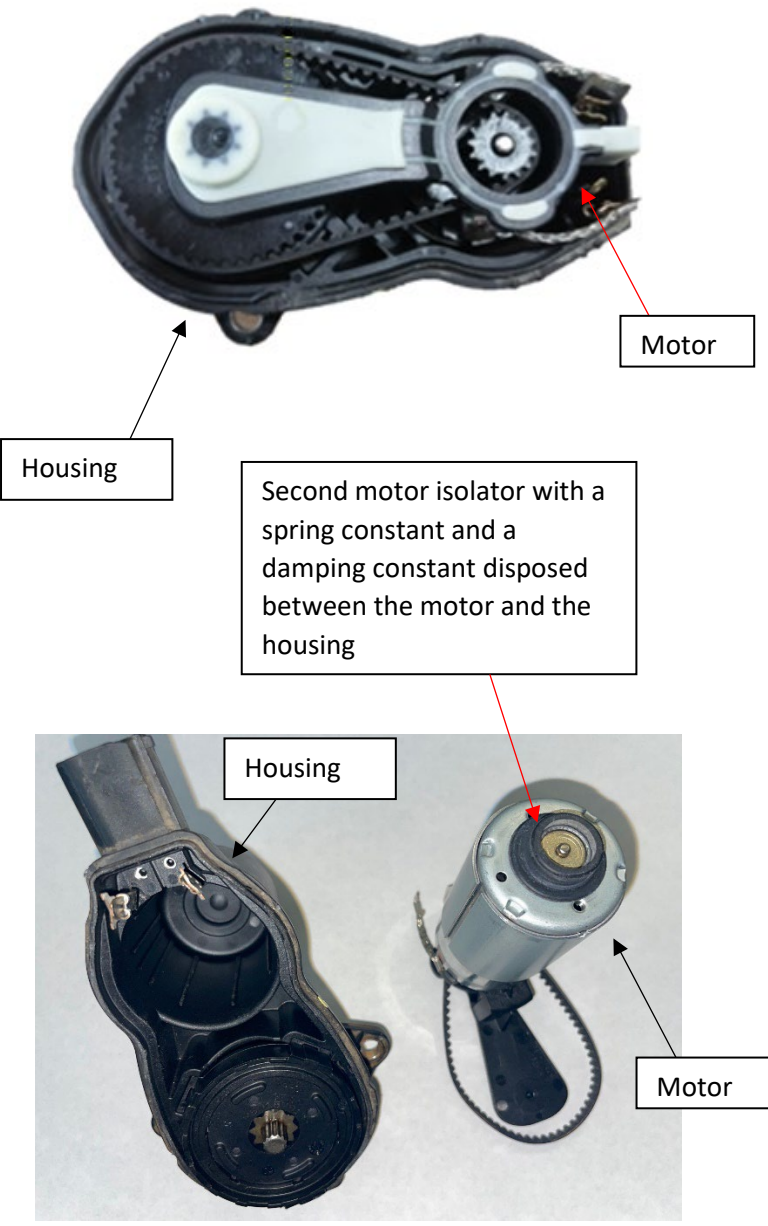
13. An electro-mechanical actuator comprising: a motor having a drive shaft; a gear train coupled to said drive shaft for driving an output of said actuator; a sub-frame, said motor and at least a portion of said drive train being mounted on said sub-frame; and	 Electromechanical actuator Drive Shaft At least a portion of the drive train (gear train) is mounted on the sub-frame Sub-frame Gear train coupled to the drive shaft for driving an output of the actuator Motor mounted on the sub-frame
an actuator housing, said housing defining a motor cavity receiving at least a portion of said motor, wherein cooperation between said housing and said sub-frame separate said motor from a remainder of said actuator.	 Actuator housing defining a motor cavity Cooperation between the housing and the sub-frame separate the motor from a remainder of the actuator Sub-frame Motor cavity receiving at least a portion of the motor

14. The electromechanical actuator according to claim 13, further comprising a first motor isolator having a spring constant and a damping constant, said isolator disposed between said sub-frame and said motor.



Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 14 by making, using, offering to sell, selling, and/or importing Actuator #1 in a manner that directly infringes the '415 Patent.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 14 by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 14 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

	Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 14 by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 14 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.
15. The electromechanical actuator according to claim 14, further comprising a second motor isolator having a spring constant and a damping constant, said isolator disposed between said motor and said housing.	

Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 15 by making, using, offering to sell, selling, and/or importing Actuator #1 in a manner that directly infringes the '415 Patent.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 15 by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 15 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

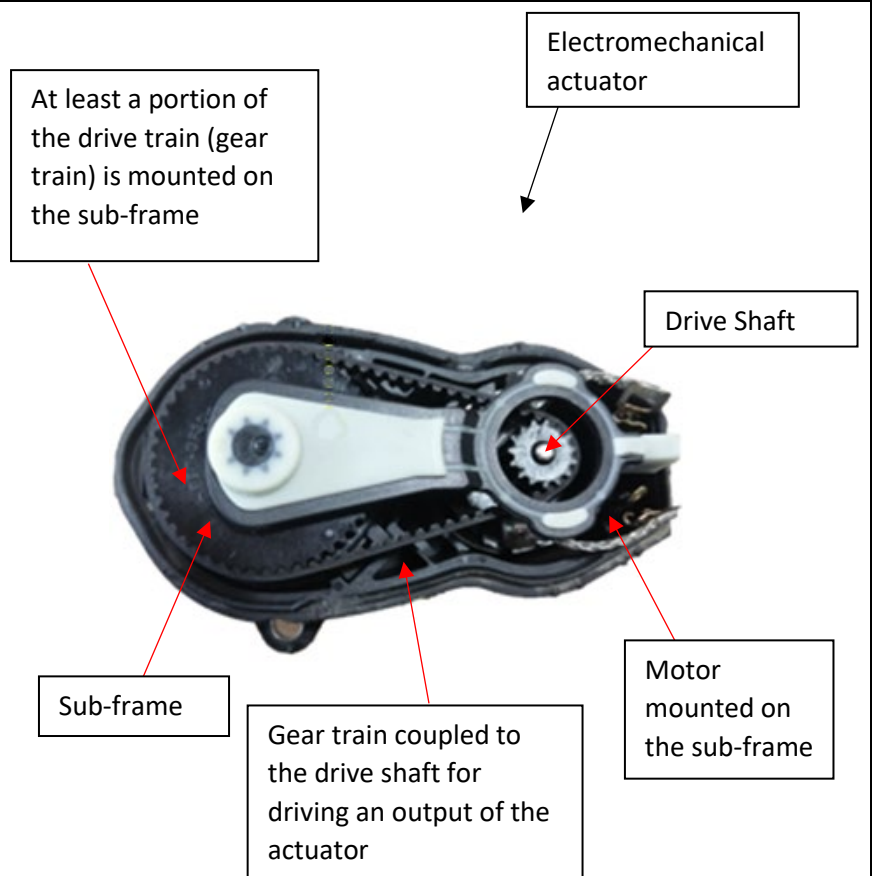
Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 15 by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a staple article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 15 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.

16. An electro-mechanical actuator comprising:

a motor having a drive shaft;

a gear train coupled to said drive shaft for driving an output of said actuator;

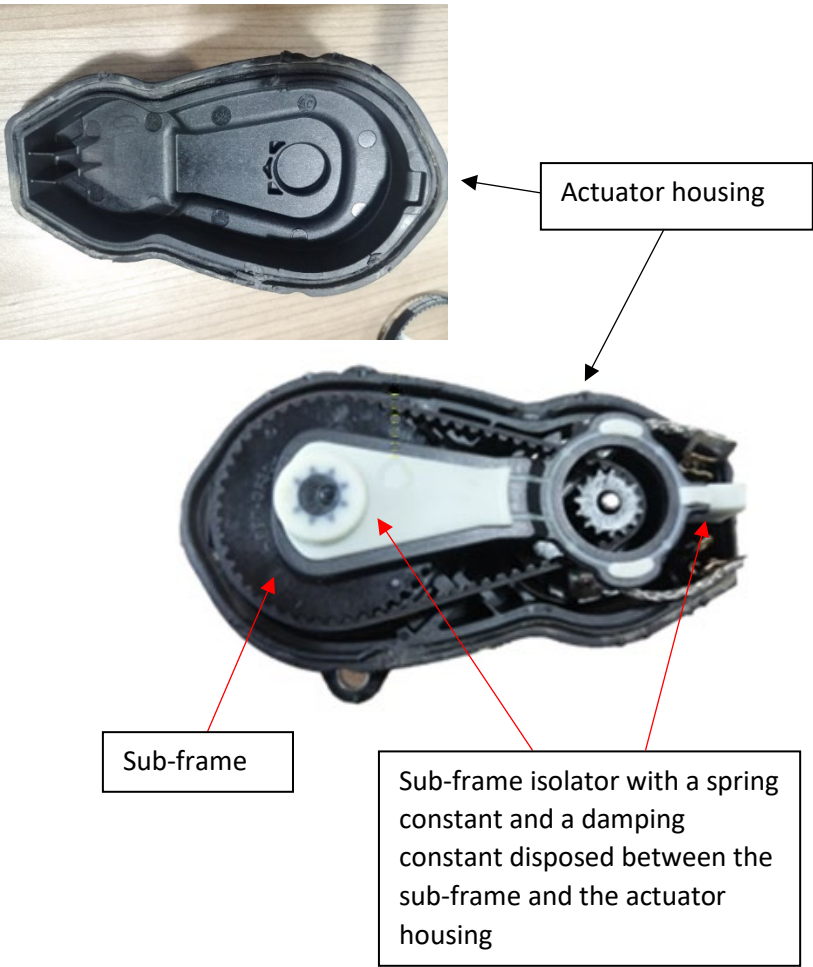
a sub-frame, said motor and at least a portion of said drive train being mounted on said sub-frame; and



Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, independent claim 16 by making, using, offering to sell, selling, and/or importing Actuator #1 in a manner that directly infringes the ‘415 Patent.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 16 by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants’ direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants’ direct customers and/or downstream customers directly infringe claim 16 of the ‘415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the ‘415 Patent, while knowing Defendants’ direct customers and/or downstream customers actions constitute infringement of the ‘415 Patent or by remaining willfully blind that such acts by Defendants’ direct customers and/or downstream customers constitute infringement of the ‘415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 16 by at least making, selling, offering to sell, and/or

	importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 16 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.
a sub-frame isolator having a spring constant and a damping constant, said isolator disposed between said sub-frame and an actuator housing.	 Actuator housing Sub-frame Sub-frame isolator with a spring constant and a damping constant disposed between the sub-frame and the actuator housing

17. An electrically actuated parking brake system comprising:

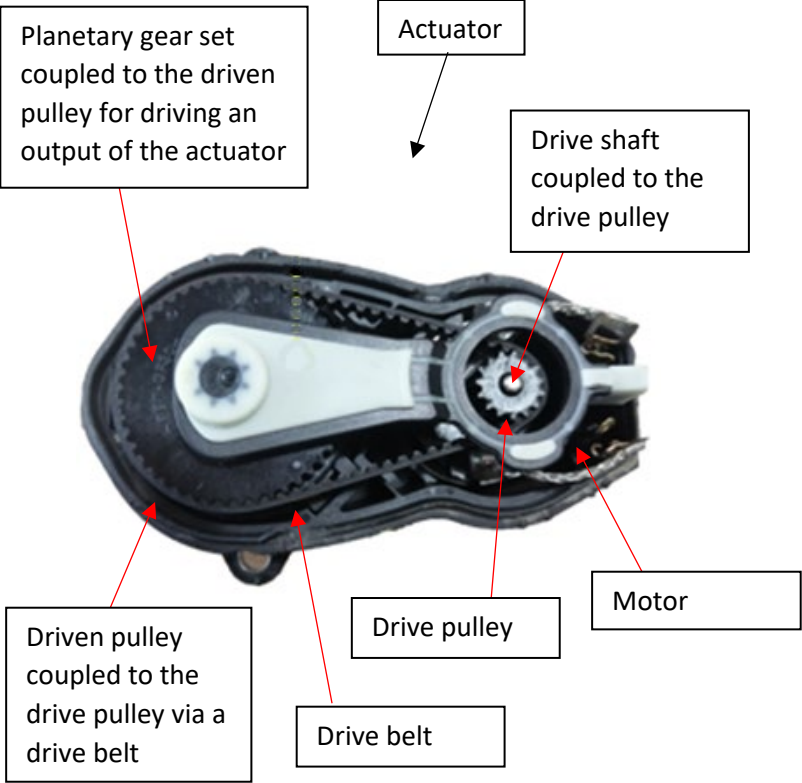
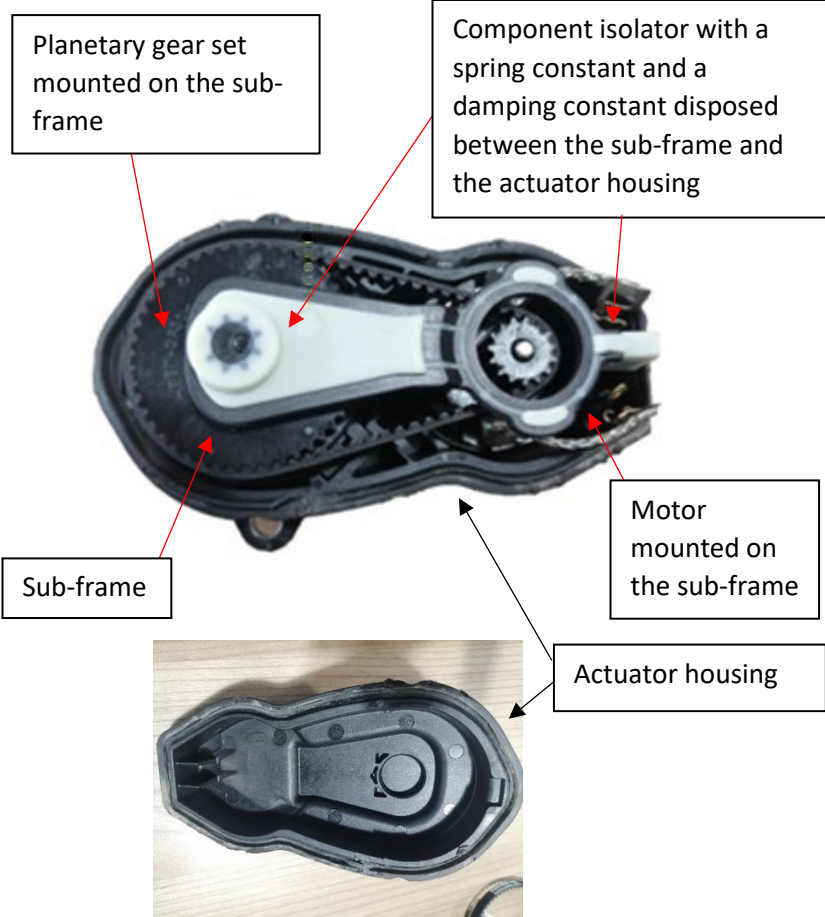
a vehicle power source;



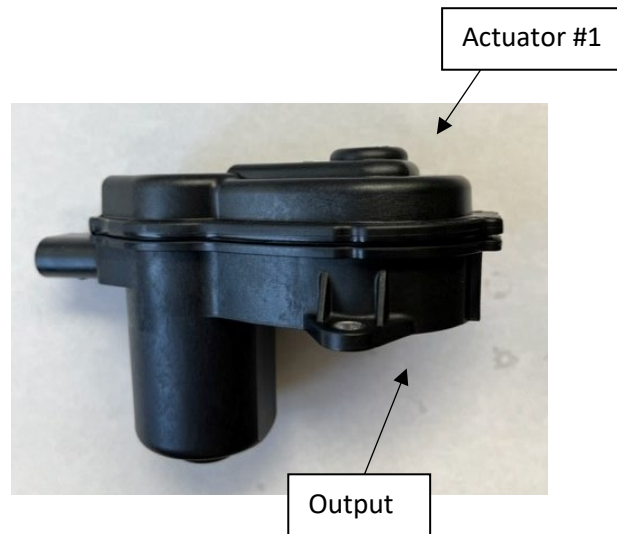
Defendants' Actuator #1 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 17 and its dependent claims below by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 17 and its dependent claims below of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 17 and its dependent claims below by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 17 and its dependent claims below of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.

an actuator comprising a motor having a drive shaft coupled to a drive pulley, a driven pulley coupled to said drive pulley via a drive belt, and a planetary gear set coupled to said driven pulley for driving an output of said actuator,	 Planetary gear set coupled to the driven pulley for driving an output of the actuator Actuator Drive shaft coupled to the drive pulley Driven pulley coupled to the drive pulley via a drive belt Drive pulley Drive belt Motor
at least said motor and planetary gear set mounted on a sub-frame, and a component isolator having a spring constant and a damping constant disposed between said sub-frame and an actuator housing; and	 Planetary gear set mounted on the sub-frame Component isolator with a spring constant and a damping constant disposed between the sub-frame and the actuator housing Sub-frame Motor mounted on the sub-frame Actuator housing

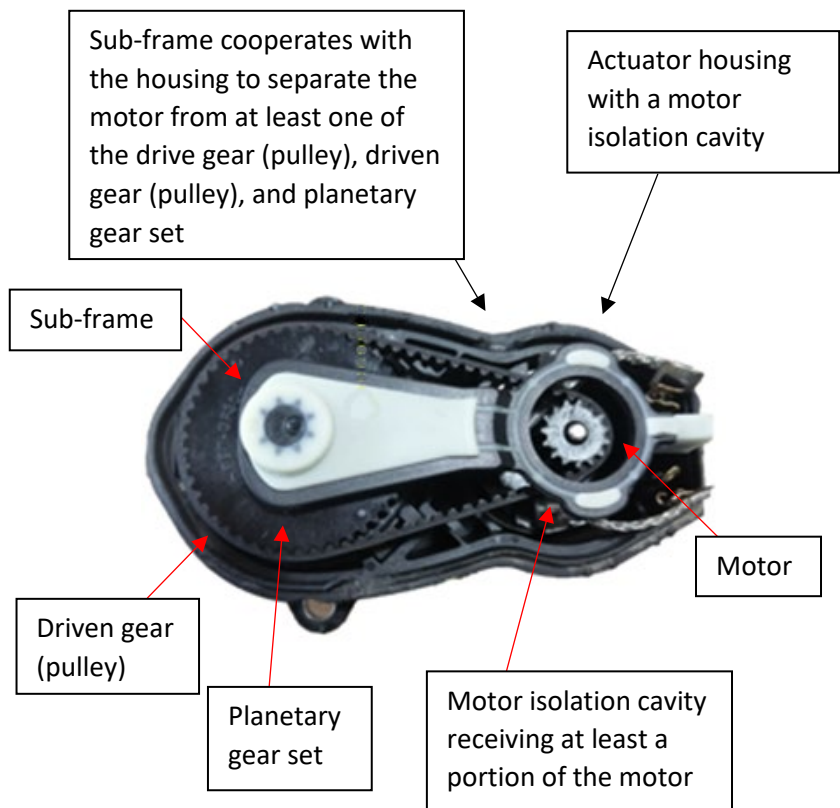
a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.



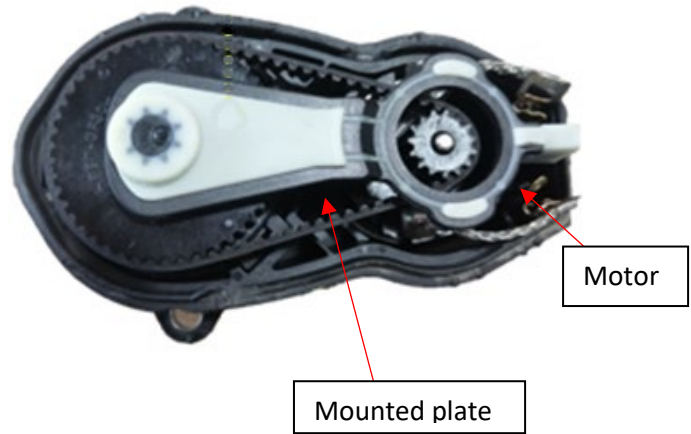
When Defendants' Actuator #1 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

18. The system according to claim 17, said actuator housing comprising a motor isolation cavity receiving at least a portion of said motor,

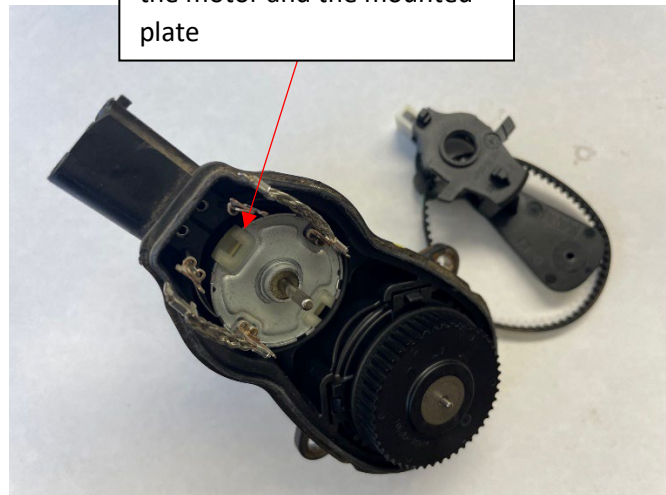
wherein said sub-frame cooperates with said housing to separate said motor from at least one of said drive gear, driven gear and said planetary gear set.



19. The system according to claim 17, further comprising a motor isolator having a spring constant and a damping constant, said motor isolator disposed between said motor and said mounted plate.



Motor isolator with a spring constant and a damping constant disposed between the motor and the mounted plate

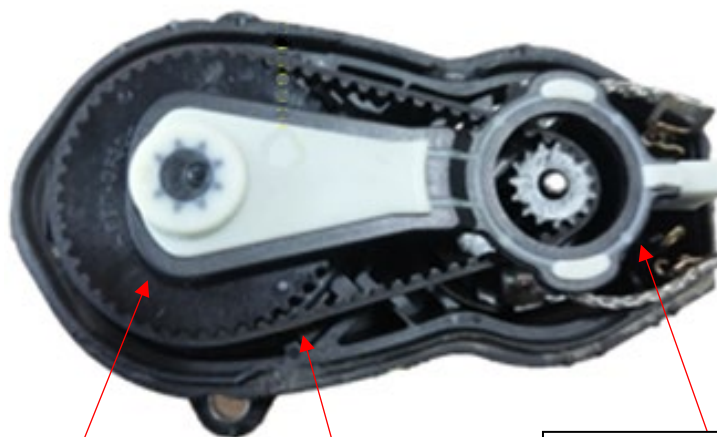


20. A method of assembling an actuator comprising:

Actuator #1



mounting a motor and a gear train to a sub-frame;



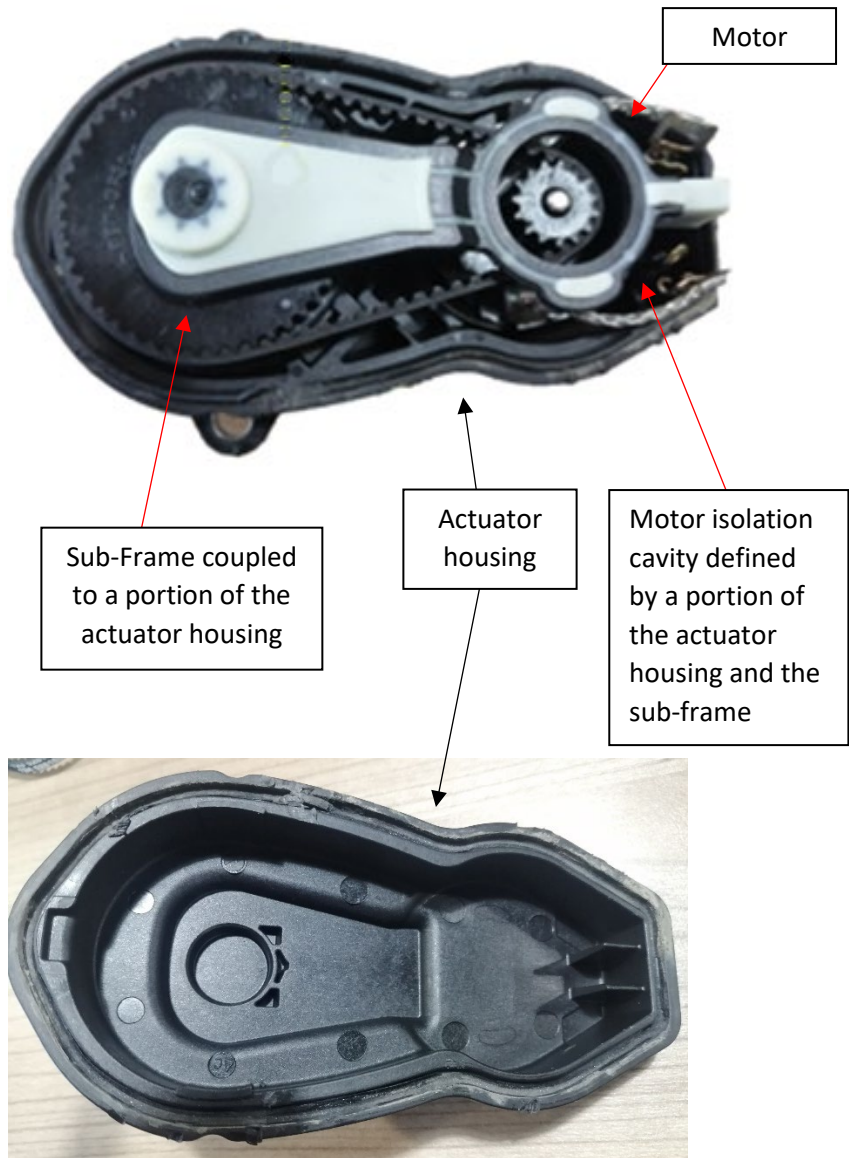
Sub-Frame

Gear train
mounted to
the sub-frame

Motor mounted
to the sub-frame

Defendants and/or their direct customers and/or their downstream customers mount a motor and a gear train to a sub-frame.

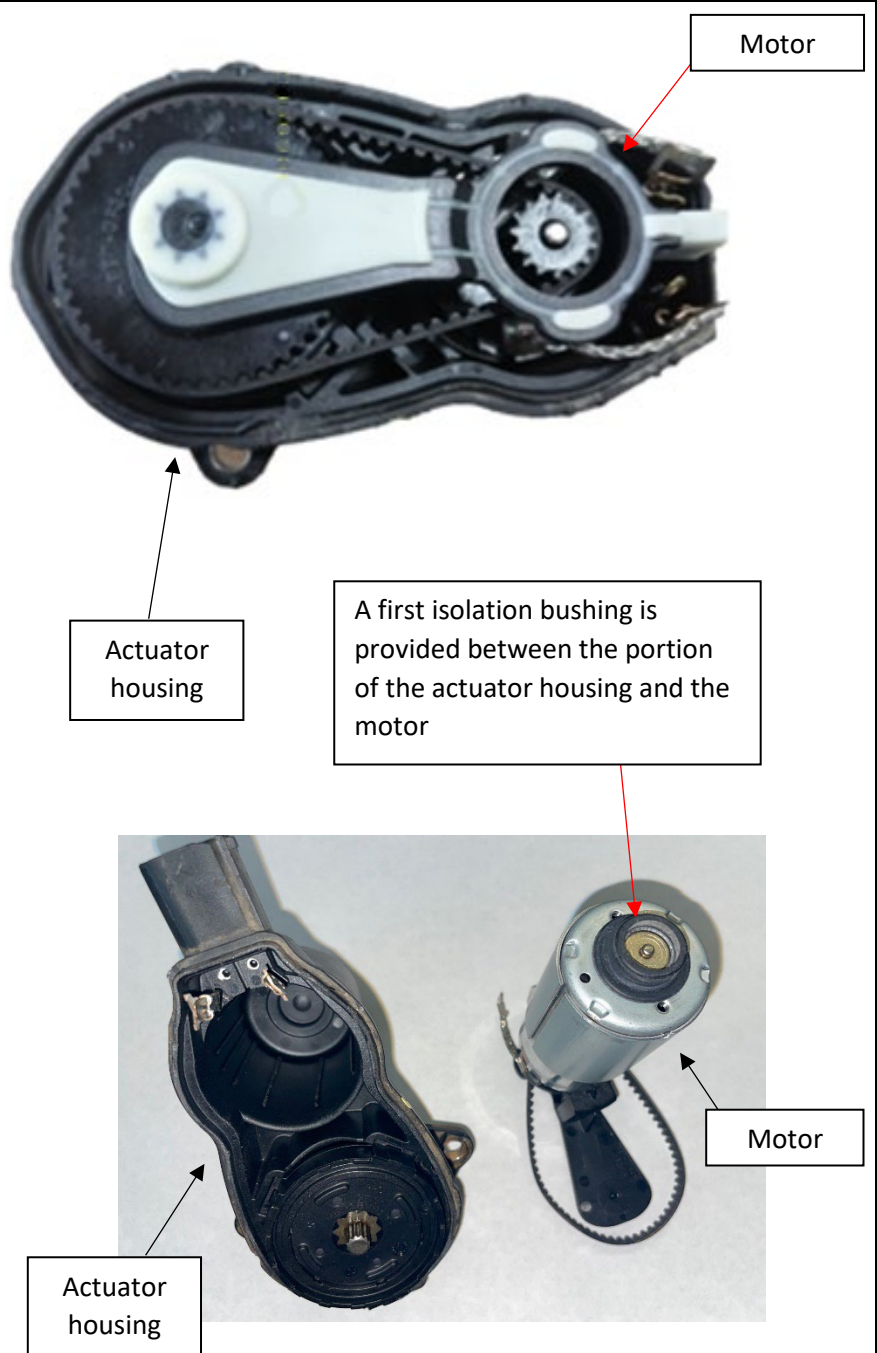
coupling said sub-frame to a portion of an actuator housing to at least partially enclose said motor in a motor isolation cavity defined by said portion of said actuator housing and said sub-frame.



Defendants and/or their direct customers and/or their downstream customers couple the sub-frame to a portion of an actuator housing to at least partially enclose said motor in a motor isolation cavity defined by said portion of said actuator housing and said sub-frame.

24. A method according to claim 20, said method further comprising:

providing a first motor isolation bushing between said portion of said actuator housing and said motor; and



Defendants and/or their direct customers and/or their downstream customers provide a first motor isolation bushing between said portion of said actuator housing and said motor.

Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 24 by making, using, offering to sell, selling, and/or importing Actuator #1 in a manner that directly infringes the '415 Patent.

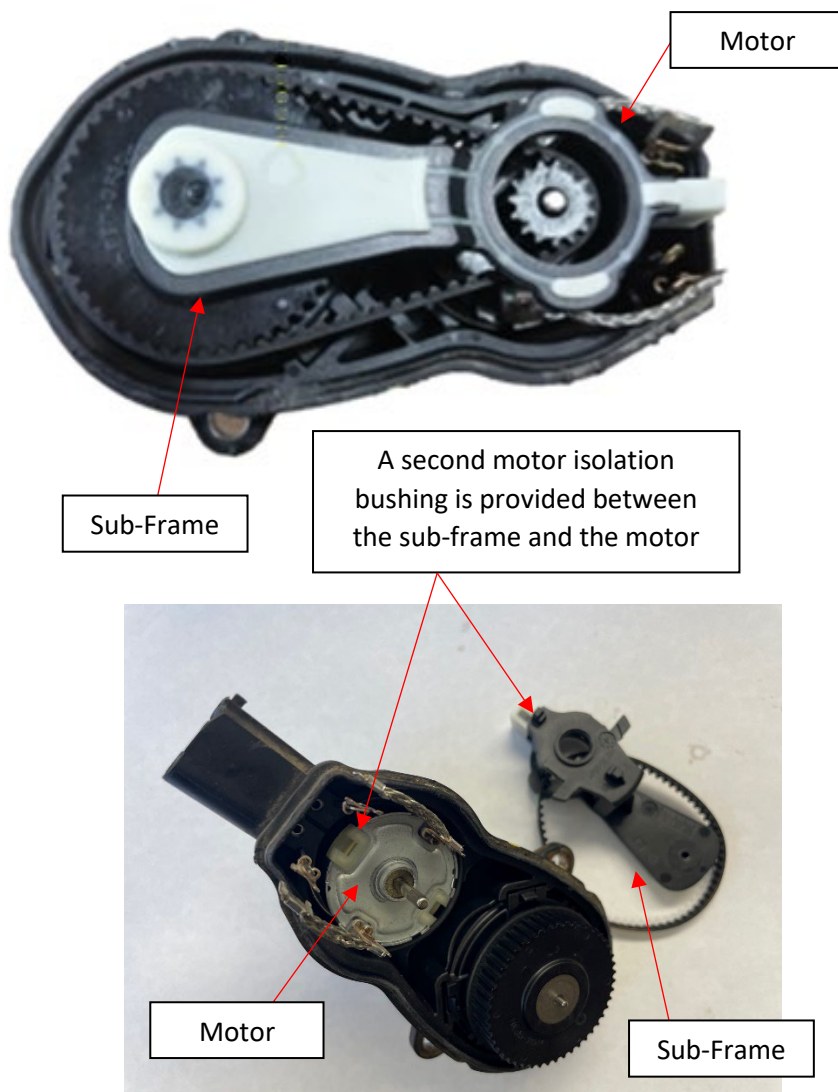
Alternatively and/or additionally, under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 24 by at least making, offering to sell, selling, and/or importing Actuator

#1 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe dependent claim 24 and its dependent claims below of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 24 by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe dependent claim 24 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.

Alternatively and/or additionally, under 35 U.S.C. § 271(g), Defendants offers to sell, sell, or use within the United States a product which is made by the process of claim 24, and/or actively induce their direct customer and/or downstream customers to do so as discussed above with respect to infringement under § 271(b), and/or actively contribute to their direct customers and/or downstream customers doing so as discussed above with respect to infringement under § 271(c).

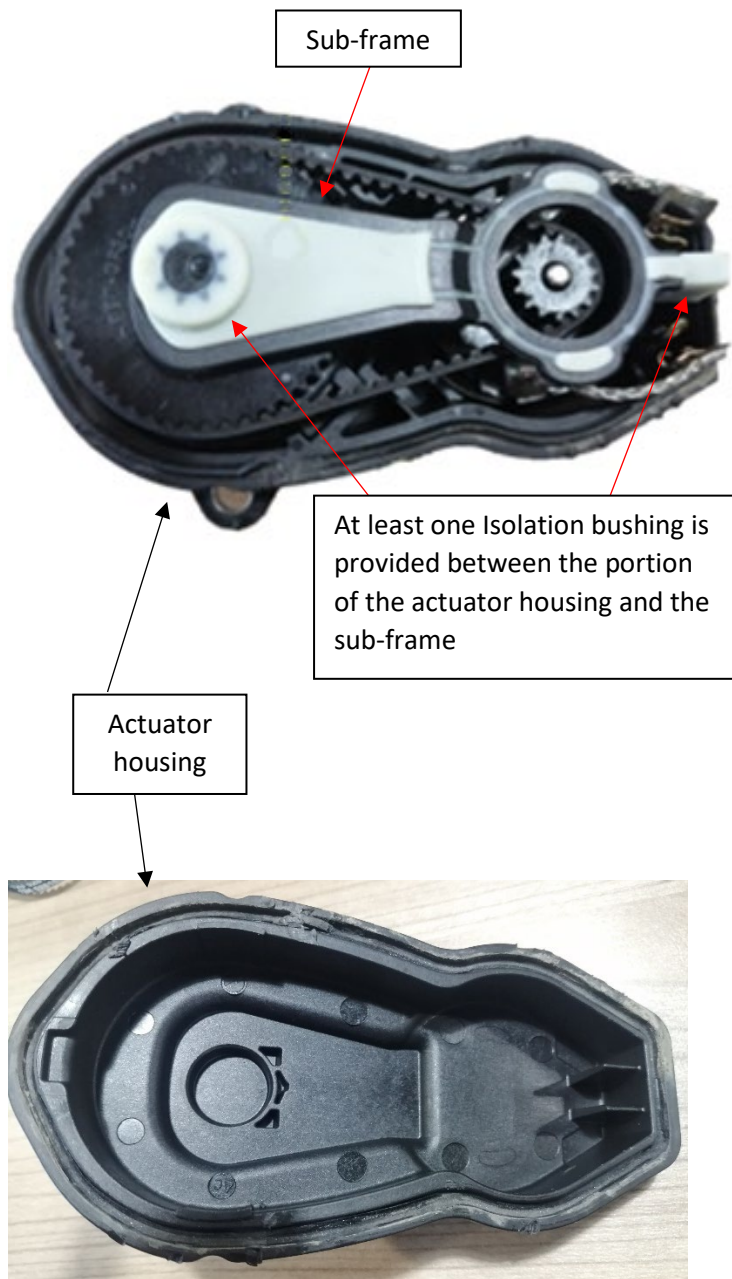
providing a second motor isolation bushing between said sub-frame and said motor.



Defendants and/or their direct customers and/or their downstream customers provide a second motor isolation bushing between said sub-frame and said motor.

25. A method according to claim 20, said method further comprising:

providing at least one isolation bushing between said portion of said actuator housing and said sub-frame.



Defendants and/or their direct customers and/or their downstream customers provide at least one isolation bushing between said portion of said actuator housing and said sub-frame.

Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 25 by making, using, offering to sell, selling, and/or importing Actuator #1 in a manner that directly infringes the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 25 by at least making, offering to sell, selling, and/or importing Actuator #1 for use by at least Defendants' direct customers and/or

downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe dependent claim 25 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

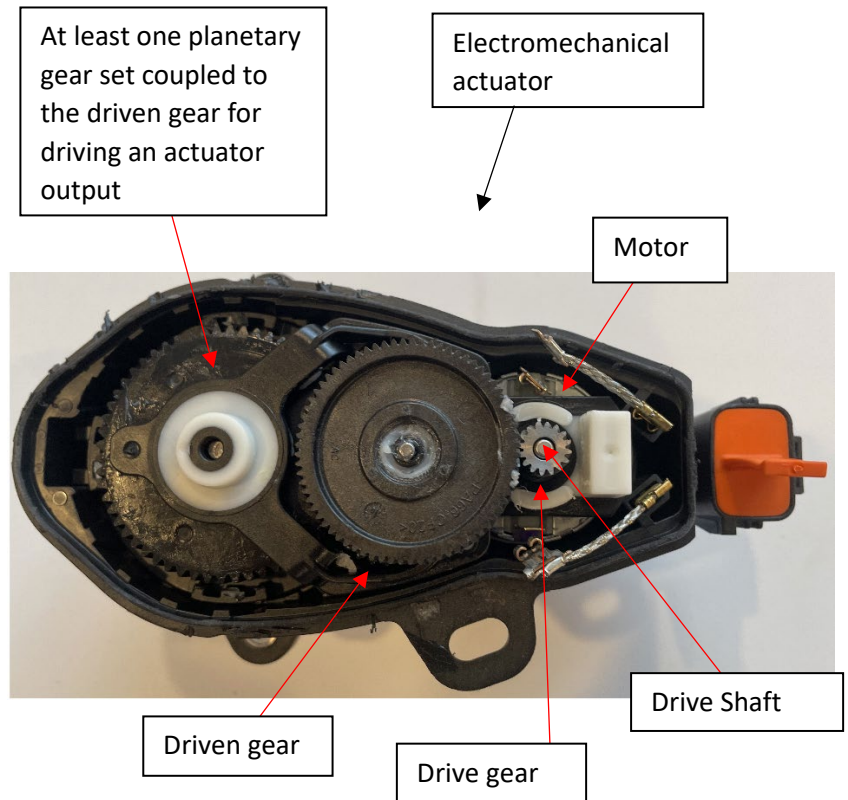
Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 25 by at least making, selling, offering to sell, and/or importing Actuator #1, which is a material part of the claimed invention, while knowing that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #1 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe dependent claim 25 of the '415 Patent by making and/or using Actuator #1 in the manner instructed and/or intended by Defendants in vehicles.

Alternatively and/or additionally, under 35 U.S.C. § 271(g), Defendants offers to sell, sell, or use within the United States a product which is made by the process of claim 25, and/or actively induce their direct customer and/or downstream customers to do so as discussed above with respect to infringement under § 271(b), and/or actively contribute to their direct customers and/or downstream customers doing so as discussed above with respect to infringement under § 271(c).

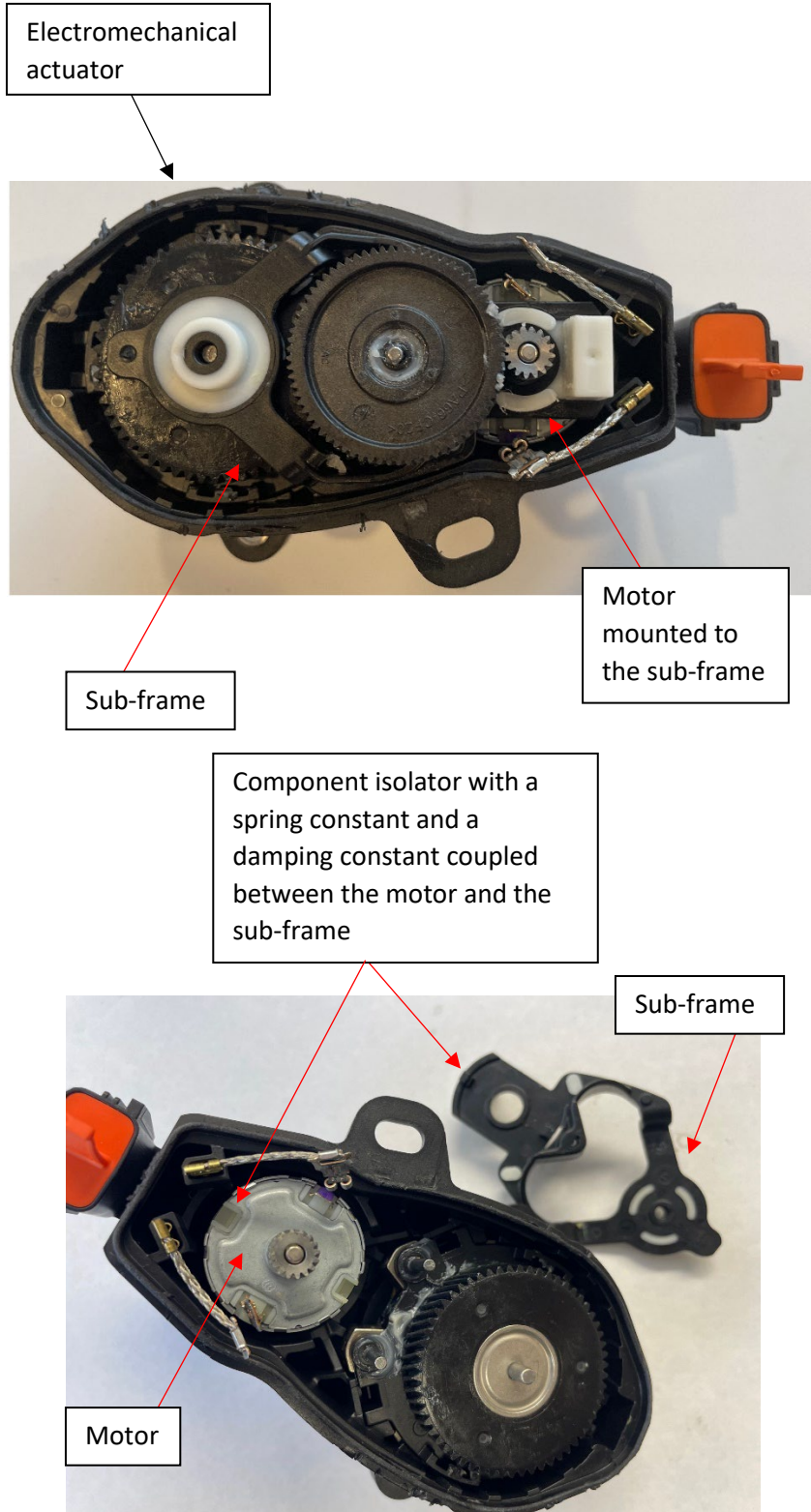
EXHIBIT B

Claim	Accused Actuator #2
5. An electrically actuated parking brake system comprising: a vehicle power source;	Actuator #2 Defendants' Actuator #2 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source. Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 5 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 5 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent. Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 5 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 5 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.

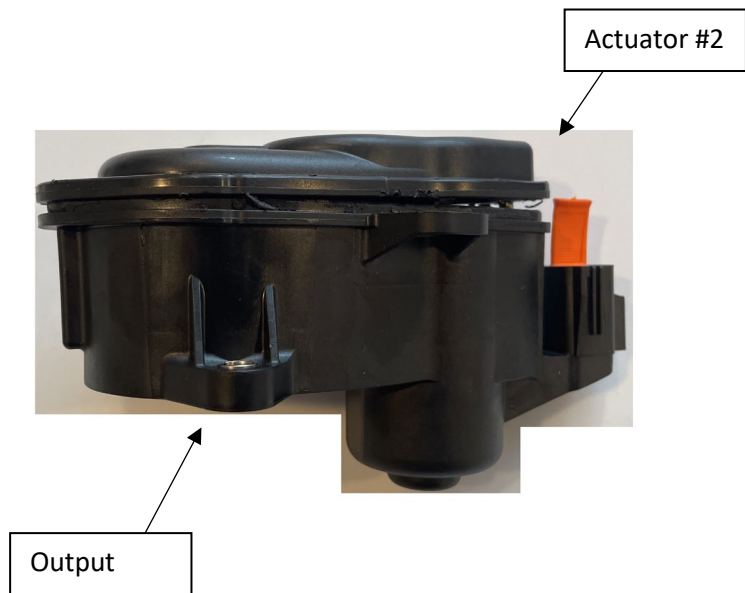
an electromechanical actuator comprising a motor having a drive shaft, a drive gear coupled to said drive shaft, a driven gear coupled to said drive gear, at least one planetary gear set coupled to said driven gear for driving an actuator output,



and a sub-frame, said motor being mounted on said sub-frame, said actuator further comprising a component isolator having a spring constant and a damping constant, said isolator coupled between said motor and said sub-frame; and



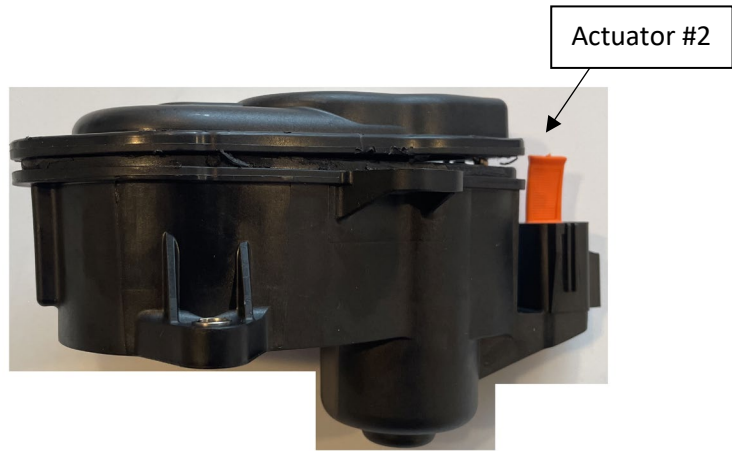
a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.



When Defendants' Actuator #2 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

6. An electrically actuated parking brake system comprising:

a vehicle power source;



Defendants' Actuator #2 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source.

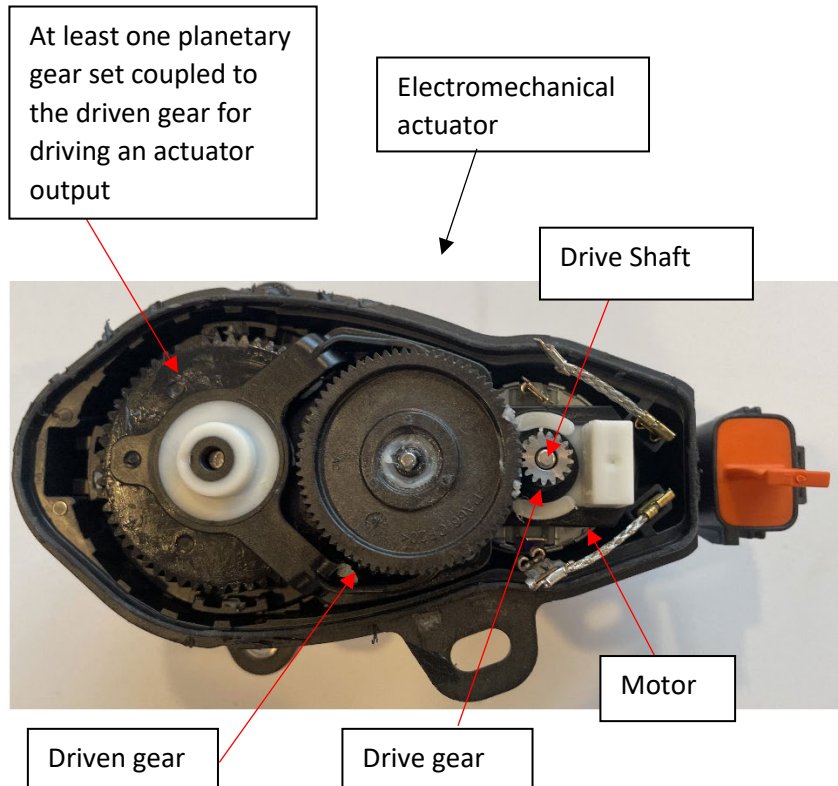
an electromechanical actuator comprising

a motor having a drive shaft,

a drive gear coupled to said drive shaft,

a driven gear coupled to said drive gear,

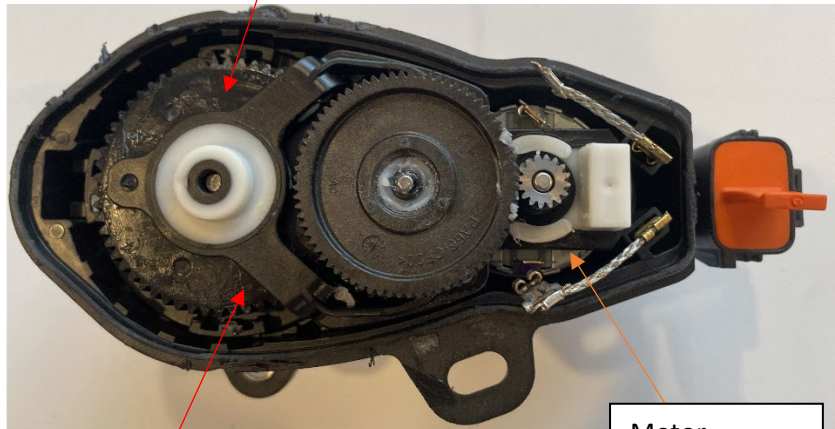
and at least one planetary gear set coupled to said driven gear for driving an actuator output, and



a sub-frame, said motor being mounted on said sub-frame and said at least one planetary gear set being mounted on said sub-frame; and

Electromechanical actuator

Planetary gear set mounted on the sub-frame



Sub-frame

Motor mounted on the sub-frame

a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.

Actuator #2

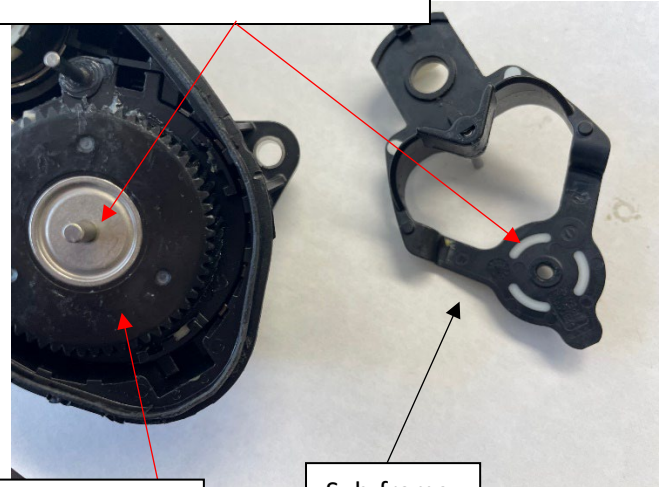


Output

When Defendants' Actuator #2 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

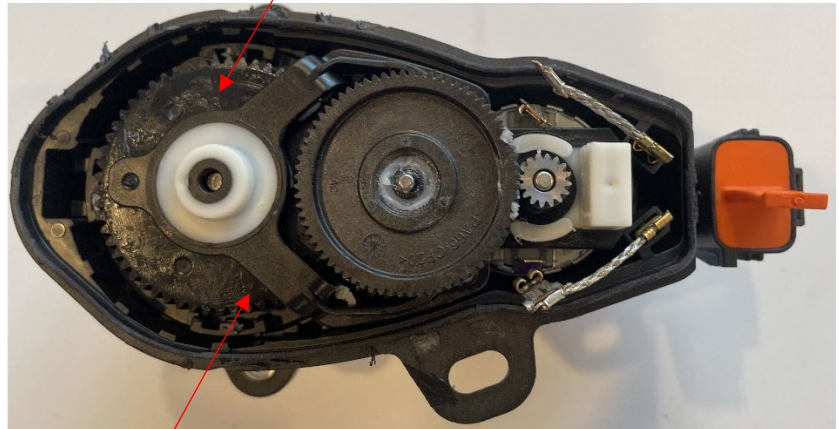
7. The system according to claim 6, further comprising a component isolator having a spring constant and a damping constant, said isolator coupled between said at least one planetary gear set and said sub-frame.

Component isolator with a spring constant and a damping constant coupled between at least one planetary gear set and the sub-frame



Planetary gear set mounted on the sub-frame

Sub-frame



Sub-frame

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 7 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 7 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415

	Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent. Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 7 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 7 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.
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8. An electrically actuated parking brake system comprising:

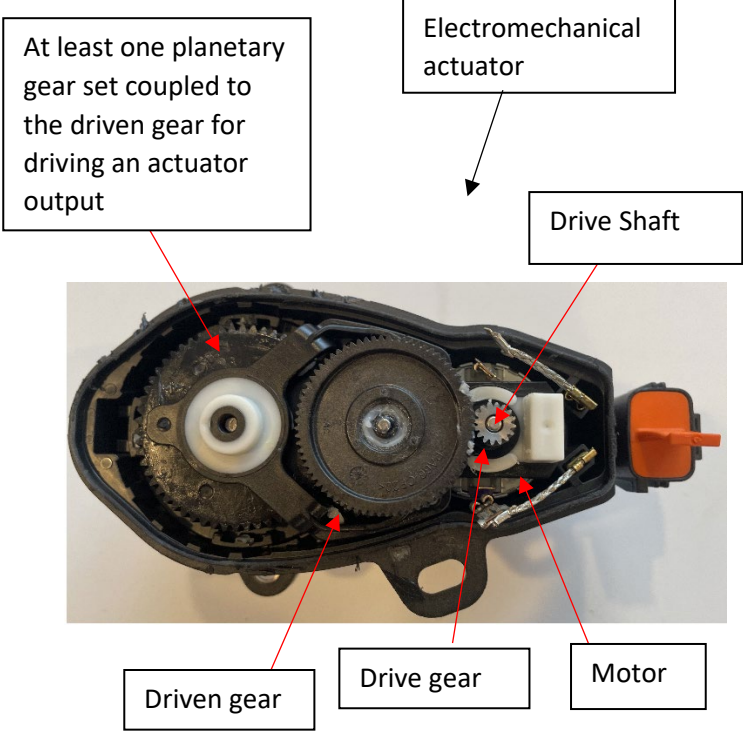
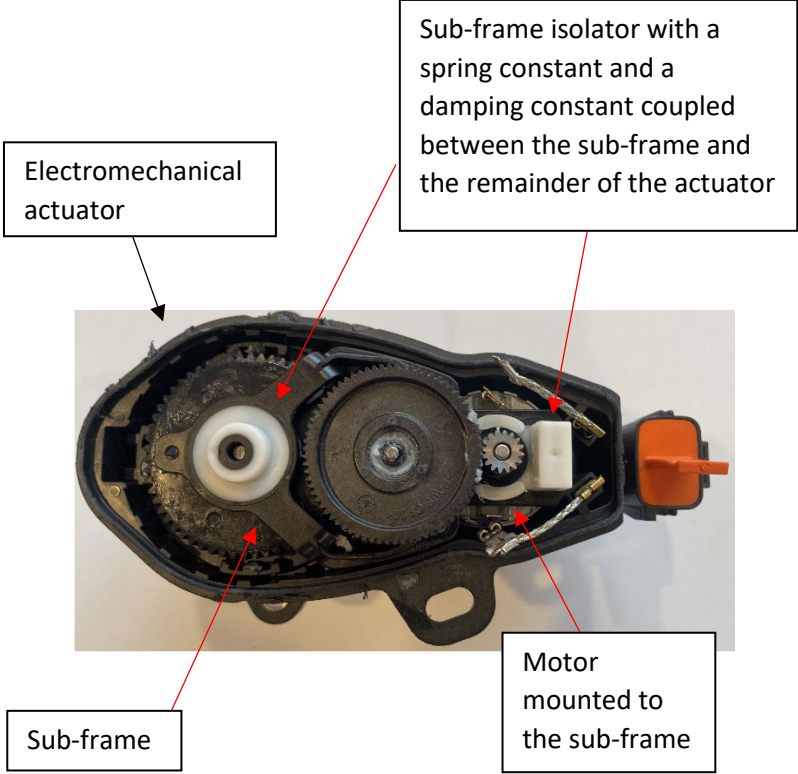
a vehicle power source;



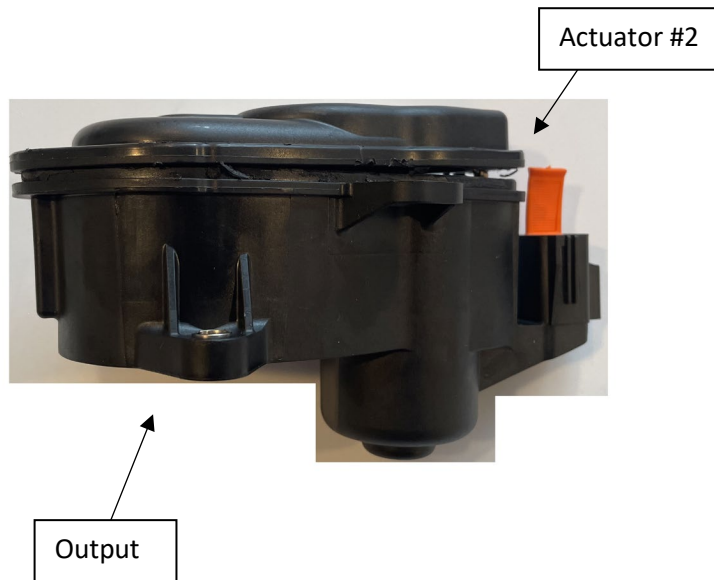
Defendants' Actuator #2 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 8 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 8 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

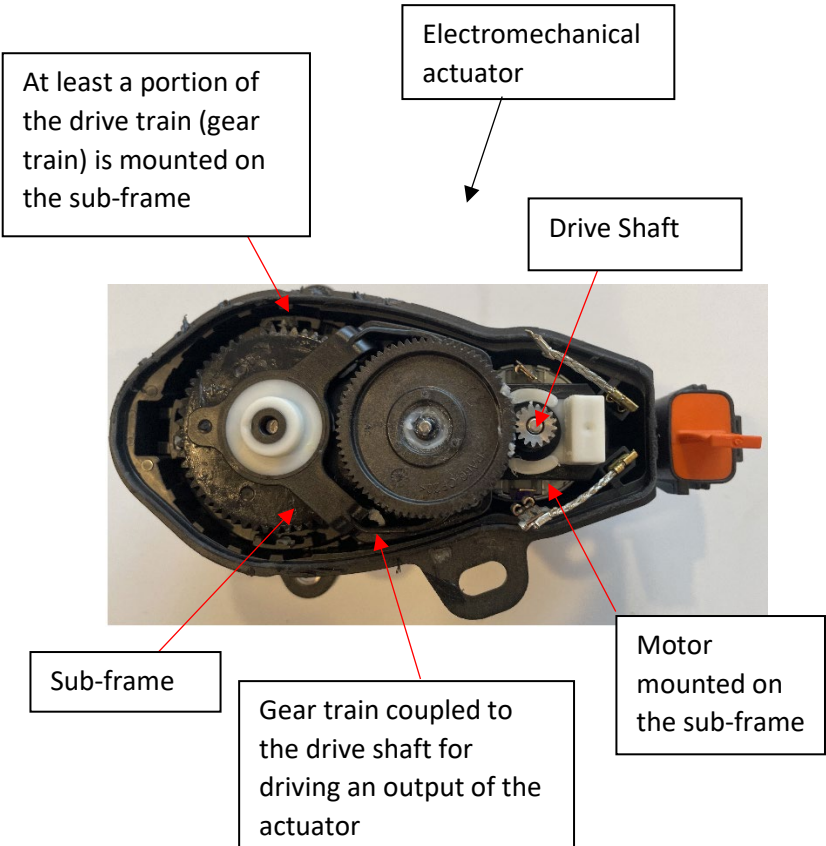
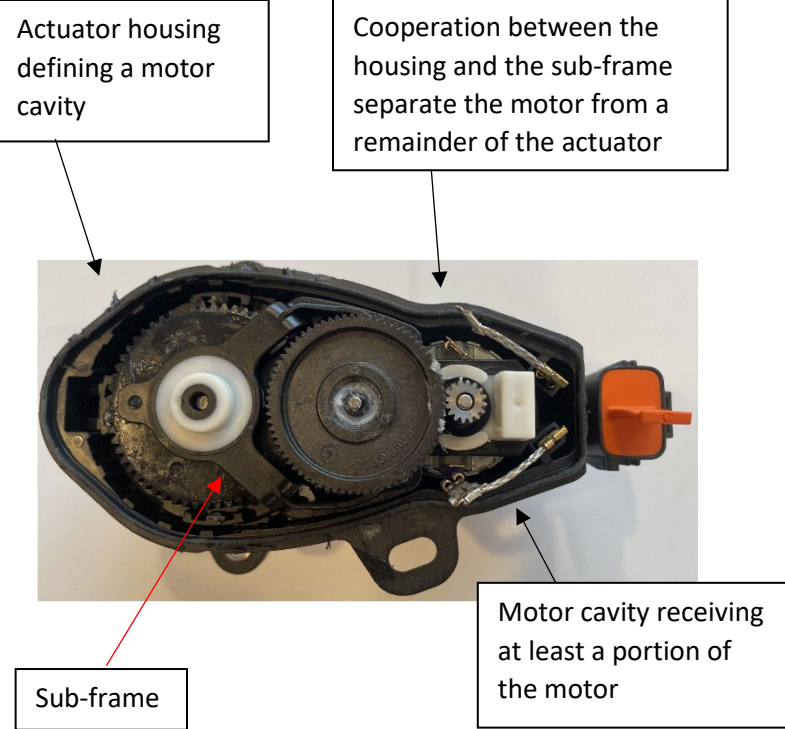
Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 8 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 8 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.

an electromechanical actuator comprising a motor having a drive shaft, a drive gear coupled to said drive shaft, a driven gear coupled to said drive gear, at least one planetary gear set coupled to said driven gear for driving an actuator output, and	 At least one planetary gear set coupled to the driven gear for driving an actuator output Electromechanical actuator Drive Shaft Driven gear Drive gear Motor
a sub-frame, said motor being mounted on said sub-frame, said actuator further comprising a sub-frame isolator having a spring constant and a damping constant, said isolator coupled between said sub-frame and a remainder of said actuator; and	 Electromechanical actuator Sub-frame isolator with a spring constant and a damping constant coupled between the sub-frame and the remainder of the actuator Sub-frame Motor mounted to the sub-frame

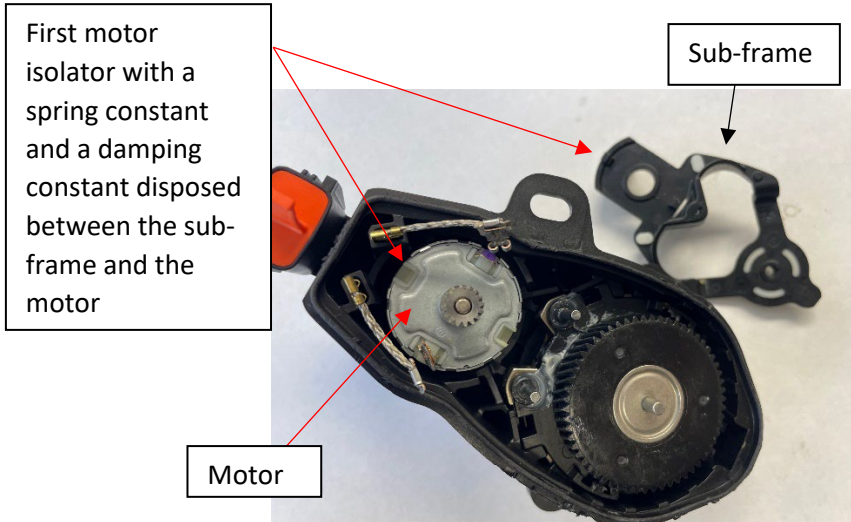
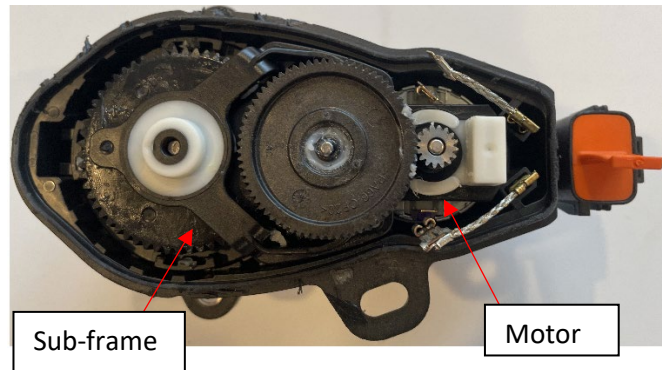
a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.



When Defendants' Actuator #2 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

13. An electro-mechanical actuator comprising: a motor having a drive shaft; a gear train coupled to said drive shaft for driving an output of said actuator; a sub-frame, said motor and at least a portion of said drive train being mounted on said sub-frame; and	 At least a portion of the drive train (gear train) is mounted on the sub-frame Electromechanical actuator Drive Shaft Sub-frame Gear train coupled to the drive shaft for driving an output of the actuator Motor mounted on the sub-frame
an actuator housing, said housing defining a motor cavity receiving at least a portion of said motor, wherein cooperation between said housing and said sub-frame separate said motor from a remainder of said actuator.	 Actuator housing defining a motor cavity Cooperation between the housing and the sub-frame separate the motor from a remainder of the actuator Sub-frame Motor cavity receiving at least a portion of the motor

14. The electromechanical actuator according to claim 13, further comprising a first motor isolator having a spring constant and a damping constant, said isolator disposed between said sub-frame and said motor.

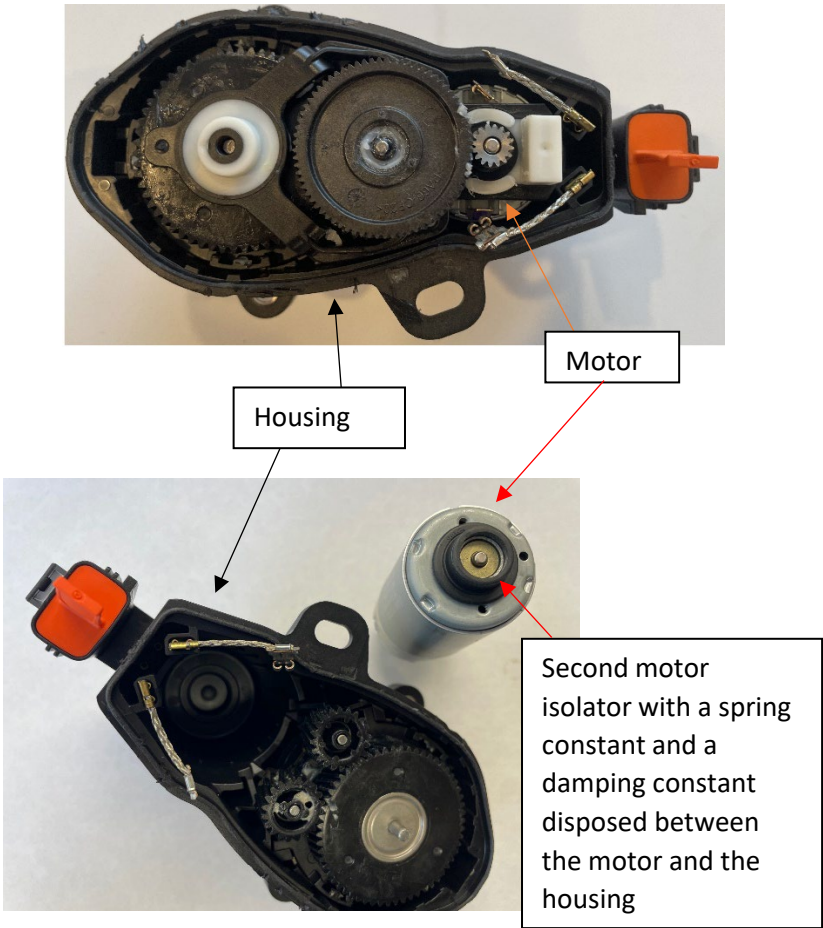


Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 14 by making, using, offering to sell, selling, and/or importing Actuator #2 in a manner that directly infringes the '415 Patent.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 14 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 14 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 14 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 14 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.

15. The electromechanical actuator according to claim 14, further comprising a second motor isolator having a spring constant and a damping constant, said isolator disposed between said motor and said housing.



Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 15 by making, using, offering to sell, selling, and/or importing Actuator #2 in a manner that directly infringes the '415 Patent.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 15 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least

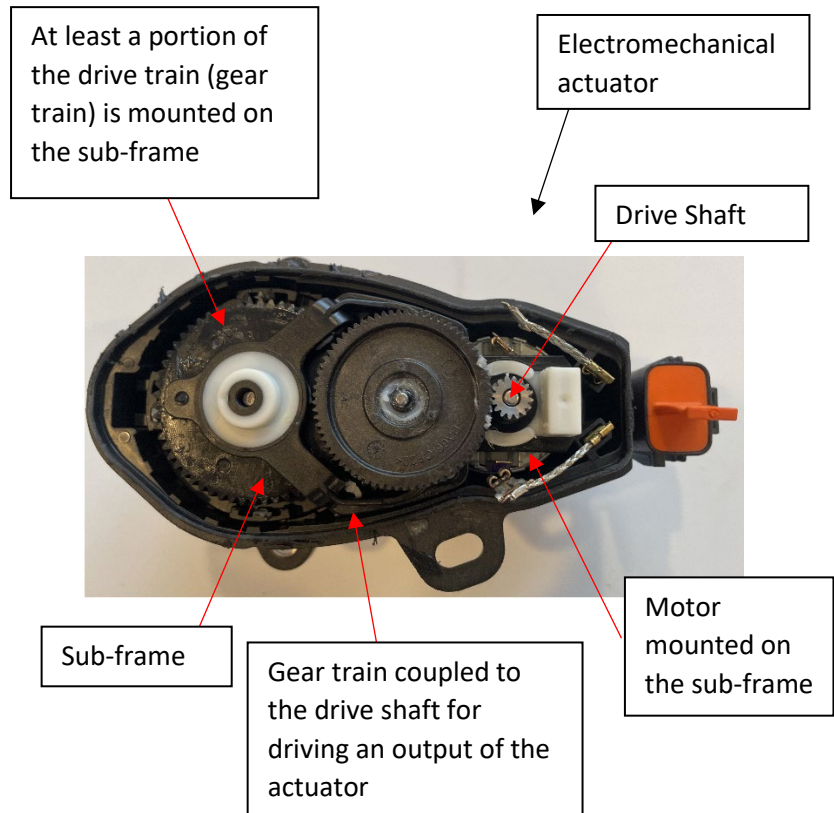
	Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 15 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent. Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 15 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 15 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.
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16. An electro-mechanical actuator comprising:

a motor having a drive shaft;

a gear train coupled to said drive shaft for driving an output of said actuator;

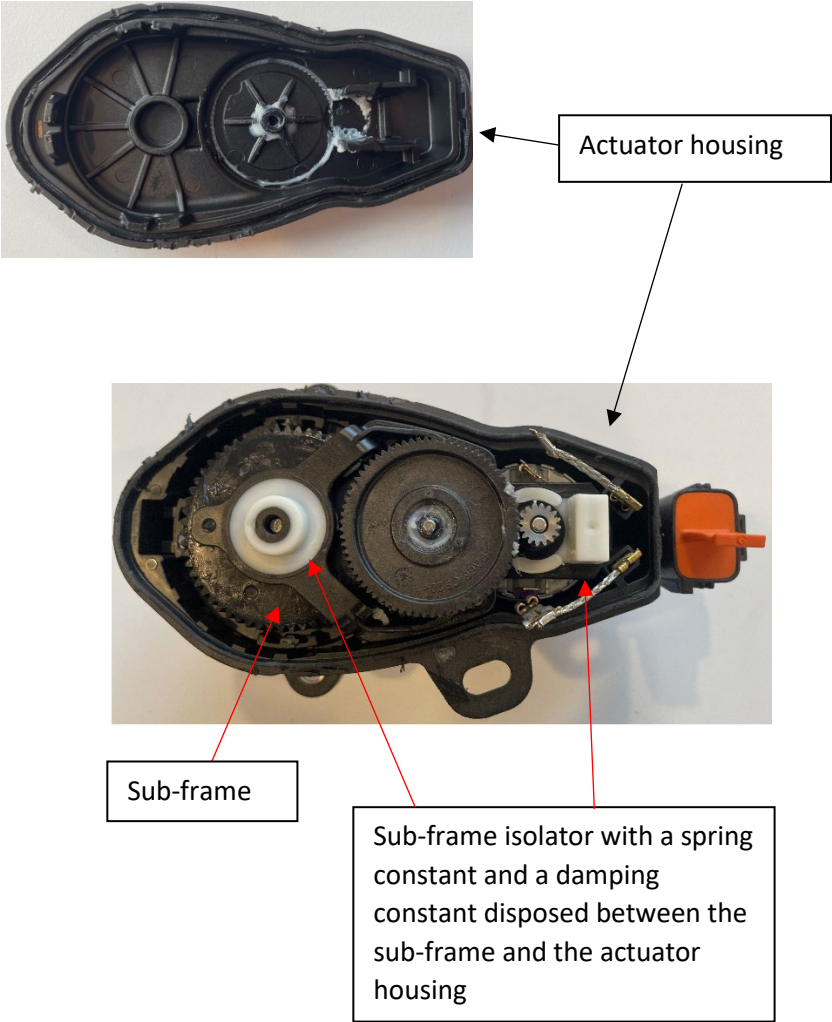
a sub-frame, said motor and at least a portion of said drive train being mounted on said sub-frame; and



Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, independent claim 16 by making, using, offering to sell, selling, and/or importing Actuator #2 in a manner that directly infringes the '415 Patent.

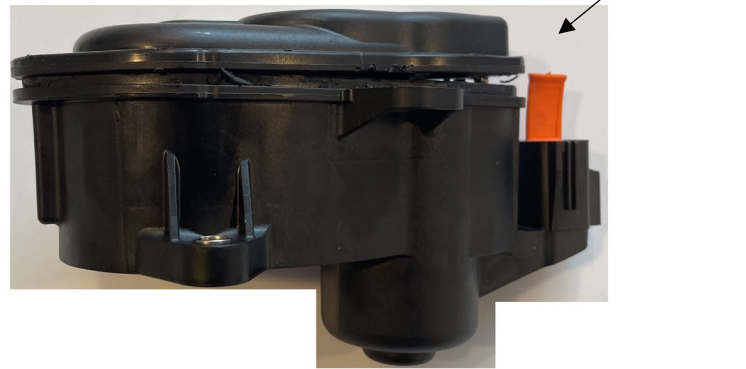
Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 16 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 16 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 16 by at least making, selling, offering to sell, and/or

	importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 16 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.
a sub-frame isolator having a spring constant and a damping constant, said isolator disposed between said sub-frame and an actuator housing.	 Actuator housing Sub-frame Sub-frame isolator with a spring constant and a damping constant disposed between the sub-frame and the actuator housing

17. An electrically actuated parking brake system comprising:

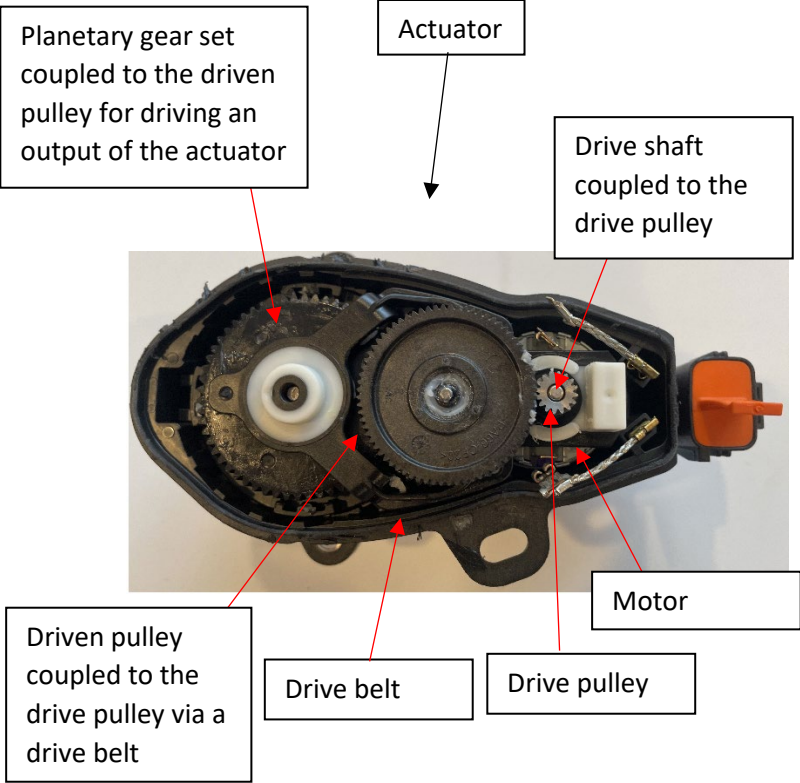
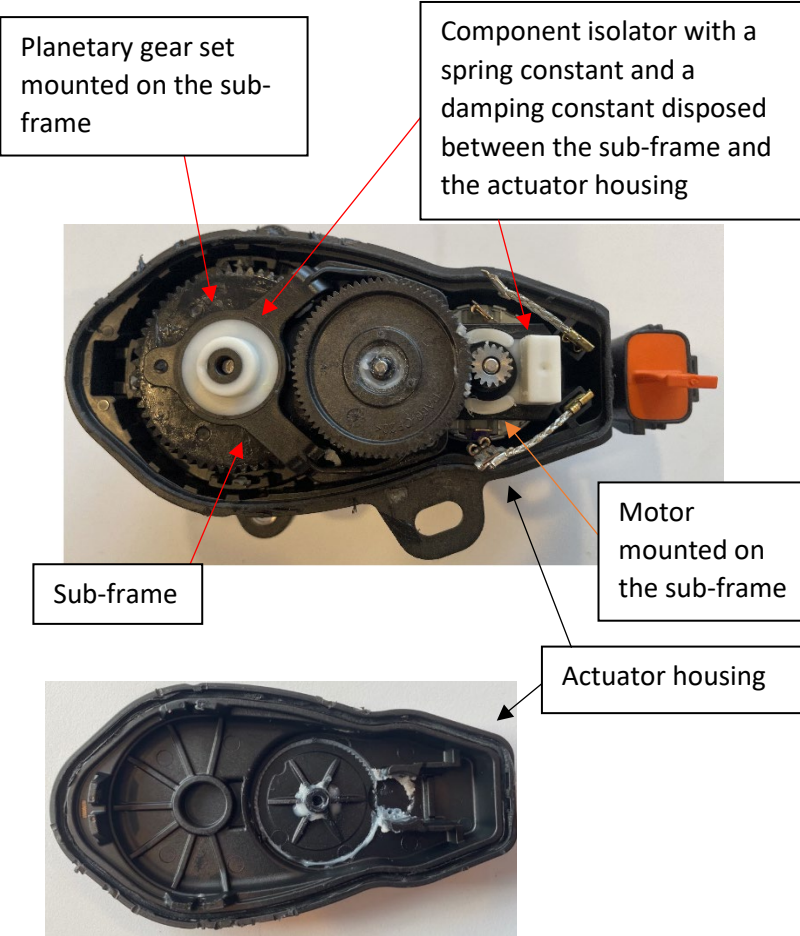
a vehicle power source;



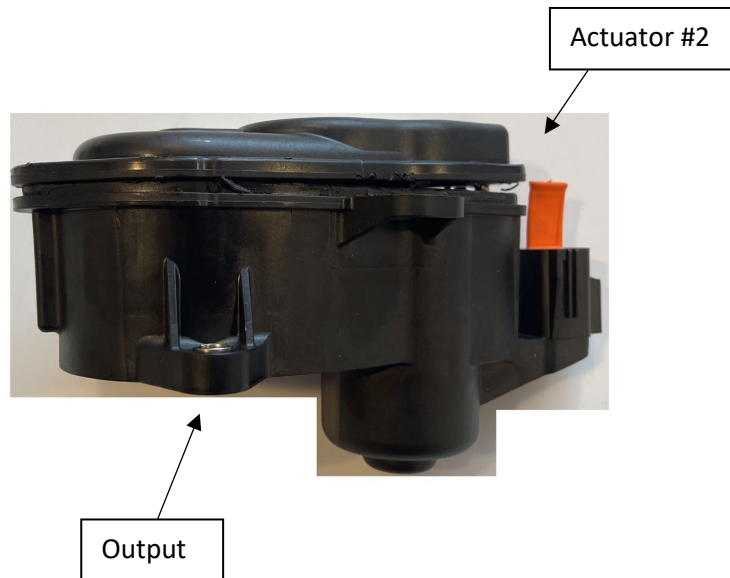
Defendants' Actuator #2 is, when installed in a vehicle, part of an electrically actuated parking brake system. The electrically actuated parking brake system includes a vehicle power source.

Under 35 U.S.C. § 271(b), Defendants actively induce infringement of independent claim 17 and its dependent claims below by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe claim 17 and its dependent claims below of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of independent claim 17 and its dependent claims below by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe claim 17 and its dependent claims below of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.

an actuator comprising a motor having a drive shaft coupled to a drive pulley, a driven pulley coupled to said drive pulley via a drive belt, and a planetary gear set coupled to said driven pulley for driving an output of said actuator,	 Actuator Planetary gear set coupled to the driven pulley for driving an output of the actuator Drive shaft coupled to the drive pulley Motor Drive pulley Drive belt Driven pulley coupled to the drive pulley via a drive belt
at least said motor and planetary gear set mounted on a sub-frame, and a component isolator having a spring constant and a damping constant disposed between said sub-frame and an actuator housing; and	 Planetary gear set mounted on the sub-frame Component isolator with a spring constant and a damping constant disposed between the sub-frame and the actuator housing Motor mounted on the sub-frame Sub-frame Actuator housing

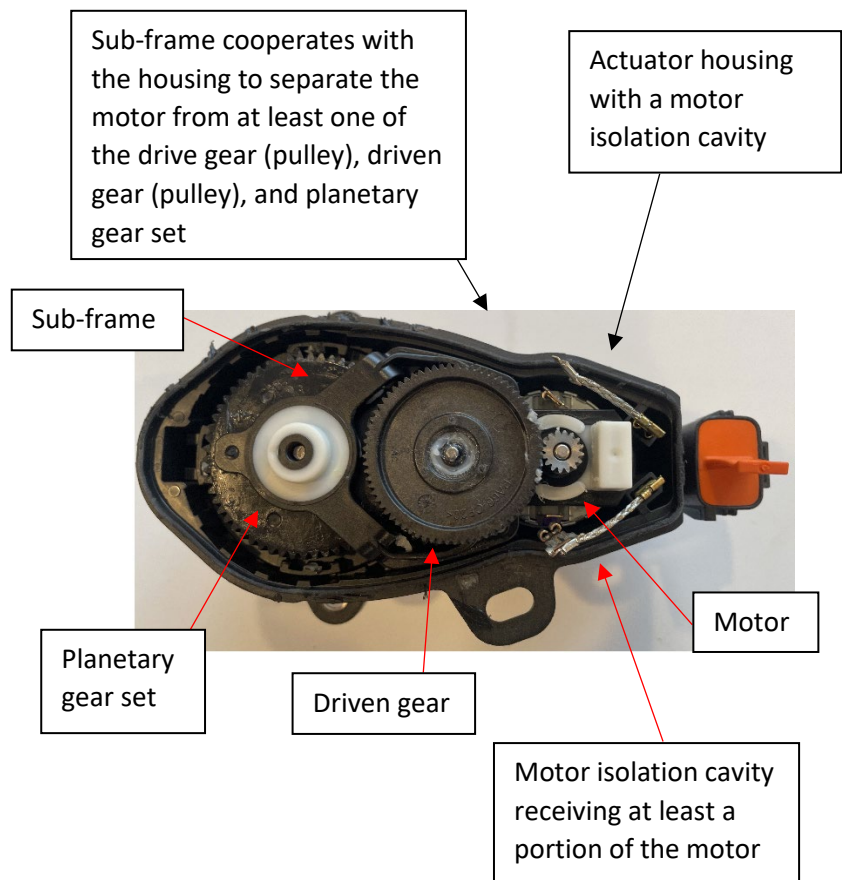
a brake caliper coupled to said actuator output, said actuator output being configured for driving said brake caliper between an engaged position and a released position.



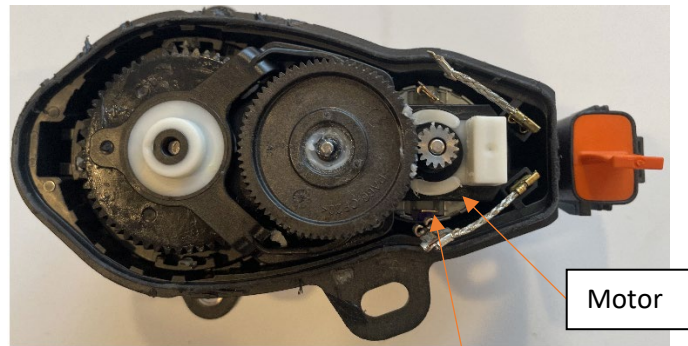
When Defendants' Actuator #2 is installed in a vehicle, a brake caliper is coupled to the actuator output, and the actuator output is configured for driving said brake caliper between an engaged position and a released position.

18. The system according to claim 17, said actuator housing comprising a motor isolation cavity receiving at least a portion of said motor,

wherein said sub-frame cooperates with said housing to separate said motor from at least one of said drive gear, driven gear and said planetary gear set.



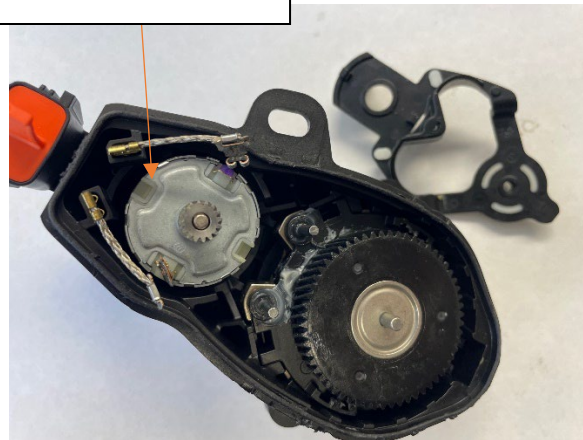
19. The system according to claim 17, further comprising a motor isolator having a spring constant and a damping constant, said motor isolator disposed between said motor and said mounted plate.



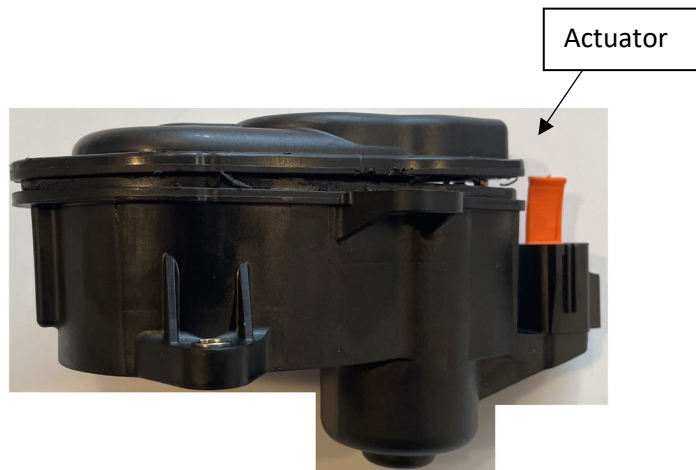
Motor

Mounted plate

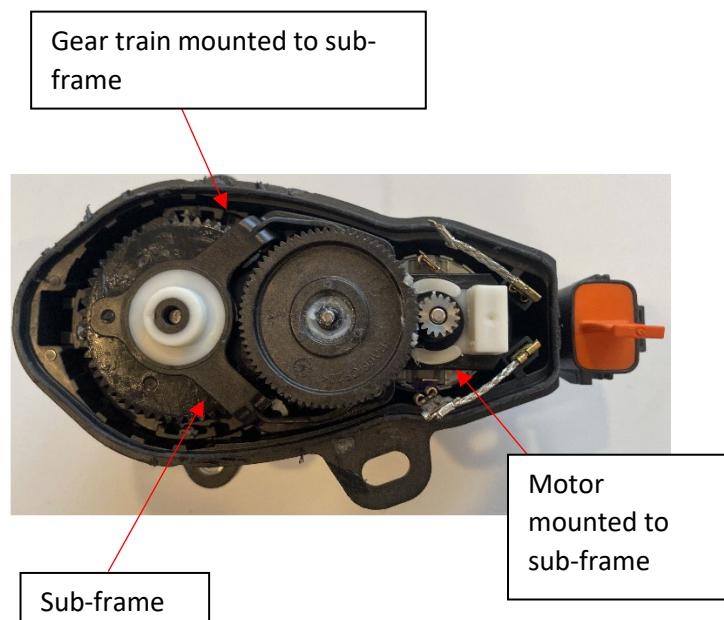
Motor isolator with a spring constant and a damping constant disposed between the motor and the mounted plate



20. A method of assembling an actuator comprising:

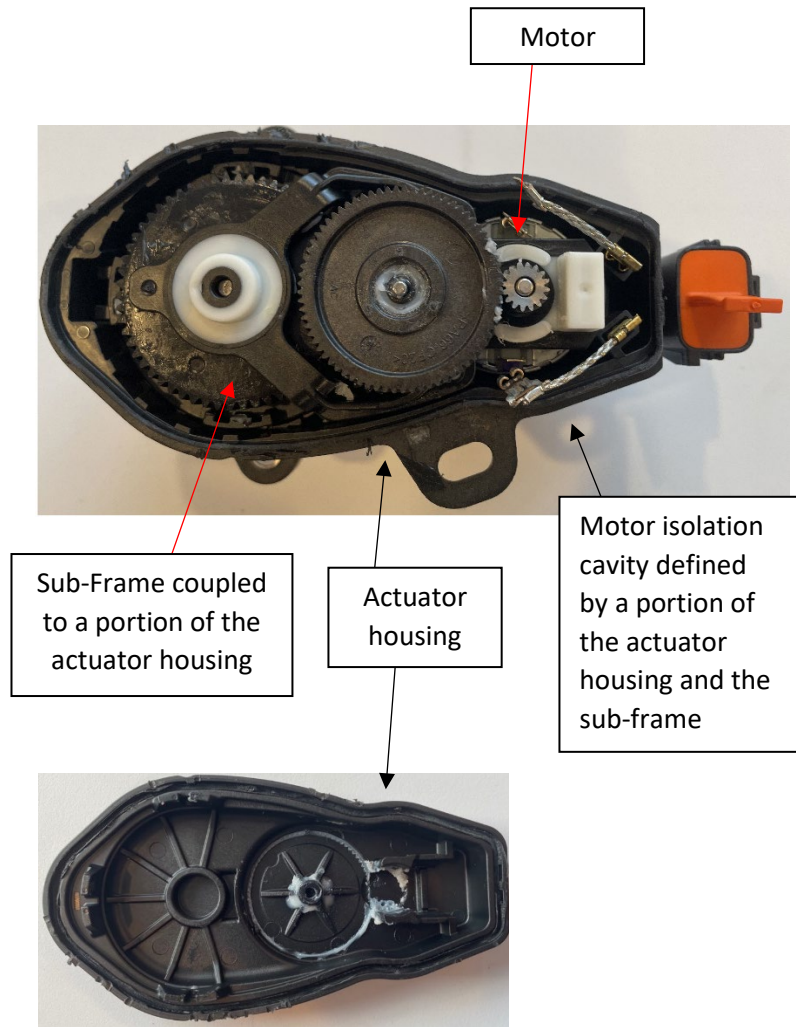


mounting a motor and a gear train to a sub-frame;



Defendants and/or their direct customers and/or their downstream customers mount a motor and a gear train to a sub-frame.

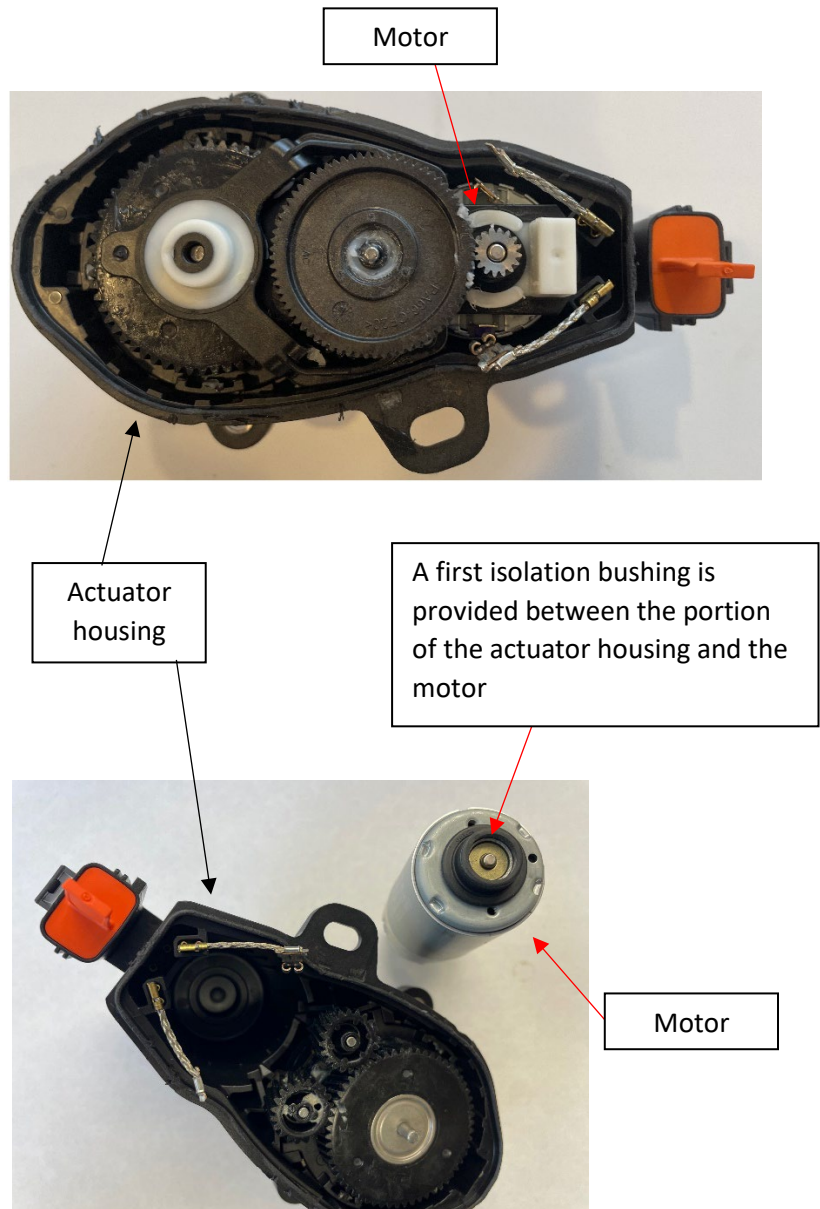
coupling said sub-frame to a portion of an actuator housing to at least partially enclose said motor in a motor isolation cavity defined by said portion of said actuator housing and said sub-frame.



Defendants and/or their direct customers and/or their downstream customers couple the sub-frame to a portion of an actuator housing to at least partially enclose said motor in a motor isolation cavity defined by said portion of said actuator housing and said sub-frame.

24. A method according to claim 20, said method further comprising:

providing a first motor isolation bushing between said portion of said actuator housing and said motor; and



Defendants and/or their direct customers and/or their downstream customers provide a first motor isolation bushing between said portion of said actuator housing and said motor.

Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 24 by making, using, offering to sell, selling, and/or importing Actuator #2 in a manner that directly infringes the '415 Patent.

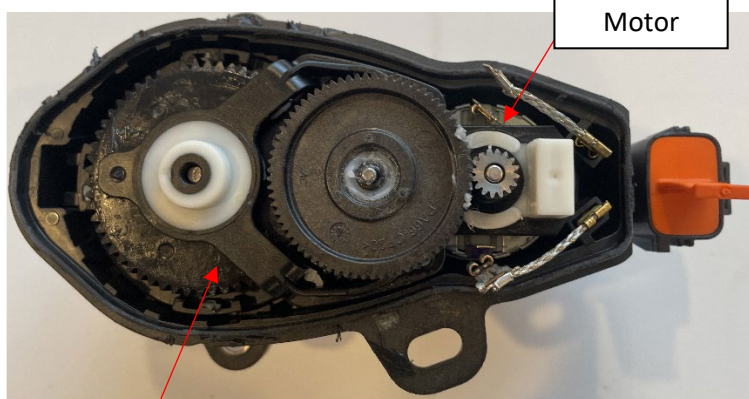
Alternatively and/or additionally, under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 24 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed

and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe dependent claim 24 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the '415 Patent, while knowing Defendants' direct customers and/or downstream customers actions constitute infringement of the '415 Patent or by remaining willfully blind that such acts by Defendants' direct customers and/or downstream customers constitute infringement of the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 24 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the '415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants' direct customers and/or downstream customers directly infringe dependent claim 24 of the '415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles.

Alternatively and/or additionally, under 35 U.S.C. § 271(g), Defendants offers to sell, sell, or use within the United States a product which is made by the process of claim 24, and/or actively induce their direct customer and/or downstream customers to do so as discussed above with respect to infringement under § 271(b), and/or actively contribute to their direct customers and/or downstream customers doing so as discussed above with respect to infringement under § 271(c).

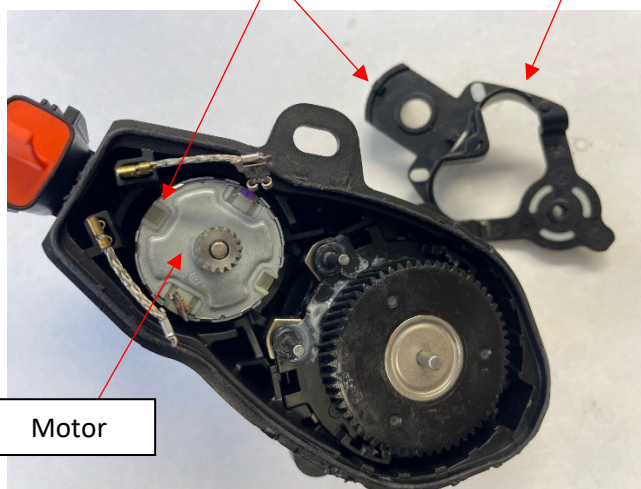
providing a second motor isolation bushing between said sub-frame and said motor.



Sub-Frame

A second motor isolation bushing is provided between the sub-frame and the motor

Sub-Frame

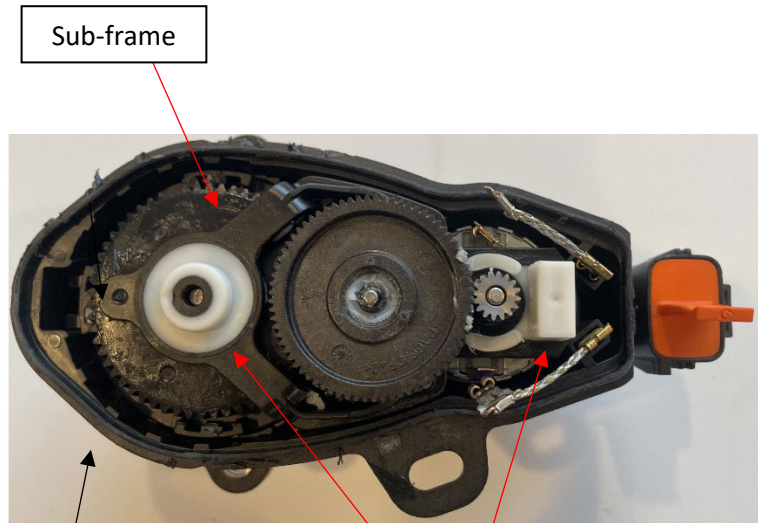


Motor

Defendants and/or their direct customers and/or their downstream customers provide a second motor isolation bushing between said sub-frame and said motor.

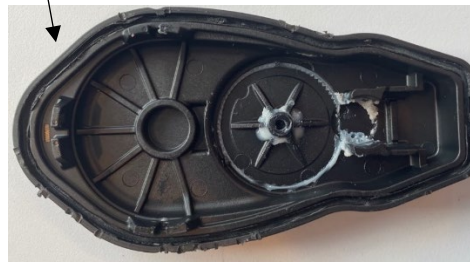
25. A method according to claim 20, said method further comprising:

providing at least one isolation bushing between said portion of said actuator housing and said sub-frame.



Actuator housing

At least one Isolation bushing is provided between the portion of the actuator housing and the portion of the sub-frame



Defendants and/or their direct customers and/or their downstream customers provide at one isolation bushing between said portion of said actuator housing and said sub-frame.

Under 35 U.S.C. § 271(a), Defendants have infringed, and continue to infringe, dependent claim 25 by making, using, offering to sell, selling, and/or importing Actuator #2 in a manner that directly infringes the '415 Patent.

Alternatively and/or additionally, under 35 U.S.C. § 271(b), Defendants actively induce infringement of dependent claim 25 by at least making, offering to sell, selling, and/or importing Actuator #2 for use by at least Defendants' direct customers and/or downstream customers in an infringing manner and as instructed and/or intended by Defendants. Defendants' direct customers and/or downstream customers directly infringe dependent claim 25 of the '415 Patent by making and/or using Actuator #2 in the

	manner instructed and/or intended by Defendants in vehicles. Defendants do so specifically intending their direct customers and/or downstream customers to infringe the ‘415 Patent, while knowing Defendants’ direct customers and/or downstream customers actions constitute infringement of the ‘415 Patent or by remaining willfully blind that such acts by Defendants’ direct customers and/or downstream customers constitute infringement of the ‘415 Patent. Alternatively and/or additionally, under 35 U.S.C. § 271(c), Defendants actively contribute to infringement of dependent claim 25 by at least making, selling, offering to sell, and/or importing Actuator #2, which is a material part of the claimed invention, while knowing that Actuator #2 is especially made or adapted for use in the infringement of the ‘415 Patent or by remaining willfully blind that Actuator #2 is especially made or adapted for use in the infringement of the ‘415 Patent, and is not a stable article or commodity of commerce suitable for substantial non-infringing use. Defendants’ direct customers and/or downstream customers directly infringe dependent claim 25 of the ‘415 Patent by making and/or using Actuator #2 in the manner instructed and/or intended by Defendants in vehicles. Alternatively and/or additionally, under 35 U.S.C. § 271(g), Defendants offers to sell, sell, or use within the United States a product which is made by the process of claim 25, and/or actively induce their direct customer and/or downstream customers to do so as discussed above with respect to infringement under § 271(b), and/or actively contribute to their direct customers and/or downstream customers doing so as discussed above with respect to infringement under § 271(c).
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