

EXHIBIT A-3

Kaneko alone and in view of Katabami, Cao and/or King-Smith

U.S. Patent No. 9,280,220

Upon information and belief, Japanese Patent Publication No. JP 2008-152540 to Kaneko (“Kaneko”) (published July 3, 2008) either expressly, implicitly, or inherently anticipates the asserted claims of U.S. Patent No. 9,280,220 (“’220 Patent”) under 35 U.S.C. § 102 and/or renders those claims obvious under 35 U.S.C. § 103 alternatively in view of U.S. Patent No. 5,528,002 to Katabami (“Katabami”) (issued June 18, 1996), U.S. Patent No. 8,988,398 to Cao et al. (“Cao”) (issued March 24, 2015), and/or U.S. Patent Publication No. 20100085325 to King-Smith et al. (“King-Smith”) (published April 8, 2010) as set forth in the chart below.

A person of ordinary skill in the art would have been motivated to modify the technology of Kaneko based on Katabami for the obvious benefit of providing additional status information related to the stylus. Katabami, 16:34-42.

A person of ordinary skill in the art would have been motivated to modify the technology Kaneko based on Cao for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. *See, e.g.*, Cao, 1:20-51.

A person of ordinary skill in the art would have been motivated to modify the technology of Kaneko based on King-Smith for the obvious benefit of improved communication of data using different kinds of modulation of the signal. King-Smith, ¶ [0010].

The following contentions are subject to revision and amendment pursuant to Federal Rule of Civil Procedure 26(e) and the Court Orders in this matter subject to further investigation and discovery regarding the references.

Claim 1		Example Disclosures in Prior Art
1[pre] A stylus comprising:		To the extent the preamble is considered limiting, Kaneko discloses an electronic pen 300 used as an input means to a panel 100. Kaneko, FIG. 1 & ¶¶ [0020], [0024], & [0040].

[Fig. 1]

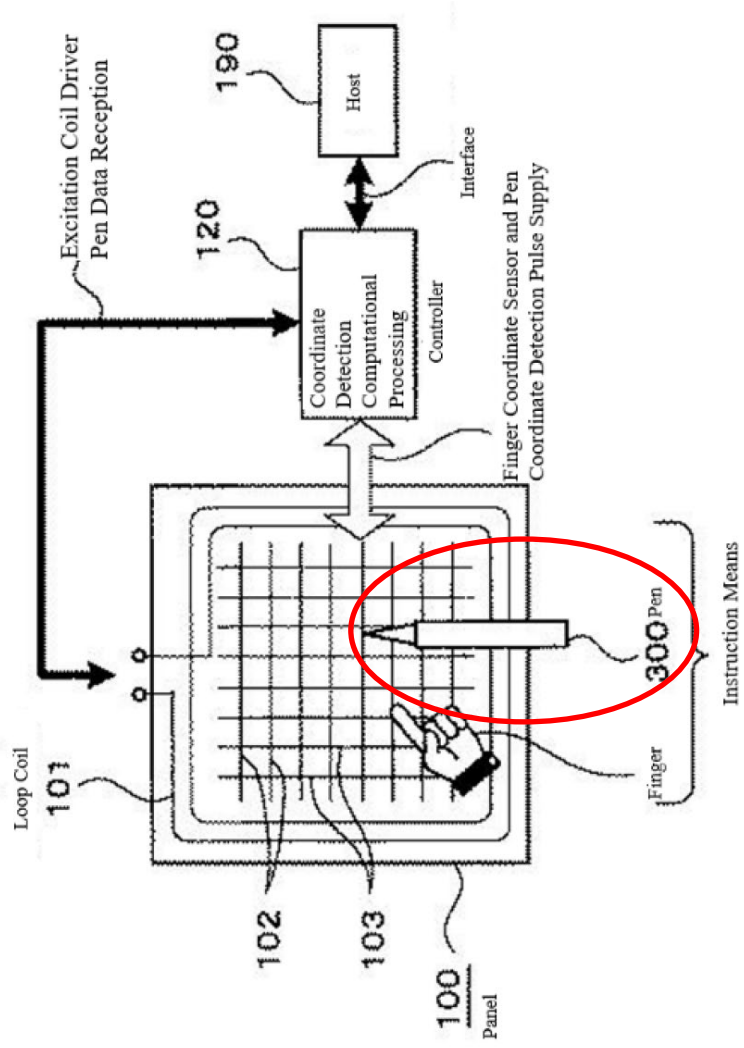


FIG. 1 of Kaneko

Claim 1 1[a] one or more sensors;	Example Disclosures in Prior Art The electronic pen of Kaneko includes sensors, such as “a pressure detection mechanism to detect pressure according to usage.” Kaneko, ¶ [0024]. A person of ordinary skill in the art would appreciate that detecting pressure could be performed using one or more sensors. The electronic pen of Kaneko also includes, for example, an electric field sensor. <i>Id.</i> To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 1[a], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses an input device 102 (i.e., a stylus) that includes an inertial measurement unit 114, which may comprise a compass, a gyroscope, and one or more accelerometers, which are sensors. Cao, 3:59-4:35. FIG. 1 of Cao It would have been obvious to modify the stylus of Kaneko to include the sensors of Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. See, e.g., Cao, 1:20-51.
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Claim 1 1[b] one or more electrodes configured to communicate with a device by receiving signals from and transmitting signals to a touch sensor of the device; and	Example Disclosures in Prior Art The electronic pen of Kaneko includes an electric field sensor at a tip of the electronic pen. Kaneko, ¶ [0024]. A signal is provided to the electronic pen via the electric field sensor and from a loop coil 101, and the electronic pen generates a counter magnetic field to communicate data to the panel side. Kaneko, ¶¶ [0024] & [0040]. A conductive material, such as metal or conductive resin, is arranged at the pen tip 325 to detect the electric field from the conductive film pattern on the panel side. Kaneko, ¶ [0044].
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[Fig. 6]

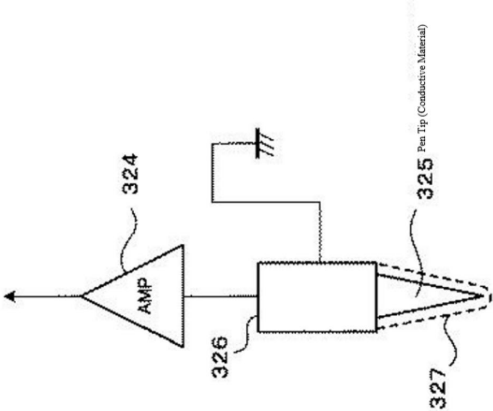


FIG. 6 of Kaneko

Claim 1 1[c] one or more computer-readable non-transitory storage media embodying logic that is operable when executed to:	Example Disclosures in Prior Art Kaneko discloses various operations performed at the electronic pen, such as modulating a LC resonance circuit 310 by a modulation circuit 322 to change electric current flow through a loop coil 101 on the panel side. Kaneko, ¶ [0041]. The electronic pen is thus used to transmit data to the controller on the panel side, where the signal is demodulated to receive the data. <i>Id.</i> A person of ordinary skill in the art would appreciate that the electronic pen of Kaneko includes limitation 1[c] to store instructions for performing operations performed at the electronic pen. FIG. 5 of Kaneko To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 1[c], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person's knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses that software included in processing components 134 of an input device may be stored in a memory, which may comprise computer-readable media. Cao, 5:12-15.
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1[c1] receive sensor data from the one or more sensors;

The electronic pen of Kaneko includes sensors, such as “a pressure detection mechanism to detect pressure according to usage.” Kaneko, ¶ [0024]. A person of ordinary skill in the art would appreciate that detecting pressure could be performed using one or more sensors. The electronic pen of Kaneko also includes, for example, an electric field sensor. *Id.* Kaneko describes that an electric field sensor at the pen tip detects the strength of the electric field generated around the matrix pattern, and after converting this detected signal to digital form, the intensity data is sent to the modulation circuit. *Id.* The modulation circuit modulates the LC resonance voltage to generate a counter magnetic field. *Id.* This generated counter magnetic field alters the electric current flowing in loop coil 101 on the panel side. *Id.* The signal provided from the electronic pen to the panel side is used to communicate data. Kaneko, ¶ [0041]. A person of ordinary skill would appreciate that Kaneko discloses limitation 1[c1] based on at least the foregoing disclosures.

To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 1[c1], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation.

For example, the input device 102 of Cao includes the inertial measurement unit 114, which may comprise a compass, a gyroscope, and one or more accelerometers, which are sensors. Cao, 3:59-4:35. The inertial measurement unit 114 is used to measure and output a pitch or tilt angle of the input device 102. Cao, 4:35-37.

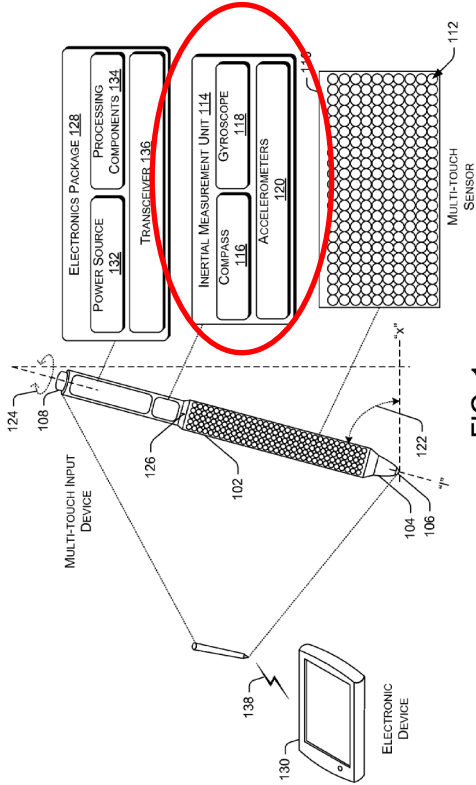


FIG. 1
FIG. 1 of Cao

It would have been obvious to modify the stylus of Kaneko to include the sensors of Cao, and a person of ordinary skill would have been

Claim 1	Example Disclosures in Prior Art
	motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51.
1[c2] receive a first signal generated by the device;	Kaneko describes that an electric field sensor at the pen tip detects the strength of the electric field generated around the matrix pattern, and after converting this detected signal to digital form, the intensity data is sent to the modulation circuit. Kaneko, ¶ [0024].
1[c3] generate a second signal by modulating a carrier signal based on the sensor data; and	The modulation circuit 322 of Kaneko receives a signal obtained by dividing the carrier frequency detected by the LC resonant circuit 310 using a frequency divider 321. Kaneko, ¶ [0041]. Moreover, Kaneko discloses that an excitation frequency provided from the panel side serves as a carrier. Kaneko, ¶ [0037]. The modulation circuit 322 of Kaneko modulates the LC resonance circuit 310 to change electric current flow through a loop coil 101 on the panel side to transmit data. Kaneko, ¶ [0041]. To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 1[c3], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses passing output data of the inertia measurement unit to the electronic device. Cao, 4:55-57. It would have been obvious to modify the stylus of Kaneko to pass the output data to the electronic device as in Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51.

Claim 1	Example Disclosures in Prior Art
1[c4] transmit to the device, in response to the first signal, the second signal, the sensor data being obtainable by demodulating the second signal.	The modulation circuit 322 of Kaneko modulates the LC resonance circuit 310 to change electric current flow through a loop coil 101 on the panel side to transmit data. Kaneko, ¶ [0041]. The electric current change is detected on the panel side and converted to voltage by a detection resistor, enabling demodulation into received data. <i>Id.</i> To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 1[c4], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses passing output data of the inertia measurement unit to the electronic device. Cao, 4:55-57. It would have been obvious to modify the stylus of Kaneko pass the output data to the electronic device as in Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.</i>, Cao, 1:20-51

Claim 3	Example Disclosures in Prior Art
3. The stylus of claim 1, wherein the second signal is generated using one of: amplitude modulation; frequency modulation; and phase modulation.	Kaneko discloses the LC resonant circuit 310 is amplitude modulated by the modulation circuit 322. Kaneko, ¶ [0041]. Kaneko further discloses that the disclosed technology can use other modulation techniques, such as “frequency, phase, and amplitude modulation.” Kaneko, ¶ [0049]. To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose the limitations of claim 3, a person of ordinary skill would understand how to modify Kaneko to meet these limitations based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Katabami and/or King-Smith to meet these limitations. Katabami discloses a cordless pen that includes switches, such as a side switch 72 that can be pressed by a finger of a user and a pressure sensitive switch 73 that can be turned on when a user presses the tip of the pen against the plate surface of a tablet. Katabami, 16:34-42. These switches are used to provide a pen status. <i>Id.</i> Each switch is coupled to a respective capacitor, which cause an oscillation frequency to be lowered when the respective switch is turned on. Katabami, 16:36-48. A frequency shift can be decoded to determine status information of the switches. Katabami, 15:51-57 & 16:48-50. Accordingly, Katabami discloses frequency modulation. It would have been obvious to modify the stylus of Kaneko to use the switches of Katabami using frequency modulation, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of providing additional status information related to the stylus. Moreover, King-Smith discloses a transducer, which may be a stylus, configured to selectively generate an electric field at multiple frequencies and to encode digital data in frequency shifts of the electric field. King-Smith, ¶ [0010]. King-Smith further describes that “any other digital modulation technique may be used to encode digital data, including Amplitude-Shift Keying (ASK) technique, Phase-Shift Keying (PSK) technique, and Quadrature Amplitude Modulation (QAM) technique.” <i>Id.</i> Therefore, King-Smith discloses generating a signal using amplitude modulation, frequency modulation, and phase modulation. It would have been obvious to modify the technology of Kaneko to implement multiple kinds of modulation, as in King-Smith, and a person of ordinary skill would have been motivated to so modify the technology of King-Smith for the obvious benefit of improved communication of data using different kinds of modulation of the signal. <i>See id.</i>

Claim 4 4. The stylus of claim 1, wherein: the one or more sensors comprise a pressure sensor and a button; and the sensor data comprises pressure data and button state data.	Example Disclosures in Prior Art The electronic pen of Kaneko includes sensors, such as “a pressure detection mechanism to detect pressure according to usage.” Kaneko, ¶ [0024]. Additionally, the electronic pen of Kaneko includes switches for assigned functions, such as for clicking. <i>Id.</i> To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation the limitations of claim 4, a person of ordinary skill would understand how to modify Kaneko to meet these limitations based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao and/or Katabami to meet these limitations. For example, Cao discloses that the input device may include a retractable tip that activates a pressure switch housed in the input device. Cao, 3:64-66. The pressure switch outputs a signal when sufficient pressure actuates the switch. Cao, 3:66-67. Cao further discloses that the body of the input device can have at least one button, which may be a clickable button to activate a pressure switch. Cao, 4:1-4. Accordingly, Cao discloses a pressure sensor and a button, as well as sensor data comprising pressure data and button state data. Additionally, Katabami discloses a cordless pen that includes switches, such as a side switch 72 that can be pressed by a finger of a user and a pressure sensitive switch 73 that can be turned on when a user presses the tip of the pen against the plate surface of a tablet. Katabami, 16:34-42. These switches are used to provide a pen status. <i>Id.</i> Accordingly, Katabami also discloses a pressure sensor and a button, as well as sensor data comprising pressure data and button state data. The diagram illustrates the internal circuitry of a stylus. It begins with a battery (2) connected to a switch (60). Following the switch, the circuit splits into two parallel branches. The upper branch contains a resistor (61) in series with a transistor (62). The lower branch contains a resistor (63) in series with a transistor (71). The outputs of transistors 62 and 71 are connected to a common node, which then leads to a series combination of a capacitor (70) and a switch (72). This series combination is connected to ground. Additionally, there is a feedback path from the output node back to the input of transistor 62, passing through a resistor (64) and a capacitor (65). A resistor (66) is connected between the output node and ground. A capacitor (68) is connected between the output node and the input of transistor 71. A capacitor (69) is connected between the input of transistor 71 and ground. A resistor (67) is connected between the output node and the input of transistor 62. Fig. 2 of Katabami
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Claim 5	Example Disclosures in Prior Art
5. The stylus of claim 1, wherein the sensor data is digital.	Kaneko discloses digitizing at the electronic pen using an analog-to-digital converter 323, and Kaneko discloses that a digital processing configuration is preferred to reduce the effects of noise. Kaneko, ¶¶ [0024], [0045] & [0047]. To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation the limitations of claim 5, a person of ordinary skill would understand how to modify Kaneko to meet these limitations based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao. For example, Cao discloses “digital data” in relation to data outputted by the inertial measurement unit. Cao, 5:1-9.

Claim 7	Example Disclosures in Prior Art
7[pre] One or more computer-readable non-transitory storage media embodying logic that is operable when executed to:	To the extent the preamble is considered limiting, Kaneko discloses various operations performed at the electronic pen, such as modulating a LC resonance circuit 310 by a modulation circuit 322 to change electric current flow through a loop coil 101 on the panel side. Kaneko, ¶ [0041]. The electronic pen is thus used to transmit data to the controller on the panel side, where the received signal is demodulated to receive the data. <i>Id.</i> A person of ordinary skill in the art would appreciate that the electronic pen of Kaneko includes limitation 7[pre] to store instructions for performing operations performed by the electronic pen.

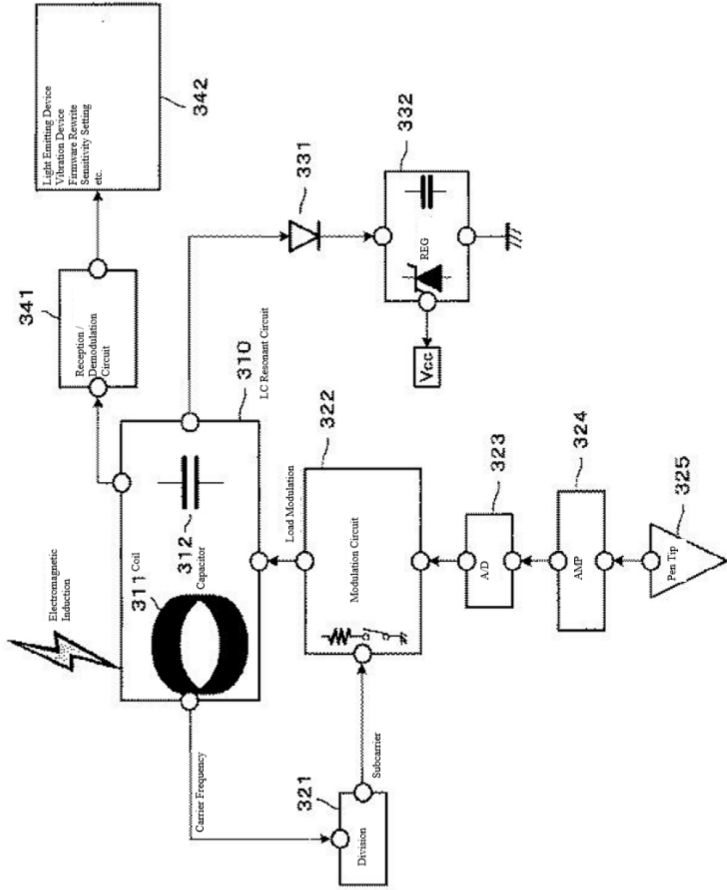
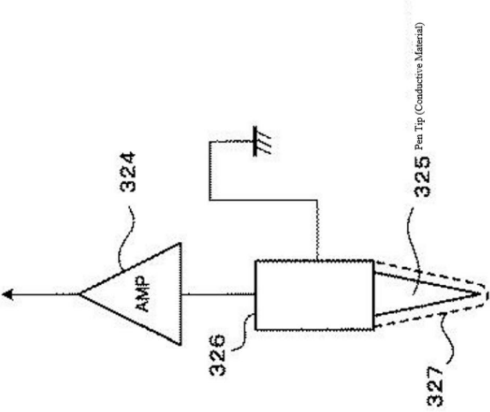


FIG. 5 of Kaneko

To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 7[pre], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person's knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses that software included in processing components 134 of an input device may be stored in a memory, which may comprise computer-readable media. Cao, 5:12-15.

Claim 7 7[a] receive sensor data from one or more sensors in or on a stylus, the stylus comprising one or more electrodes configured to communicate with a device by receiving signal from and transmitting signals to a touch sensor of the device;	Example Disclosures in Prior Art The electronic pen of Kaneko includes an electric field sensor at a tip of the electronic pen. Kaneko, ¶ [0024]. A signal is provided to the electronic pen via the electric field sensor and from a loop coil 101, and the electronic pen generates a counter magnetic field to communicate data to the panel side. Kaneko, ¶¶ [0024] & [0040]. A conductive material, such as metal or conductive resin, is arranged at the pen tip 325 to detect the electric field from the conductive film pattern on the panel side. Kaneko, ¶ [0044]. [Fig. 6]  FIG. 6 of Kaneko The electronic pen of Kaneko includes sensors, such as “a pressure detection mechanism to detect pressure according to usage.” Kaneko, ¶ [0024]. A person of ordinary skill in the art would appreciate that detecting pressure could be performed using one or more sensors. The electronic pen of Kaneko also includes, for example, an electric field sensor. <i>Id.</i> Kaneko describes that an electric field sensor at the pen tip detects the strength of the electric field generated around the matrix pattern, and after converting this detected signal to digital form, the intensity data is sent to the modulation circuit. <i>Id.</i> The modulation circuit modulates the LC resonance voltage to generate a counter magnetic field. This generated counter magnetic field alters the electric current flowing in loop coil 101 on the panel side. <i>Id.</i> The signal provided from the electronic pen to the panel side is used to communicate data. Kaneko, ¶ [0041]. A person of ordinary skill would appreciate that Kaneko discloses limitation 7[a] based on at least the foregoing disclosures.
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Claim 7	Example Disclosures in Prior Art To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 7[a], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses an input device 102 (i.e., a stylus) that includes an inertial measurement unit 114, which may comprise a compass, a gyroscope, and one or more accelerometers, which are sensors. Cao, 3:59-4:35. It would have been obvious to modify the stylus of Kaneko to include the sensors of Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51.
7[b] receive a first signal generated by the device;	Kaneko describes that an electric field sensor at the pen tip detects the strength of the electric field generated around the matrix pattern, and after converting this detected signal to digital form, the intensity data is sent to the modulation circuit. Kaneko, ¶ [0024].

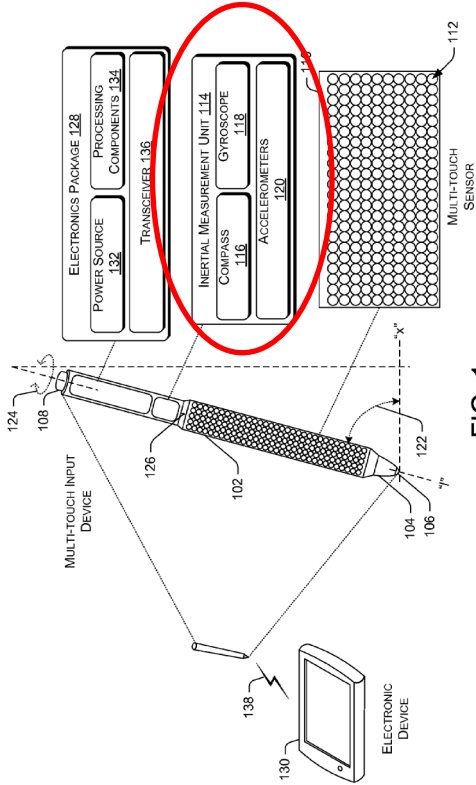


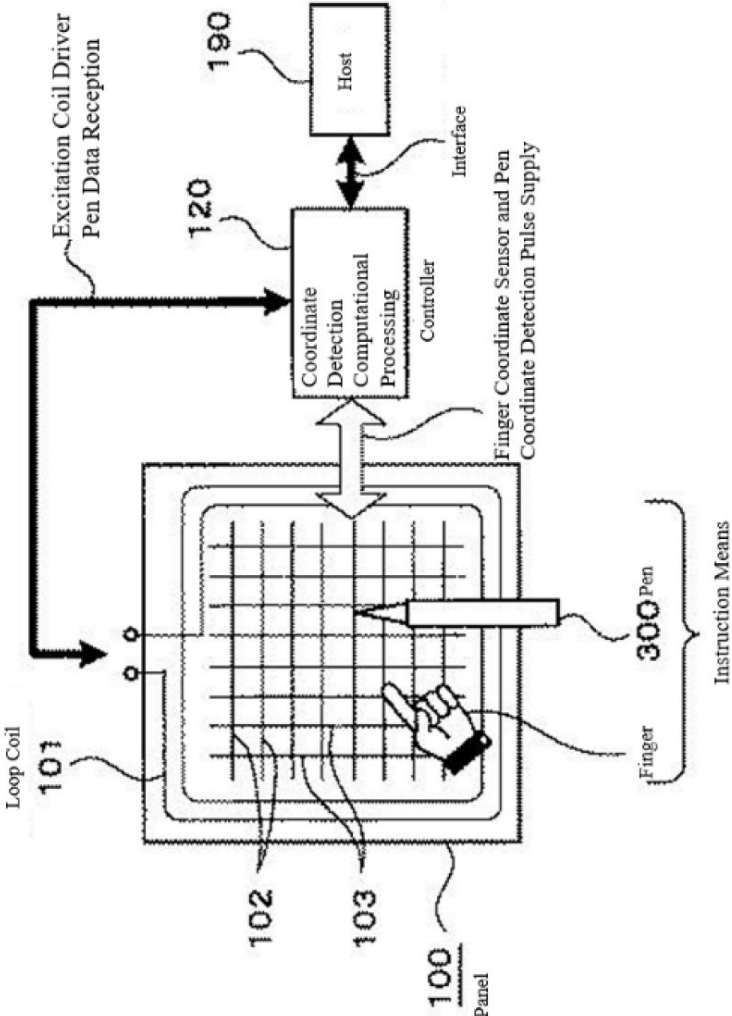
FIG. 1
FIG. 1 of Cao

Claim 7	Example Disclosures in Prior Art
7[d] generate a second signal by modulating a carrier signal based on the sensor data; and	The modulation circuit 322 of Kaneko receives a signal obtained by dividing the carrier frequency detected by the LC resonant circuit 310 using a frequency divider 321. Kaneko, ¶ [0041]. Moreover, Kaneko discloses that an excitation frequency provided from the panel side serves as a carrier. Kaneko, ¶ [0037]. The modulation circuit 322 of Kaneko modulates the LC resonance circuit 310 to change electric current flow through a loop coil 101 on the panel side to transmit data. Kaneko, ¶ [0041]. To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 7[c], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses passing output data of the inertia measurement unit to the electronic device. Cao, 4:55-57. It would have been obvious to modify the stylus of Kaneko to pass the output data to the electronic device as in Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.</i>, Cao, 1:20-51.
7[e] transmit to the device, in response to the first signal, the second signal, the sensor data being obtainable by demodulating the second signal.	The modulation circuit 322 of Kaneko modulates the LC resonance circuit 310 to change electric current flow through a loop coil 101 on the panel side to transmit data. Kaneko, ¶ [0041]. The electric current change is detected on the panel side and converted to voltage by a detection resistor, enabling demodulation into received data. <i>Id.</i> To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 7[d], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses passing output data of the inertia measurement unit to the electronic device. Cao, 4:55-57. It would have been obvious to modify the stylus of Kaneko pass the output data to the electronic device as in Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.</i>, Cao, 1:20-51

Claim 9	Example Disclosures in Prior Art
9. The media of claim 7, wherein the second signal is generated using one of: amplitude modulation; frequency modulation; and phase modulation.	See claim 3 above.

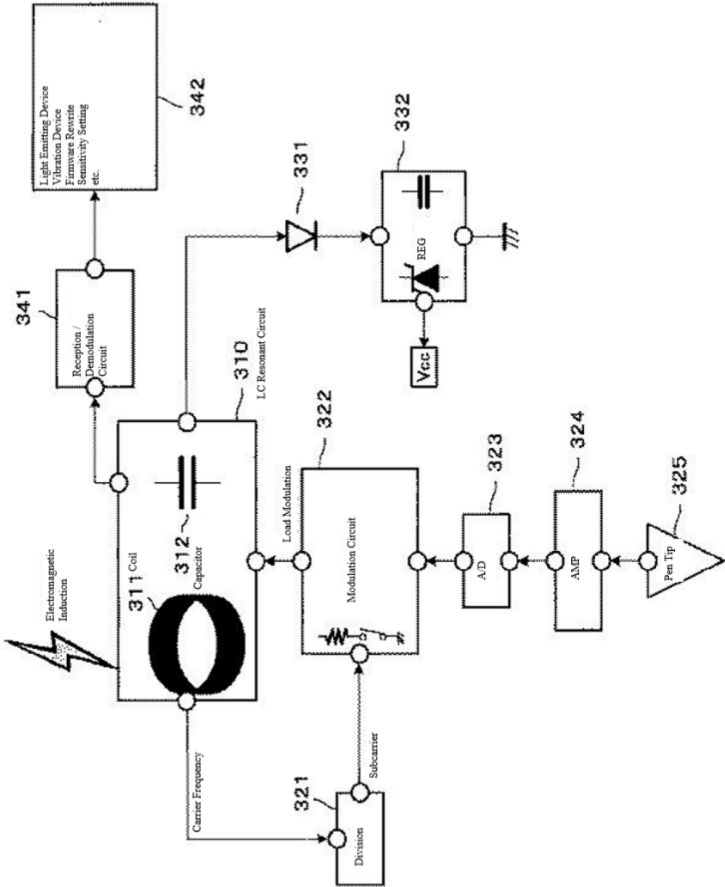
Claim 10	Example Disclosures in Prior Art
10. The media of claim 7, wherein: the one or more sensors comprise a pressure sensor and a button; and the sensor data comprises pressure data and button state data.	See claim 4 above.

Claim 11	Example Disclosures in Prior Art
11. The media of claim 7, wherein the sensor data is digital.	See claim 5 above.

Claim 13 13[pre] A system comprising:	Example Disclosures in Prior Art To the extent the preamble is considered limiting, Kaneko discloses an electronic pen 300 used as an input means to a panel 100. Kaneko, FIG. 1 & ¶¶ [0020], [0024], & [0040]. [Fig. 1]  FIG. 1 of Kaneko The panel 100 of Kaneko includes and input detection part that detects a coordinate position touched on the panel. Kaneko, ¶ [0020]. The electronic pen 300 of Kaneko is a stylus. Kaneko, FIG. 1 & ¶¶ [0020], [0024], & [0040]. The electronic pen of Kaneko includes sensors, such as “a pressure detection mechanism to detect pressure according to usage.” Kaneko, ¶ [0024]. A person of ordinary skill in the art would appreciate that detecting pressure could be performed using one or more sensors. The electronic pen of Kaneko also included, for example, an electric field sensor. <i>Id.</i>
13[a] a device comprising a touch sensor; and 13[b] a stylus comprising: 13[b]1] one or more sensors;	

Claim 13	Example Disclosures in Prior Art To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 13[b1], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses an input device 102 (i.e., a stylus) that includes an inertial measurement unit 114, which may comprise a compass, a gyroscope, and one or more accelerometers, which are sensors. Cao, 3:59-4:35. FIG. 1 FIG. 1 of Cao It would have been obvious to modify the stylus of Kaneko to include the sensors of Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51.
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Claim 13	Example Disclosures in Prior Art
13[b2] one or more electrodes configured to communicate with a device by receiving signals from and transmitting signals to a touch sensor of the device; and	The electronic pen of Kaneko includes an electric field sensor at a tip of the electronic pen. Kaneko, ¶ [0024]. A signal is provided to the electronic pen via the electric field sensor and from a loop coil 101, and the electronic pen generates a counter magnetic field to communicate data to the panel side. Kaneko, ¶¶ [0024] & [0040]. A conductive material, such as metal or conductive resin, is arranged at the pen tip 325 to detect the electric field from the conductive film pattern on the panel side. Kaneko, ¶ [0044]. [Fig. 6] FIG. 6 of Kaneko

Claim 13 13[b3] one or more computer-readable non-transitory storage media embodying logic that is operable when executed to:	Example Disclosures in Prior Art Kaneko discloses various operations performed at the electronic pen, such as modulating a LC resonance circuit 310 by a modulation circuit 322 to change electric current flow through a loop coil 101 on the panel side. Kaneko, ¶ [0041]. The electronic pen is thus used to transmit data to the controller on the panel side, where the received signal is demodulated to receive the data. <i>Id.</i> A person of ordinary skill in the art would appreciate that the electronic pen of Kaneko includes limitation 13[b3] to store instructions for performing operations performed by the electronic pen.  FIG. 5 of Kaneko To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 13[b3], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses that software included in processing components 134 of an input device may be stored in a memory, which may comprise computer-readable media. Cao, 5:12-15.
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13|b3A] receive sensor data from the one or more sensors;

The electronic pen of Kaneko includes sensors, such as “a pressure detection mechanism to detect pressure according to usage.” Kaneko, ¶ [0024]. A person of ordinary skill in the art would appreciate that detecting pressure could be performed using one or more sensors. The electronic pen of Kaneko also included, for example, an electric field sensor. *Id.* Kaneko describes that an electric field sensor at the pen tip detects the strength of the electric field generated around the matrix pattern, and after converting this detected signal to digital form, the intensity data is sent to the modulation circuit. *Id.* The modulation circuit modulates the LC resonance voltage to generate a counter magnetic field. This generated counter magnetic field alters the electric current flowing in loop coil 101 on the panel side. *Id.* The signal provided from the electronic pen to the panel side is used to communicate data. Kaneko, ¶ [0041]. A person of ordinary skill would appreciate that Kaneko discloses limitation 13|b3A] based on at least the foregoing disclosures.

To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 13|b3A], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation.

For example, the input device 102 of Cao includes the inertial measurement unit 114, which may comprise a compass, a gyroscope, and one or more accelerometers, which are sensors. Cao, 3:59-4:35. The inertial measurement unit 114 is used to measure and output a pitch or tilt angle of the input device 102. Cao, 4:35-37.

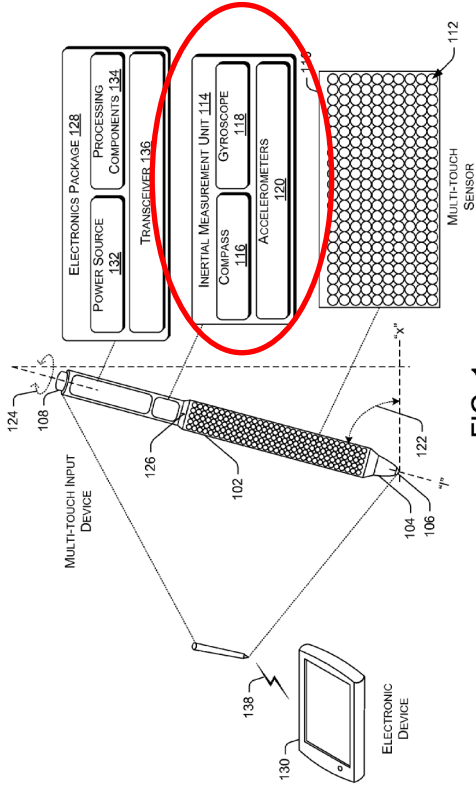


FIG. 1
FIG. 1 of Cao

It would have been obvious to modify the stylus of Kaneko to include the sensors of Cao, and a person of ordinary skill would have been

Claim 13	Example Disclosures in Prior Art
	motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51.
13[b3B] receive a first signal generated by the device;	Kaneko describes that an electric field sensor at the pen tip detects the strength of the electric field generated around the matrix pattern, and after converting this detected signal to digital form, the intensity data is sent to the modulation circuit. Kaneko, ¶ [0024].
13[b3C] generate a second signal by modulating a carrier signal based on the sensor data; and	The modulation circuit 322 of Kaneko receives a signal obtained by dividing the carrier frequency detected by the LC resonant circuit 310 using a frequency divider 321. Kaneko, ¶ [0041]. Moreover, Kaneko discloses that an excitation frequency provided from the panel side serves as a carrier. Kaneko, ¶ [0037]. The modulation circuit 322 of Kaneko modulates the LC resonance circuit 310 to change electric current flow through a loop coil 101 on the panel side to transmit data. Kaneko, ¶ [0041]. To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 13[b3C], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses passing output data of the inertia measurement unit to the electronic device. Cao, 4:55-57. It would have been obvious to modify the stylus of Kaneko to pass the output data to the electronic device as in Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51.

Claim 13	Example Disclosures in Prior Art
13[b3D] transmit to the device, in response to the first signal, the second signal, the device being operable to obtain the sensor data by demodulating the second signal.	The modulation circuit 322 of Kaneko modulates the LC resonance circuit 310 to change electric current flow through a loop coil 101 on the panel side to transmit data. Kaneko, ¶ [0041]. The electric current change is detected on the panel side and converted to voltage by a detection resistor, enabling demodulation into received data. <i>Id.</i> To the extent Plaintiff contends that Kaneko does not expressly, implicitly, or inherently disclose limitation 13[b3D], a person of ordinary skill would understand how to modify Kaneko to meet this limitation based on such person’s knowledge and Kaneko. Alternatively, a person of ordinary skill could modify Kaneko in view of Cao to meet this limitation. For example, Cao discloses passing output data of the inertia measurement unit to the electronic device. Cao, 4:55-57. It would have been obvious to modify the stylus of Kaneko pass the output data to the electronic device as in Cao, and a person of ordinary skill would have been motivated to so modify the stylus of Kaneko for the obvious benefit of capturing richer sensor data, which can be used to determine orientation of the stylus to enable different functions of the stylus. <i>See, e.g.,</i> Cao, 1:20-51
Claim 15	Example Disclosures in Prior Art
15. The system of claim 13, wherein the second signal is generated using one of: amplitude modulation; frequency modulation; and phase modulation.	<i>See claim 3 above.</i>
Claim 16	Example Disclosures in Prior Art
16. The system of claim 13, wherein: the one or more sensors comprise a pressure sensor and a button; and the sensor data comprises pressure data and button state data.	<i>See claim 4 above.</i>
Claim 17	Example Disclosures in Prior Art
17. The system of claim 13, wherein the sensor data is digital.	<i>See claim 5 above.</i>