

Gentag's Response to Abbott's Initial Invalidity Contentions

Response to Exhibit 1 regarding Invalidity Based on U.S. Patent No. 7,148,803 "Radio frequency identification (RFID) based sensor networks" ("Bandy")

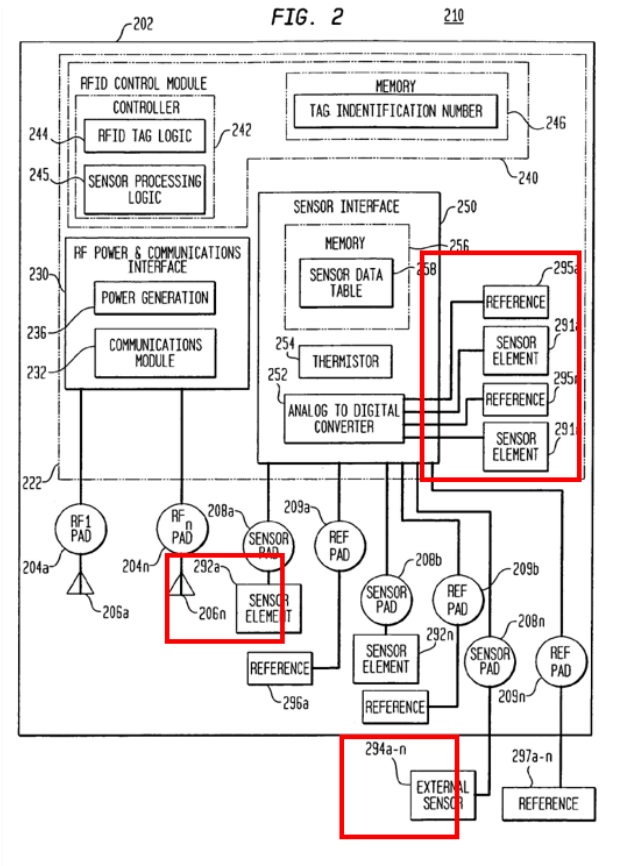
As an initial matter, Bandy is not prior art to the '307 patent for at least the following reasons. First, the invention of the '307 patent was conceived prior to the prior-art date of Bandy, and diligently reduced to practice, at least by the constructive reduction to practice of filing the application for the '307 patent. Second, Bandy cannot be used as prior art for any obviousness combination under 35 U.S.C. § 103(c) (pre-AIA), because Bandy would qualify as prior art only under 35 U.S.C. § 102(e) and the subject matter of Bandy and the claimed invention were, at the time the claimed invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claim	Bandy's Exemplary Disclosures	Gentag's Response
CLAIM 1		
1 [pre] A radio frequency (RF) addressable diagnostic sensor unit comprising	To the extent the preamble is limiting, Bandy discloses and/or renders obvious, alone or in combination with other prior art, "a radio frequency (RF) addressable diagnostic sensor unit" through the various disclosures in the reference. For example: "FIG. 1 is a block diagram of an illustrative RF addressable sensor network 100 for monitoring, detecting, and geolocating RF addressable sensors, according to an embodiment of the present invention. Network 100 includes a population of RF addressable sensors 102, one or more wireless addressable sensor readers 140, and a communications network 180." Bandy at 4:33-39.	The identified disclosures from Bandy fail to disclose a diagnostic sensor unit, as one of ordinary skill in the art would understand that term in light of the intrinsic evidence of the '307 patent.

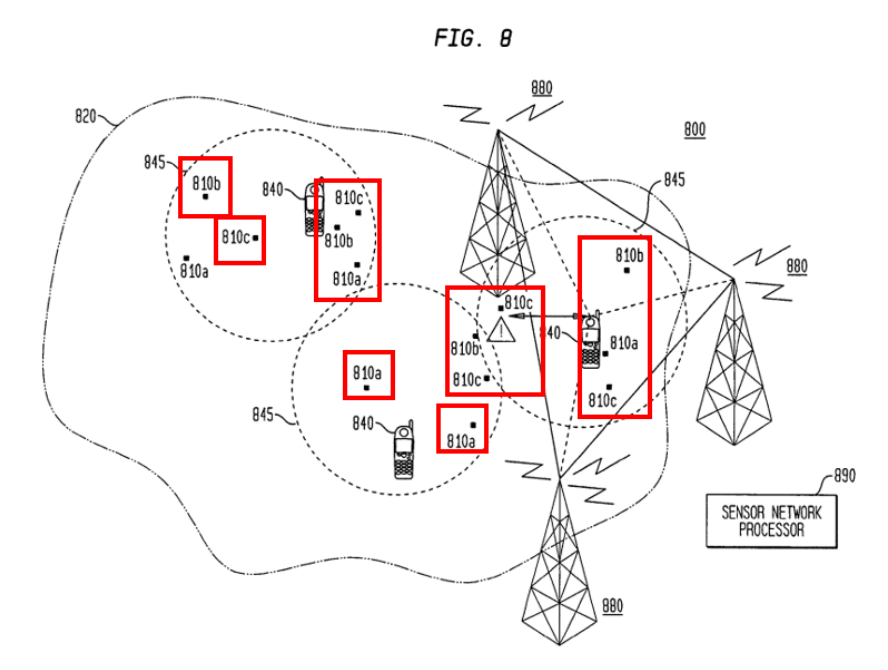
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 1 Bandy at Fig. 1.	
1[a] at least one sensor element;	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “at least one sensor element,” through the various disclosures in the reference. For example: “RF addressable sensor 210 also includes a plurality of sensor elements 291a–291 m, 292a–292n, and 294a–294n.” Bandy at 6:58-60.	Subject to Plaintiffs’ objections and reservations, admitted.

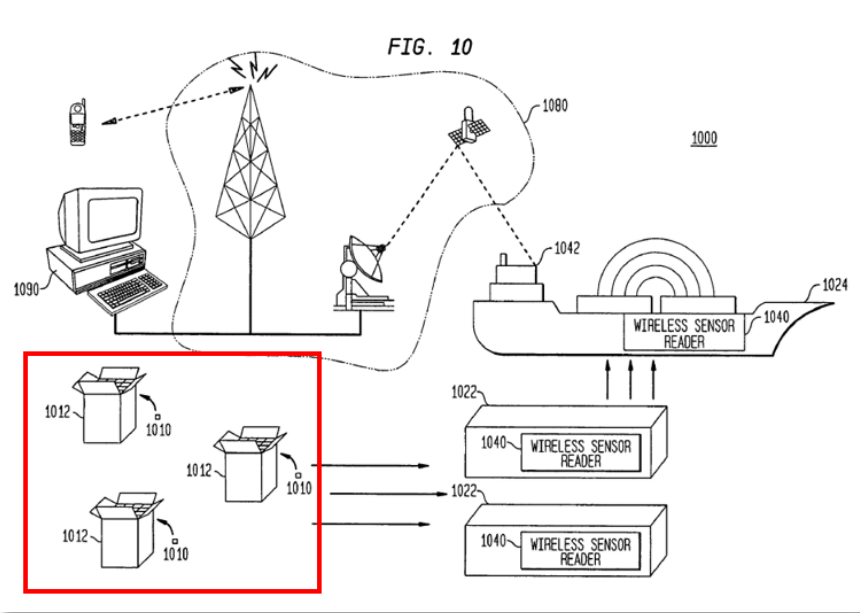
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 2. “FIG. 8 depicts a sensor network 800 for monitoring geographical area 820. Sensor network 800 includes a plurality of RF addressable sensors 810a, 810b, and 810c, etc. (collectively sensor 	

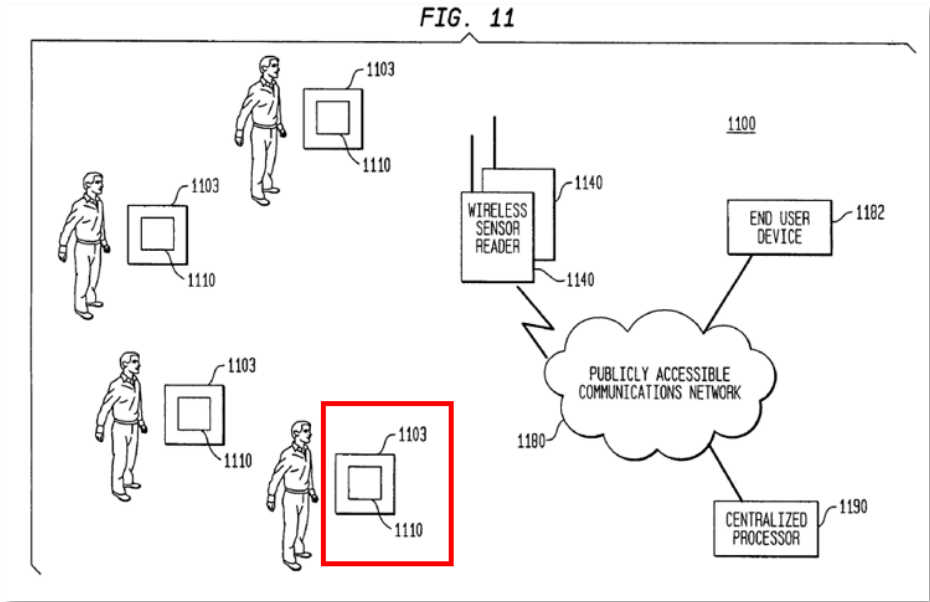
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	elements 810), one or more wireless sensor readers 840, and access points for communications network 880.” Bandy at 17:17-22.  Bandy at Fig. 8. “An example of this use is presented in the block diagram of FIG. 10. Remote shipping container monitoring network 1000 includes one or more shipping packages 1012, one or more shipping containers 1022, at least one transport vessel 1024, a communications network 1080, and a network monitoring processor	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	1090. One or more RF addressable sensors 1010 may be affixed to each shipping package 1012 or concealed directly inside the box or crate.” Bandy at 18:25-34.  Bandy at Fig. 10. “As shown in FIG. 11, remote individual-specific monitoring network 1100 includes one or more smart cards or badges 1103 having at least one RF addressable sensor 1110, a wireless sensor reader 1140, a communications network 1180, and an end user device 1182.”	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at 19:59-63.  Bandy at Fig. 11. “In this application, as shown in FIG. 12, appliance 1201 includes a wireless sensor reader 1240 which is coupled to a communications network 1280. A user places one or more items into appliance 1201 that have an RF addressable sensor 1210. For example, a product may have an RF addressable sensor 1210 included in the product’s packaging. Alternatively, the user may affix an RF addressable sensor 1210 to an item or may immerse or insert an RF addressable sensor into an item (e.g., immersing a sensor into a container of milk).”	

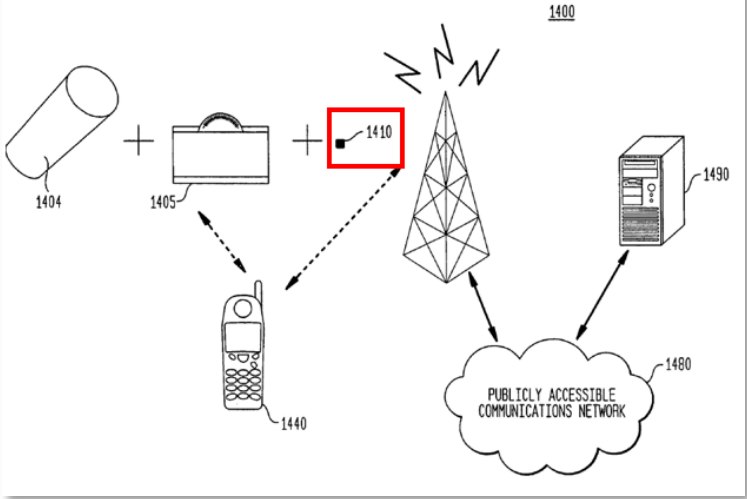
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at 20:50-59. Bandy at Fig. 12. “In FIG. 13A, a user affixes, immerses, or inserts an RF addressable sensor 1310 onto or into a food item. The RF addressable sensor 1310 includes sensor elements to detect certain chemical compositions. . . . FIG. 13B depicts a sensor network 1300 for monitoring food safety. This type of sensor network may be used at a grocery store or a food storage location (e.g., a warehouse). In this application, an RF addressable sensor 1310 is included in the packaging of each food item 1309. For example, each package of meat would include an RF addressable sensor 1310.” Bandy at 21:19-23, 33-40.	

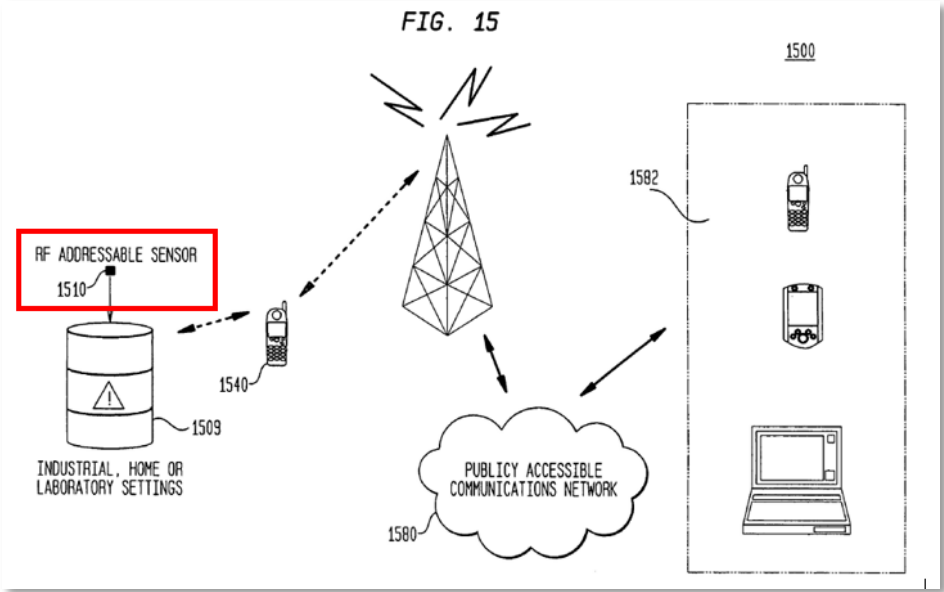
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 13A RF ADDRESSABLE SENSOR 1310 The diagram shows a drug canister 1404 with a label 1405 containing an RF addressable sensor 1310. A mobile device 1340 is shown communicating with the sensor. A dashed line indicates a signal path from the sensor to a server 1390 and a database 1380. FIG. 13B The diagram shows a network system. A cloud 1309 contains an RF addressable sensor 1310. A mobile device 1340 is shown communicating with the sensor. A dashed line indicates a signal path from the sensor to a server 1390 and a database 1380. The server 1390 is connected to a publicly accessible communications network 1380. Bandy at Figs. 13A, 13B. “Each drug canister 1404 includes a label 1405 having an RF addressable sensor 1410.” Bandy at 21:67-22:1.	

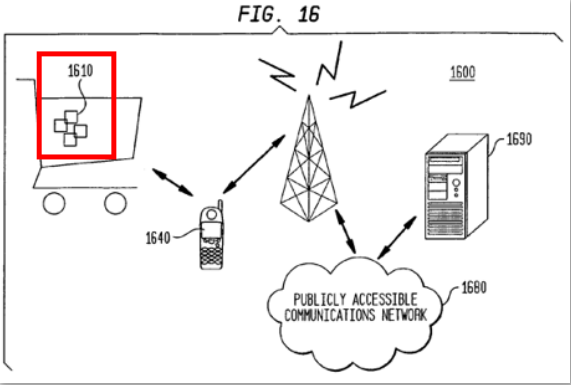
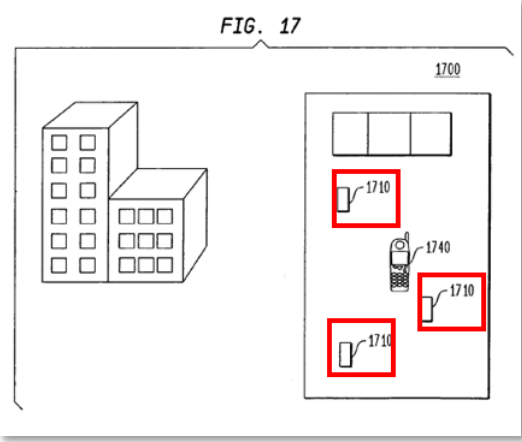
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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	FIG. 14  Bandy at Fig. 14. “Sensor network 1500 can also be used for remote sensing of non-hazardous conditions. In an embodiment, RF addressable sensor 1510 includes a thermistor. RF addressable sensor 1510 can be remotely interrogated by a low cost wireless reader 1540. For example, RF addressable sensor 1510 can be attached to pipes in a home.” Bandy at 22:53-58.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 15  Bandy at Fig. 15. “Shopping network 1600 includes one or more items having RF addressable sensor tags 1610, a wireless sensor reader 1640, a communications network 1680, and a remote network server 1690. . . . Monitoring network 1700 includes one or more RF addressable sensors 1710 and a wireless sensor reader 1740.” Bandy at 23:4-7; 63-64.	

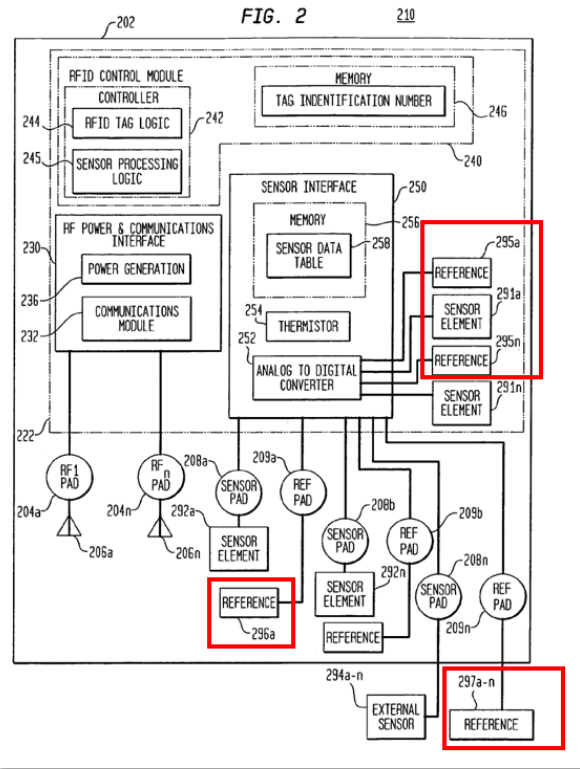
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 16.  Bandy at Fig. 17. 	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
1[b] at least one reference sensor element;	Bandy discloses and/or renders obvious, alone or in combination with other prior art, "at least one reference sensor element," through the various disclosures in the reference. For example: "In an embodiment of the present invention, as shown in FIG. 2, RF addressable sensor 210 optionally includes a plurality of reference elements 295a–295n, 296a–296n, and 297a–297n. Similar to the sensor elements, reference elements may be included in integrated circuit 222, on Substrate 202, external to substrate 202, or in any combination of the above. As shown in FIG. 2, reference elements 295a–295n are included in integrated circuit 222; reference elements 296a–296m are included on substrate 202; and reference elements 297a–297n are external to substrate 202. A sensor element need not have a reference element. If the reference element is located on the substrate (collectively reference elements 296) or external to the substrate (collectively reference elements 297), the reference element will be coupled to one or more of the plurality of reference pads 209a through 209m (collectively reference pads 209)." Bandy at 8:59-9:7.	Subject to Plaintiffs' objections and reservations, admitted.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	 Bandy at Fig. 2.	
1[c] a unique identification ID number;	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “a unique identification ID number,” through the various disclosures in the reference. For example: “In an embodiment, memory 256 stores a sensor data table 258. The sensor data table 258 is configured to store data related to all or a subset of sensor elements supported by the RF addressable sensor 210. For example, the sensor data table may store a sensor	The identified disclosures from Bandy fail to disclose an identification ID number that is unique to a particular instance of a device, as opposed to the identification of a model of the device.

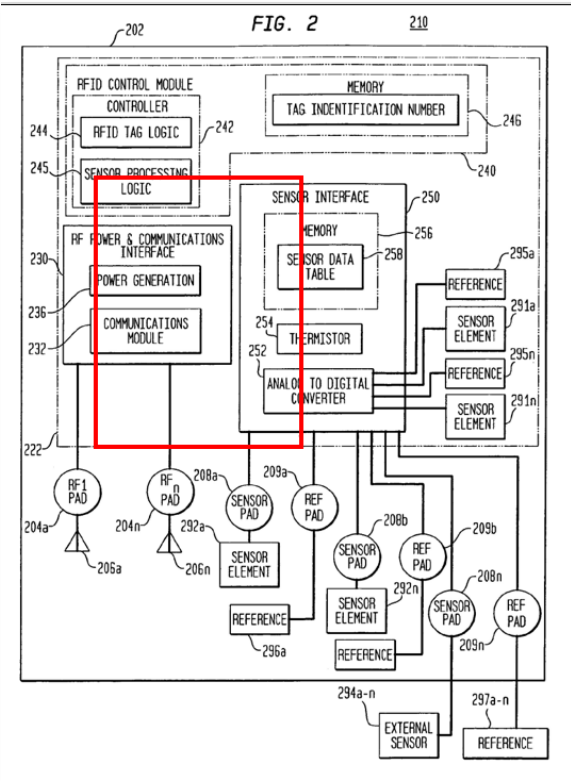
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	element identification number, a preferred read time, spacing interval between reads, and/or sensor element specific data for all or a Subset of sensor elements.” Bandy at 10:6-13. “The information may be stored permanently or temporarily. Memory 246 stores the tag identification number for the RF addressable sensor 210. In an embodiment of the present invention, the tag identification number indicates the type of sensor elements included in the RF addressable sensor 210.” Bandy at 11:24-29.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 2 Bandy at Fig. 2.	
1[d] a sensor interface having an analog to digital converter coupled to	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “a sensor interface having an analog to digital converter coupled to the at least one sensor and reference sensor element,” through the various disclosures in the reference. For example:	Subject to Plaintiffs’ objections and reservations, admitted.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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the at least one sensor and reference sensor element;	“Sensor interface 250 includes a digitizer or an analog to digital converter (ADC) 252. ADC 252 receives analog signals from sensor elements and converts the analog signal into a corresponding digital signal. ADC 252 can be coupled directly to sensor elements implemented in integrated circuit 222 and is coupled to other sensor elements 292 and 294 via sensor pads 208.” Bandy at 9:26-32. 	

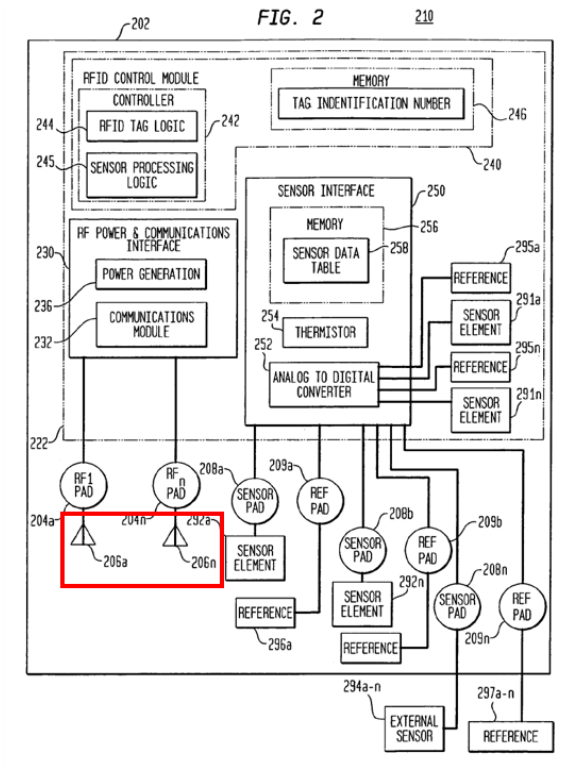
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 2. “In step 730, analog sensor data is obtained by one or more sensor elements 291, 292 and/or 294 and communicated to ADC 252.” Bandy at 16:36-38. FIG. 7A 700A <pre> graph TD 710[RECEIVE RF SIGNALS] --> 720[RECEIVE COMMAND TO OBTAIN SENSOR DATA] 720 --> 730[OBTAIN ANALOG SENSOR DATA] 730 --> 740[CONVERT ANALOG SENSOR DATA TO DIGITAL DATA] 740 --> 780[COMMUNICATE SENSOR DATA] </pre> Bandy at Fig. 7A.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
1[e] at least one antenna;	Bandy discloses and/or renders obvious, alone or in combination with other prior art, "at least one antenna," through the various disclosures in the reference. For example: "Radio frequency addressable sensor 210 includes an integrated circuit 222, a plurality of RF pads 204a through 204n. and a plurality of antennas 206a through 206n." Bandy at 6:55-57. "RF addressable sensor 210 may have one or more antennas configured to communicate with a conventional RFID reader and one or more antennas configured to communicate with wireless sensor reader 140 [of Fig. 1]." Bandy at 10:57-61.	Subject to Plaintiffs' objections and reservations, admitted.

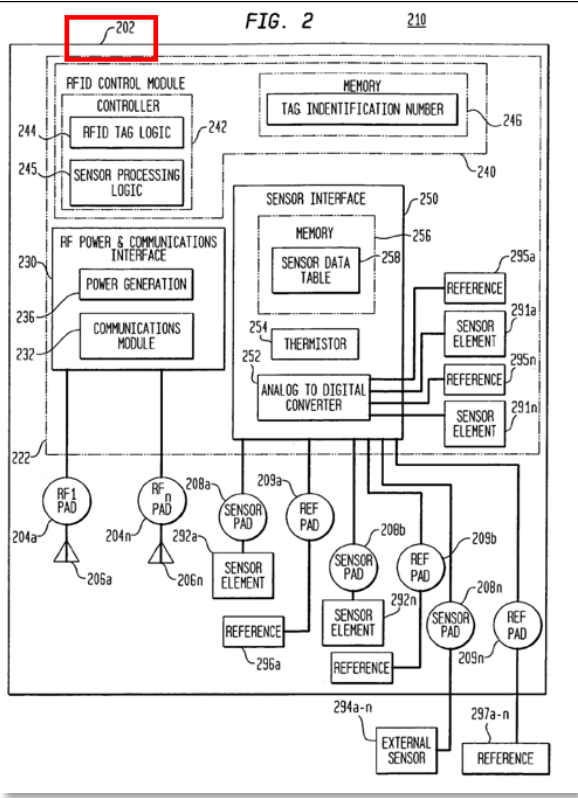
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	 Bandy at Fig. 2.	
1[f] a substrate;	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “a substrate,” through the various disclosures in the reference. For example: “Sensor elements may be included in integrated circuit 222, on substrate 202, external to substrate 202, or in any combination of the above. As shown in FIG. 2, sensor elements 291 a-n are included as a component in integrated circuit 222. Sensor elements 292a-n are included on the substrate 202. Any sensor element that is	Subject to Plaintiffs’ objections and reservations, admitted.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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	compatible with the fabrication of RF addressable sensor 210 can be used. In an embodiment of the invention, sensor elements 292a-n can be thin film sensor elements that are deposited, printed, or directly assembled onto substrate 202. Sensor elements 294a–n are external to the substrate 202. If the sensor element is located on the substrate (collectively sensor 5 elements 292) or external to the substrate (collectively sensor elements 294), the sensor element will be coupled to one or more of the plurality of sensor pads 208a through 208m (collectively sensor pads 208).” Bandy at 6:61-7:10.	

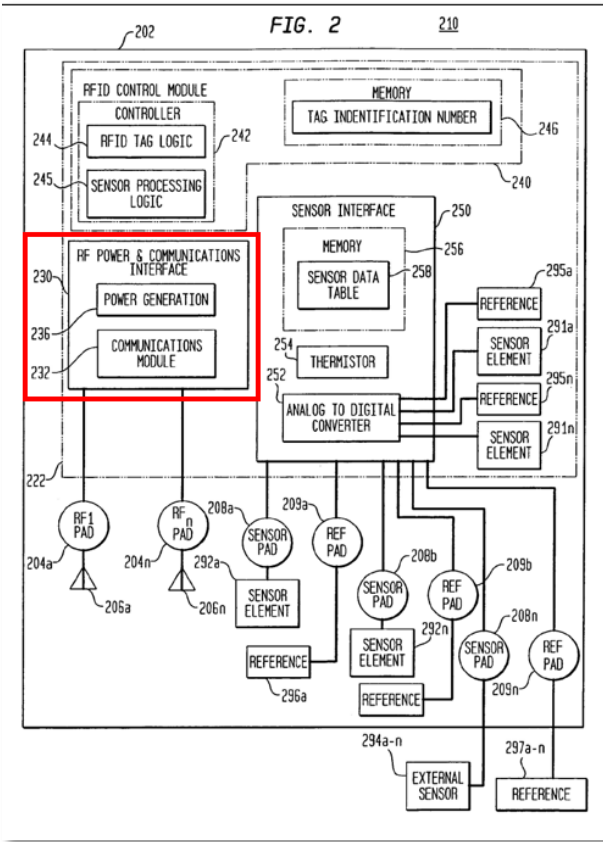
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 2. 	
1[g] an RF power and communication interface coupled to the at least one antenna and sensor interface;	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “a RF power and communication interface coupled to the at least one antenna and sensor interface,” through the various disclosures in the reference. For example: “RF Power and Communications Interface 230 includes a communications module 232 and a power generation module 236.	Subject to Plaintiffs’ objections and reservations, admitted.

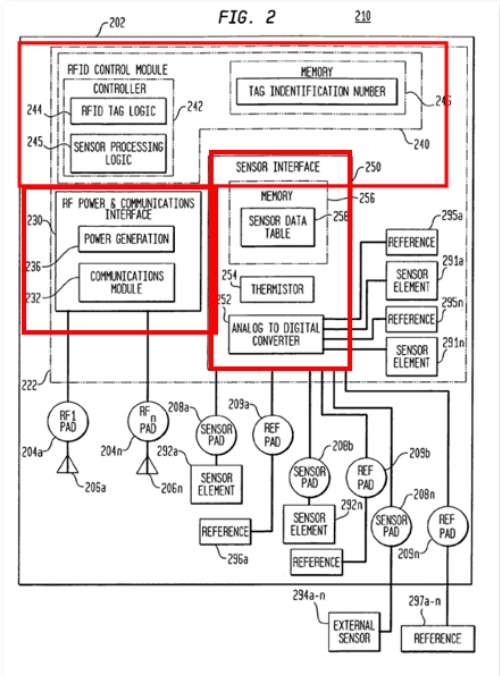
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Communications module 232 is coupled to antennas 206 to provide bi-direction communication with a wireless RF addressable sensor reader.” Bandy at 11:30-34. “The RFID control module 240 controls RF communications between the RF addressable sensor 210 and wireless sensor reader 140. RFID control module includes a controller 242 and a memory 246. Controller 242 includes RFID tag logic 244 to respond to RFID tag interrogation and read communications by the wireless sensor reader 140 or another tag reader and logic to control the operating state of the RFID tag components of the RF addressable sensor.” Bandy at 10:62-11:2. “In an alternate embodiment, RF pads 204 are coupled to both the RF power and communications interface [230] and the sensor interface 250.” Bandy at 8:11-13.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	 Bandy at Fig. 2.	
1[h] a controller coupled to the RF power and communications	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “a controller coupled to the RF power and communications interface and the sensor interface,” through the various disclosures in the reference. For example:	Subject to Plaintiffs’ objections and reservations, admitted.

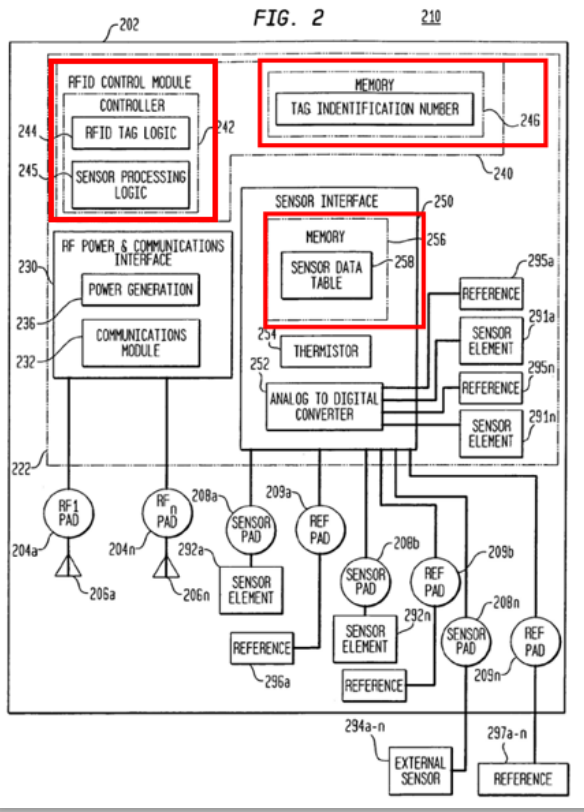
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
interface and the sensor interface; and	“The RFID control module 240 controls RF communications between the RF addressable sensor 210 and wireless sensor reader 140. RFID control module includes a controller 242 and a memory 246. Controller 242 includes RFID tag logic 244 to respond to RFID tag interrogation and read communications by the wireless sensor reader 140 or another tag reader and logic to control the operating state of the RFID tag components of the RF addressable sensor.” Bandy at 10:62-11:2. 	

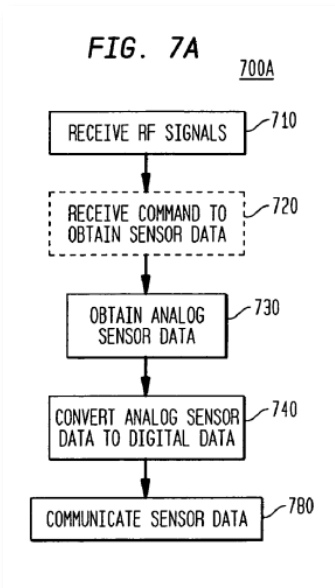
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
1 [i] a memory coupled to the controller and the sensor interface;	Bandy at Fig. 2. Bandy discloses and/or renders obvious, alone or in combination with other prior art, “a memory coupled to the controller and the sensor interface,” through the various disclosures in the reference. For example: “In an embodiment, sensor interface 250 may optionally include a memory 256. Memory 256 stores information used by RF addressable sensor 210 to process sensor data received from sensor elements.” Bandy at 9:63-66. “Memory 246 stores information used by the RF addressable sensor when operating as a RFID tag. Memory 246 may be separate or integrated with memory 256 of the sensor interface. The information may be stored permanently or temporarily. Memory 246 stores the tag identification number for the RF addressable sensor 210. In an embodiment of the present invention, the tag identification number indicates the type of sensor elements included in the RF addressable sensor 210.” Bandy at 9:21-29 [sic].	Subject to Plaintiffs' objections and reservations, admitted.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 2. “In step 780, the RF addressable sensor 110 communicates the digital sensor data to wireless sensor reader 140/340. The details of this communication are dependent upon the protocol used for communication between the wireless sensor reader 140/340 and the RF addressable sensor 110. In an embodiment of the present invention, the protocol used is a binary tree traversal protocol. In this embodiment, the tag identification number signaled by the RF 	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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	addressable sensor 110 may include both the tag identification number stored in memory 246 and the sensor data obtained by the sensor elements.” Bandy at 16:41-51.  Bandy at Fig. 7A.	
1[j] wherein the RF addressable sensor communicates with a remote wireless device, said wireless device having	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “the RF addressable sensor communicates with a remote wireless device, said wireless device having multiple wireless communication means, geolocation means and a unique ID, whereby said wireless device is coupled to at least one communications network linked to t least one remote server,” through the various disclosures in the reference. For example:	Whether “wireless communication means” or “geolocation means” is subject to 35 U.S.C. § 112(6) is a matter of claim construction that has not yet

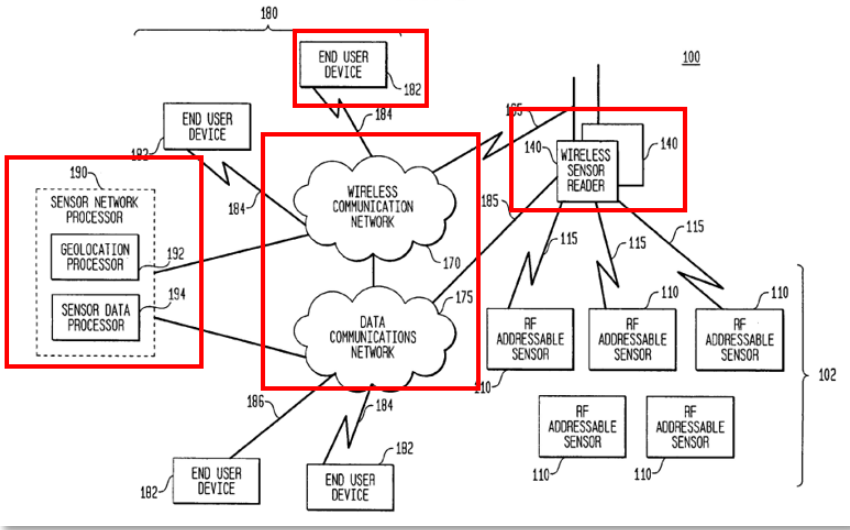
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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multiple wireless communication means, geolocation means and a unique ID, whereby said wireless device is coupled to at least one communications network linked to [a]t least one remote server; and	The term “wireless communication means” is subject to 35 U.S.C. § 112(6). The function of “wireless communication means” is “wireless communication.” The structures disclosed in Bandy that perform that function include: “Wireless sensor reader 140 includes logic to interrogate the population of RF addressable sensors 102 and logic to read sensor data and RFID tag data transmitted by the RF addressable sensors 110. In an embodiment, wireless sensor reader 140 also includes logic to process the received sensor data. Wireless sensor reader 140 can be any wireless device capable of communicating via an air interface protocol with the population of RF addressable sensors 102. In embodiments of the present invention, wireless sensor reader 140 could be a wireless phone, a personal digital assistant (PDA), a computer having wireless communications capabilities, or other type of mobile, handheld, and/or computing device.” Bandy at 5:6-18. “In an embodiment of the present invention, signals 165 are exchanged between the wireless sensor reader 140 and the wireless communication network 170 according to one or more protocols. Signals 165 are typically RF signals. As can be appreciated by a person skilled in the relevant art(s), the communications protocol used between reader 140 and wireless network 170 can be any wireless air interface protocol, such as used in IS-41 or GSM wireless communications networks, for example. In an alternate embodiment, wireless sensor reader 140 can also communicate to the data communications network 175 via interface 185. Interface 185 is a wired interface. For example, when wireless sensor reader 140 is a computer having wireless capabilities, sensor	been decided by the court. Regardless, Bandy does not disclose at least the geolocation means under any reasonable interpretation. The identified disclosures from Bandy fail to disclose this limitation, at least because they fail to disclose a wireless device that includes multiple wireless communications means within the same embodiment. Further, the identified disclosures of Bandy fail to disclose any geolocation means or unique ID as part of any remote wireless device.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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	reader 140 may access the Internet via interface 185 using TCP/IP. As can be appreciated by a person skilled in the relevant art(s), the communications protocol used between reader 140 and data communications network 175 can be any data communications protocol.” Bandy at 5:45-63. “Sensor network processor 190 is coupled to the wireless communications network 170 and/or the data communications network 175.” Bandy at 6:46-49. “In an embodiment, end user devices 182 may be coupled to communications network 180. End user devices 182 include logic for bi-directional communication with the communications network 180. End user devices 182 may be present to initiate a request for sensor data from RF addressable sensors 102 by making the request to readers 140 over network 180. In an embodiment, end user devices 182 also include logic to process received sensor data. For example, a user device 182 may include features of a processor 190, which is further described below. Thus, in an embodiment, a user device 182 may both initiate a request for sensor data and receive and process the resulting sensor data. End user devices 182 can communicate with communications network 180 via a wireless link 184 or a wired link 186. In an alternate embodiment, network 100 also includes a sensor network processor 190.” Bandy at 4:50-65.	

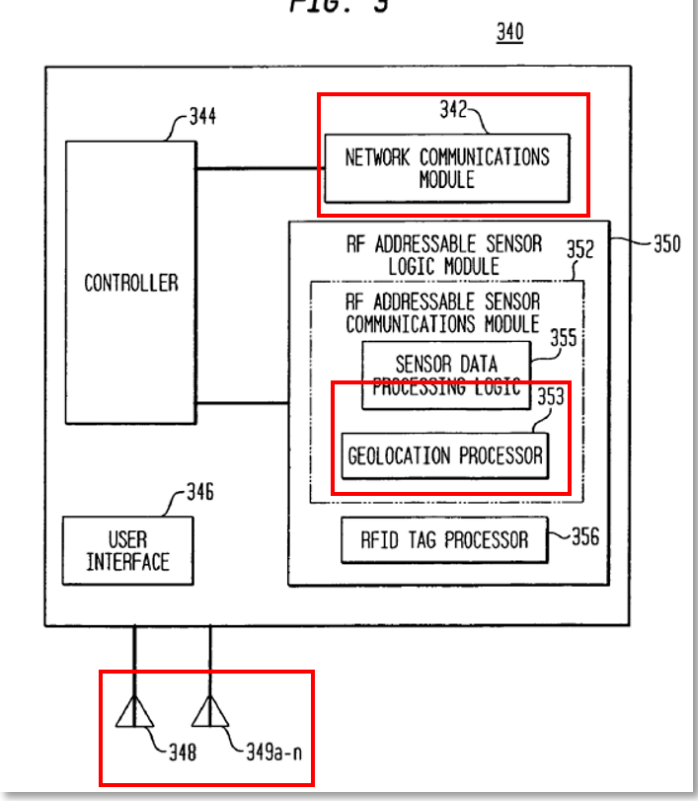
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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	FIG. 1  Bandy at Fig. 1. “Wireless sensor reader 340 includes a network communications module 342, a controller 344, a user interface 346, and an RF addressable sensor logic module 350. Wireless sensor reader 340 also includes one or more antennas. Antenna 348 is configured for communication with wireless network 170. Antenna 348 is included when wireless reader 340 is integrated with a wireless communications device. In an embodiment of the present invention, antenna 348 is also configured for communication with the population of RF addressable sensors. Antennas 349a–n are included when antenna 348 does not support communication with the population of RF addressable sensors. In this embodiment, antennas 349 are configured to communicate with the RF addressable sensors 110. In an alternate embodiment, network antenna 348 can be	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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	removed (e.g., unscrewed) from reader 340 and replaced with an RFID antenna 349 for communication with the population of sensors 102.” Bandy at 11:63-12:16. The term “geolocation means” is subject to 35 U.S.C. § 112(6). The function of “geolocation means” is “determining location of the wireless device.” Bandy discloses structure for performing that function, including: “RF addressable sensor communications module 352 includes sensor data processing logic 355 and geolocation processing logic 353.” Bandy at 13:6-8.	

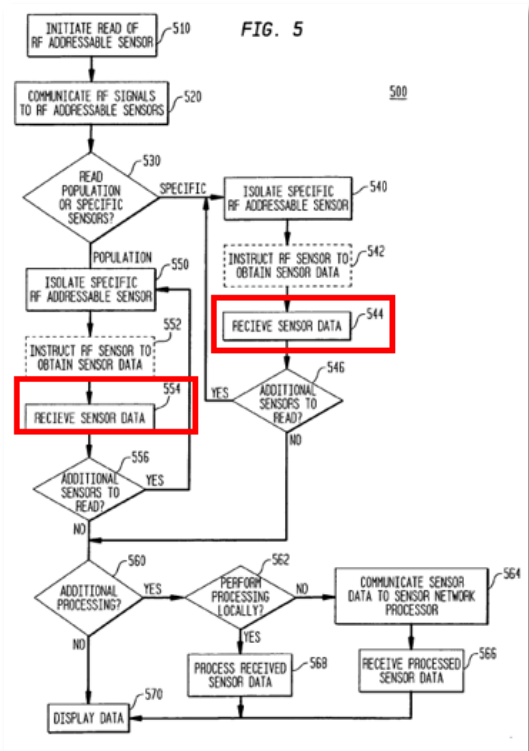
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 3  Bandy at Fig. 3. <i>See also, e.g.,</i> Figs. 8, 10-17 and associated descriptions.	
1[k] wherein the wireless device communicates with the RF addressable sensor interface to	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “the wireless device communicates with the RF addressable sensor interface to obtain the ID and sensor data,” through the various disclosures in the reference. For example:	As discussed above, the identified disclosures of Bandy fail to disclose a radio frequency (RF) addressable diagnostic sensor unit with a

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

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obtain the ID and sensor data;	“Using this approach a universal sensor platform is created based on RFID technology by allowing wireless devices Such as phones to become ‘smart’ sensor reader devices. In an embodiment, a wireless device Such as a phone is modified to include RFID-sensor tag reader functionality, as described herein. In an embodiment, when a sensor 110 having data table 258 is activated by wireless sensor reader 140, the sensor 110 identifies itself (e.g., by providing its identification number) and provides the cell phone reader with the necessary information for analyzing the sensor output. In an embodiment, sensor data table 258 also includes sensor handling information that is communicated to reader 140. For example, if sensor 110 is to detect a specific allergen in food, a complete step-by-step testing protocol can be provided and can be displayed directly on the screen of the phone or reader device 140. In another embodiment, some or all of the necessary information to handle and analyze the sensor is retrieved from processor 190.” Bandy at 10:14-32. “RFID tag processor 356 includes logic to interrogate and read RFID tag information from RF addressable sensors 110. As will be appreciated by a person skilled in the relevant art(s), RFID tag processor 356 may be implemented in hardware, software, firmware, or in combination thereof. RF addressable sensor communications module 352 includes sensor data processing logic 355 and geolocation processing logic 353. Sensor data processing logic 355 is configured to request a read of one or more addressable sensors 110 based on input from a user, after a certain interval of time, and/or upon the occurrence of a pre-defined event. Sensor data processing logic 355 is also configured to process received sensor data.”	unique ID, and therefore this limitation is not met.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at 13:1-13. “In step 544, the wireless sensor reader 140/340 receives the sensor data from the RF addressable sensor 110. Sensor data can include sensor element output data, sensor table data, reference data, and/or other data. . . . In step 554, the wireless sensor reader 140/340 receives the sensor data from the RF addressable sensor 110.” Bandy at 15:23-26, 42-43.  <pre> graph TD 510[INITIATE READ OF RF ADDRESSABLE SENSOR] --> 520[COMMUNICATE RF SIGNALS TO RF ADDRESSABLE SENSORS] 520 --> 530{READ POPULATION OR SPECIFIC SENSORS?} 530 -- POPULATION --> 550[ISOLATE SPECIFIC RF ADDRESSABLE SENSOR] 530 -- SPECIFIC --> 540[ISOLATE SPECIFIC RF ADDRESSABLE SENSOR] 550 --> 552[INSTRUCT RF SENSOR TO OBTAIN SENSOR DATA] 540 --> 542[INSTRUCT RF SENSOR TO OBTAIN SENSOR DATA] 552 --> 554[RECEIVE SENSOR DATA] 542 --> 544[RECEIVE SENSOR DATA] 554 --> 556{ADDITIONAL SENSORS TO READ?} 544 --> 546{ADDITIONAL SENSORS TO READ?} 556 -- YES --> 550 546 -- YES --> 540 556 -- NO --> 560{ADDITIONAL PROCESSING?} 546 -- NO --> 562{PERFORM PROCESSING LOCALLY?} 560 -- YES --> 562 560 -- NO --> 570[DISPLAY DATA] 562 -- YES --> 568[PROCESS RECEIVED SENSOR DATA] 562 -- NO --> 564[COMMUNICATE SENSOR DATA TO SENSOR NETWORK PROCESSOR] 564 --> 566[RECEIVE PROCESSED SENSOR DATA] 568 --> 570 566 --> 570 </pre>	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 5. “In step 780, the RF addressable sensor 110 communicates the digital sensor data to wireless sensor reader 140/340. The details of this communication are dependent upon the protocol used for communication between the wireless sensor reader 140/340 and the RF addressable sensor 110. In an embodiment of the present invention, the protocol used is a binary tree traversal protocol. In this embodiment, the tag identification number signaled by the RF addressable sensor 110 may include both the tag identification number stored in memory 246 and the sensor data obtained by the sensor elements.” Bandy at 16:41-51. <i>See also</i> Fig. 7B, wherein step 780 “is generally the same as step 780 discussed [] in reference to FIG. 7A.” Bandy at 17:7-8.	

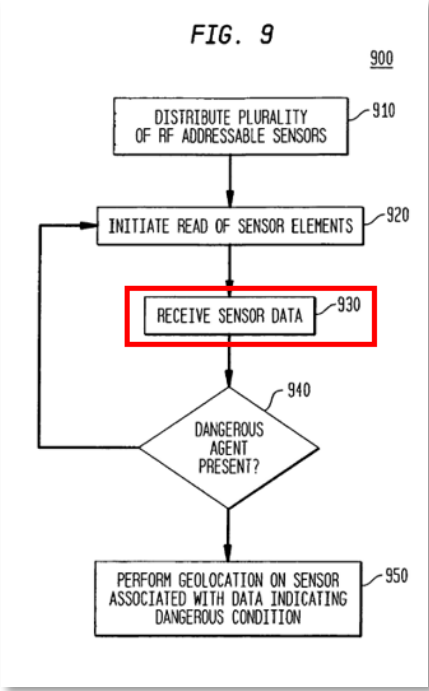
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 7A 700A <pre> graph TD 710[RECEIVE RF SIGNALS] --> 720[RECEIVE COMMAND TO OBTAIN SENSOR DATA] 720 --> 730[OBTAIN ANALOG SENSOR DATA] 730 --> 740[CONVERT ANALOG SENSOR DATA TO DIGITAL DATA] 740 --> 780[COMMUNICATE SENSOR DATA] style 780 stroke:#f00,stroke-width:2px </pre> Bandy at Fig. 7A. “In step 930, the wireless sensor reader 840 receives sensor data from the sensor elements within its read coverage range 845.” Bandy at 17:54-56.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 8.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 9  <pre> graph TD 910[DISTRIBUTE PLURALITY OF RF ADDRESSABLE SENSORS] --> 920[INITIATE READ OF SENSOR ELEMENTS] 920 --> 930[RECEIVE SENSOR DATA] 930 --> 940{DANGEROUS AGENT PRESENT?} 940 -- Yes --> 920 940 -- No --> 950[PERFORM GEOLOCATION ON SENSOR ASSOCIATED WITH DATA INDICATING DANGEROUS CONDITION] </pre> Bandy at Fig. 9. <i>See also, e.g.,</i> Figs. 10-16 and associated descriptions relating at least to the communication of sensor identification information and sensor data. “In an embodiment, end user devices 182 also include logic to process received sensor data. For example, a user device 182 may include features of a processor 190, which is further described below. Thus, in an embodiment, a user device 182 may both initiate a request for sensor data and receive and process the resulting	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	sensor data. End user devices 182 can communicate with communications net work 180 via a wireless link 184 or a wired link 186. In an alternate embodiment, network 100 also includes a sensor network processor 190.” Bandy at 4:56-65. “Sensor data processor 194 includes logic to receive sensor data from one or more RF addressable sensors 110, perform processing on the received data, and communicate information based on the processing to wireless reader 140 or an end user device 182.” Bandy at 6:42-46.	
1 [1] wherein the remote server authenticates said unique sensor ID associated with said unique wireless device ID and communicates to said wireless device processed information relating to said sensor data and software related to the unique sensor ID,	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “the remote server authenticates said unique sensor ID associated with said unique wireless device ID and communicates to said wireless device processed information relating to said sensor data and software related to the unique sensor ID, thereby allowing said wireless device to interpret said sensor anywhere worldwide,” through the various disclosures in the reference. For example: “Sensor network processor 190 receives sensor data over network 180, and processes the data. Furthermore, in an embodiment, processor 190 transmits the processed data back over network 180 to reader 140, for example. Sensor network processor 190 includes a geolocation processor 192 and a sensor data processor 194. . . . Sensor data processor 194 includes logic to receive sensor data from one or more RF addressable sensors 110, perform processing on the received data, and communicate information based on the processing to wireless reader 140 or an end user device 182.	The identified disclosures from Bandy fail to disclose a remote server or any element that authenticates a unique sensor ID associated with a unique wireless device ID. The identified disclosures from Bandy further fail to disclose communication of processed information relating to said sensor data and software related to the unique sensor ID from any remote server.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
thereby allowing said wireless device to interpret said sensor anywhere worldwide.	Sensor network processor 190 is coupled to the wireless communications network 170 and/or the data communications network 175.” Bandy at 6:9-14, 6:42-48. “Using this approach a universal sensor platform is created based on RFID technology by allowing wireless devices such as phones to become ‘smart’ sensor reader devices. In an embodiment, a wireless device such as a phone is modified to include RFID-sensor tag reader functionality, as described herein. In an embodiment, when a sensor 110 having data table 258 is activated by wireless sensor reader 140, the sensor 110 identifies itself (e.g., by providing its identification number) and provides the cell phone reader with the necessary information for analyzing the sensor output. In an embodiment, sensor data table 258 also includes sensor handling information that is communicated to reader 140. For example, if sensor 110 is to detect a specific allergen in food, a complete step-by-step testing protocol can be provided and can be displayed directly on the screen of the phone or reader device 140. In another embodiment, some or all of the necessary information to handle and analyze the sensor is retrieved from processor 190. Software may also be downloaded directly and transparently into the cell phone or reader 140 to ‘train’ the wireless device to recognize and analyze that given type of RFID sensor. This information may be stored permanently or temporarily in wireless device 140. When the necessary processing and analysis information is downloaded from a remote location, only the ID of the RFID-sensor is necessary, providing a highly streamlined solution for universal sensor analyses for wireless devices such as cell phones. In another embodiment, hybrid systems can be provided whereby only a basic sensor analysis protocol can be downloaded into the cellphones and	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	the sensor data processing is done remotely. This situation is particularly applicable where complex multivariate analyses of sensor data are required. Phones may also include in permanent memory a summary table with the necessary IDs to recognize any type of sensor. The above described method allows an ordinary wireless device to instantly become a 'smart' device for any type of sensor." Bandy at 10:14-51. 29. A wireless sensor reader comprising: at least one antenna configured for communication with one or more radio frequency (RF) addressable sensors; a controller; a network communications module coupled to the controller, the network communications module having an interface for coupling to a communications network; a logic module coupled to the controller; and a user interface, wherein the logic module includes a sensor communications module for receiving sensor data from the one or more RF addressable sensors. 39. The wireless sensor reader of claim 29, further comprising means for receiving sensor processing information over the communications network. 40. The wireless sensor reader of claim 39, wherein the sensor processing information includes software for analyzing sensor data. Bandy at Claims 29, 39, and 40.	

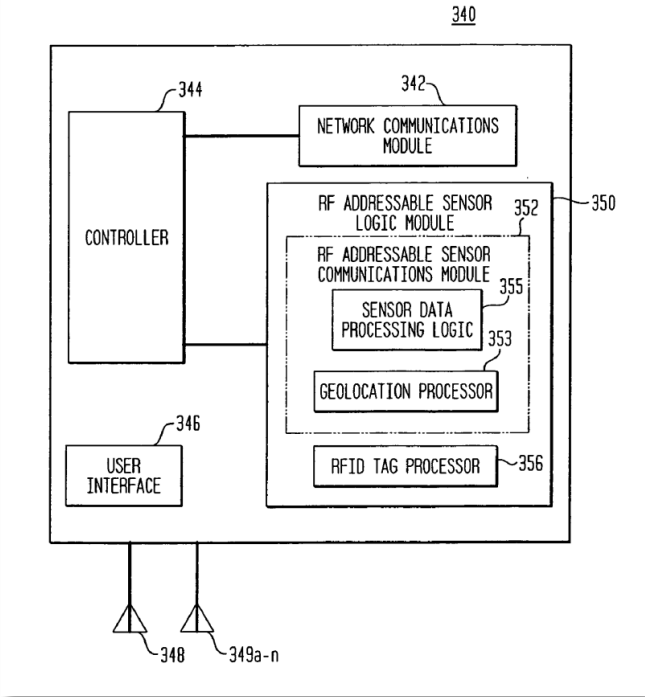
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
CLAIM 2		
2 The system according to claim 1 wherein said wireless device is a cell phone.	Bandy discloses and/or renders obvious, alone or in combination with other prior art, the “wireless device is a cell phone,” through the various disclosures in the reference. For example: In embodiments of the present invention, wireless sensor reader 140 could be a wireless phone, a personal digital assistant (PDA), a computer having wireless communications capabilities, or other type of mobile, handheld, and/or computing device.” Bandy at 5:6-18. “The wireless sensor reader is implemented in a wireless device such as a phone or PDA.” Bandy at 2:28-29. “In an embodiment, a wireless device such as a phone is modified to include RFID-sensor tag reader functionality, as described herein. In an embodiment, when a sensor 110 having data table 258 is activated by wireless sensor reader 140, the sensor 110 identifies itself (e.g., by providing its identification number) and provides the cell phone reader with the necessary information for analyzing the sensor output. . . . if sensor 110 is to detect a specific allergen in food, a complete step-by-step testing protocol can be provided and can be displayed directly on the screen of the phone or reader device 140. In another embodiment, some or all of the necessary information to handle and analyze the sensor is retrieved from processor 190. Software may also be downloaded directly and transparently into the cell phone or reader 140 to ‘train’ the wireless device to recognize and analyze that given type of RFID	Bandy does not anticipate or render obvious claim 2 of the '307 patent, at least because it does not anticipate or render obvious claim 1 of the '307 patent from which claim 2 depends.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	sensor. This information may be stored permanently or temporarily in wireless device 140. When the necessary processing and analysis information is downloaded from a remote location, only the ID of the RFID-sensor is necessary, providing a highly streamlined solution for universal sensor analyses for wireless devices such as cell phones. In another embodiment, hybrid systems can be provided whereby only a basic sensor analysis protocol can be downloaded into the cellphones and the sensor data processing is done remotely. This situation is particularly applicable where complex multivariate analyses of sensor data are required. Phones may also include in permanent memory a summary table with the necessary IDs to recognize any type of sensor. The above described method allows an ordinary wireless device to instantly become a 'smart' device for any type of sensor." Bandy at 10:14-51. "Example embodiments for wireless sensor reader 140 are described in this section. FIG. 3 is a block diagram of a wireless sensor reader 340 according to example embodiments of the present invention." Bandy at 11:63-66. "User interface 346 may include a display and/or keypad for entering data (e.g., the numerical keypad of a wireless phone)." Bandy at 12:23-25.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 3  Bandy at Fig. 3. “FIGS. 4A-C depict block diagrams of example configurations for a wireless sensor reader 440. Each configuration depicts various ways in which RF addressable sensor logic module 350 and RFID antennas 349a-n may be incorporated into a device 430. Device 430 can be an existing wireless device such as a wireless phone or PDA. In an alternate embodiment, device 430 is a device designed specifically to Support communicating with RF addressable sensors	

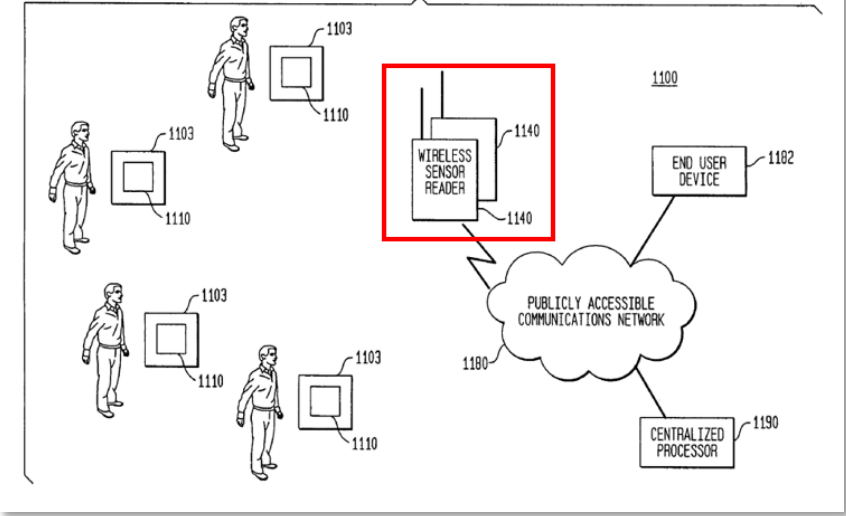
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	110 and with a communications network such as a wireless phone network or the Internet.” Bandy at 13:21-30. “For example, if the wireless sensor reader 140/340 is also a wireless telephone device, the connection signal may be a telephone call by the end user device to the wireless sensor reader.” Bandy at 14:37-40.	

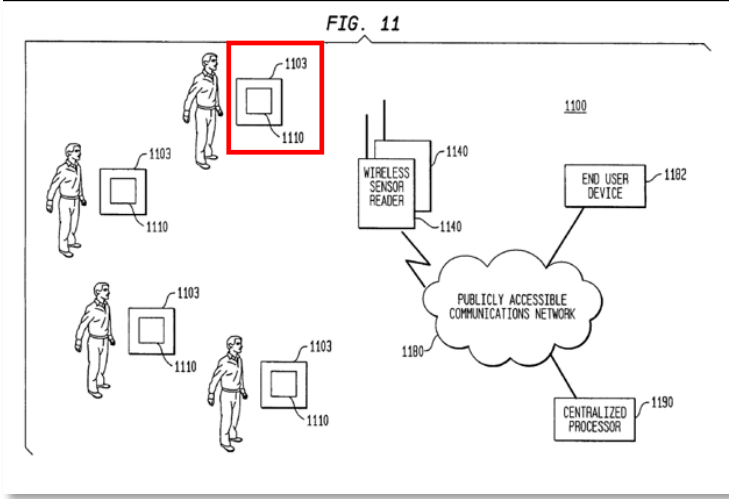
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 4A FIG. 4B FIG. 4C “A read of RF addressable sensor 1110 is then activated remotely. For example, in a residential application, a person (e.g., a parent) may connect to the wireless sensor device (e.g., by establishing a phone connection) via an end user device coupled to communications network 1180 to initiate a read.” Bandy at 20:11-16.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 11  Bandy at Fig. 11.	
CLAIM 3		
3 The system according to claim 1 wherein said sensor unit is integrated into a disposable wireless skin patch for diagnostic applications.	Bandy discloses and/or renders obvious, alone or in combination with other prior art, the “sensor unit is integrated into a disposable wireless skin patch for diagnostic applications,” through the various disclosures in the reference. For example: “The present invention can also be used for remote diagnostics monitoring, according to an example embodiment of the present invention. An example of this use is presented in the block diagram of FIG. 11.”	Bandy does not anticipate or render obvious claim 3 of the '307 patent, at least because it does not anticipate or render obvious claim 1 of the '307 patent from which claim 3 depends. The identified disclosures of Bandy fail to disclose a sensor unit integrated into a

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at 19:56-63. <i>See generally</i> 19:55-67; 20:1-44. “In an embodiment of the present invention, smart card or badge 1103 is affixed to a person (or animal) such that the sensor elements of the RF addressable sensor are proximate to the surface of the skin. RF addressable sensor 1110 may include low power sensors to monitor certain conditions or characteristics such as the individual's vital functions. The Smart card or badge 1103 is placed within the read range of the wireless sensor reader 1140.” Bandy at 20:3-10.  Bandy at Fig. 11.	disposable skin patch. In particular, neither a smart card or badge is a disposable wireless skin patch.
CLAIM 5		

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
5 The system according to claim 1 wherein said sensor is a chemical sensor.	Bandy discloses and/or renders obvious, alone or in combination with other prior art, the “sensor is a chemical sensor,” through the various disclosures in the reference. For example: “Because of this flexible architecture, various types of sensor elements can be implemented in RF addressable sensor 210. An RF addressable sensor 210 may include only one type of sensor element or may include a combination of 35 [sic] different types of sensor elements. Examples of sensor elements include: gas sensor elements that detect the presence of chemicals, such as those associated with drugs or precursor or trace chemicals of explosives Such as Pentaerythritol Tetranitrate (PETN) and Hexahydro-1,3,5-triazine (RDX); temperature sensor elements that generate information indicating ambient temperature; accelerometers that generate information indicating movement or vibration; optical sensor elements that detect the presence (or absence) of light; pressure sensor elements that detect various types of mechanical pressures; tamper sensor elements that detect efforts to destroy or remove the sensor from affixed items; electromagnetic field sensor elements, radiation sensor elements; and biochemical sensor elements. However, this list is not exhaustive. RF addressable sensor 210 may include other types of sensor elements or combinations thereof, as would be apparent to persons skilled in the relevant art(s).” Bandy at 7:32-53. “Sensor elements 292a to 292n may be a number of different sensor types such as a chemical sensors, biological sensors, etc. In an embodiment, sensor element 292.a may include of a plurality of special thin film elements such as polymers. For example, in chemical sensor elements, chemicals present in the air are	Bandy does not anticipate or render obvious claim 5 of the '307 patent, at least because it does not anticipate or render obvious claim 1 of the '307 patent from which claim 5 depends.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	absorbed differently by each of the thin film elements, changing the resistance of each and creating a characteristic electronic signature. Because many types of detectors can be added, this technology can be designed to recognize a wide range of chemicals.” Bandy at 7:57-66. “Any combination of one or more types of sensors can be used in sensor network 800. For example, RF addressable sensors 810a may include sensor elements for detecting chemical agents, sensors 810b include sensor elements for detecting radiological agents, and sensors 810c include sensor elements for detecting biological agents.” Bandy at 17:35-41. “One or more RF addressable sensors 1010 may be affixed to each shipping package 1012 or concealed directly inside the box or crate. The RF addressable sensors 1010 include chemical sensor elements, radiological sensor elements, biological sensor elements or any combination of the above.” Bandy at 18:32-39. “The RF addressable sensor 1110 may have sensor elements for monitoring temperature, chemical composition, biological composition, or a combination of the above for an individual.” Bandy at 19:64-67.	

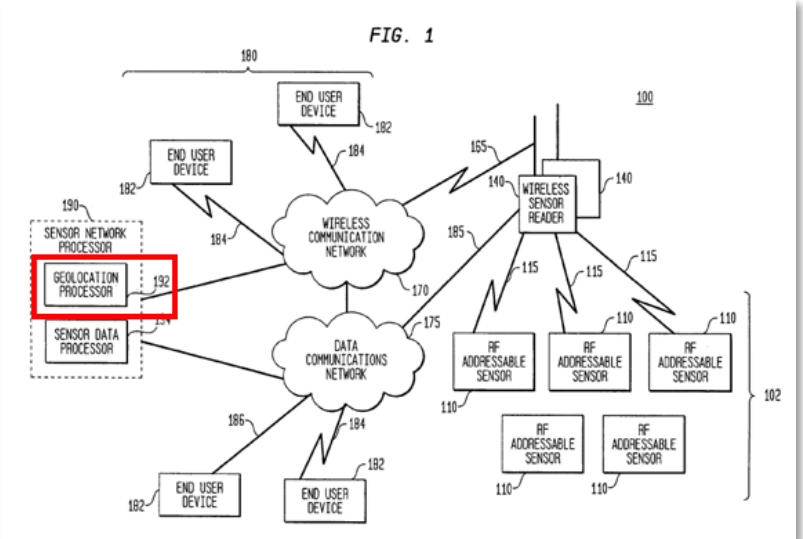
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	“In FIG. 13A, a user affixes, immerses, or inserts an RF addressable sensor 1310 onto or into a food item. The RF addressable sensor 1310 includes sensor elements to detect certain chemical compositions. For example, the user may be allergic to peanuts or other food allergen. The user may select an RF addressable sensor 1310 that is capable of detecting the trace presence of peanuts.” Bandy at 21:19-25. “The attached RF addressable sensor 1410 communicates details related to the drug and prescription Such as type, dosage, chemical composition, etc. to the wireless sensor reader 1440.” Bandy at 22:9-11. “In an embodiment, RF addressable sensors 1710 may also include motion, radiation, and/or chemical sensor elements for comprehensive remote monitoring of buildings, bridges, homes, tunnels, etc.” Bandy at 24:2-6.	
CLAIM 9		
9 The system according to claim 1 wherein the system further includes a GPS means for geolocating said system.	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “GPS means for geolocating said system,” through the various disclosures in the reference. For example: Bandy discloses or renders obvious “wherein said wireless device is a cell phone.” <i>See</i> Claim 2. Gentag admits that “GPS means for geolocating said system” “is a standard feature on cell phones.” IIC, Appendix A at 37. Accordingly, Bandy discloses and/or renders obvious claim 9.	Bandy does not anticipate or render obvious claim 9 of the '307 patent, at least because it does not anticipate or render obvious claim 1 of the '307 patent from which claim 9 depends.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	In addition, claim 9 is anticipated and/or rendered obvious as described below. The term "GPS means for geolocating said system" is subject to 35 U.S.C. § 112(6). The function of "GPS means for geolocating said system" is "geolocating by GPS." The structures disclosed in Bandy that perform that function include: "Sensor network processor 190 includes a geolocation processor 192 and a sensor data processor 194." Bandy at 6:12-14. "Geolocation processor 192 includes logic to receive data from one or more RF addressable sensors 110 and to perform GPS and/or non-GPS geolocation of the RF addressable sensors 110 based on the received data and/or signals. In GPS based geolocation, location is determined using signals provided to wireless sensor readers 140 via geo-stationary satellites. A limitation of GPS based geolocation is that signals are not available if the device is shielded (e.g., underground, in a building, etc.). In non-GPS based geolocation, location is determined by triangulation based on transmission systems as reference points (e.g., mobile base stations) and time to signal calculations. In this manner, cell phone towers can geolocate wireless sensor readers 140 through calculations done by processor 190. Similarly, wireless sensors readers 140 may be used as a basis to identify the precise location of individual sensors 110 by triangulation and synchronization of internal clocks. Since either the location of cellphone towers and/or wireless sensor readers is usually known and can include GPS coordinates,	Whether "GPS means for geolocating said system" is subject to 35 U.S.C. § 112(6) is a matter of claim construction that has not yet been decided by the court. Further, Gentag has not admitted that "GPS means for geolocating said system" was a standard feature on cell phones before the priority date of the '307 patent. The cited statement is referring to more modern cell phones, such as those used in the FreeStyle Libre system.

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	precise geolocation of sensors can be achieved using either GPS, non-GPS or hybrid systems.” Bandy at 6:16-36.  Bandy at Fig. 1. “RF addressable sensor communications module 352 includes sensor data processing logic 355 and geolocation processing logic 353. Sensor data processing logic 355 is configured to request a read of one or more addressable sensors 110 based on input from a user, after a certain interval of time, and/or upon the occurrence of a pre-defined event. Sensor data processing logic 355 is also configured to process received sensor data. Geolocation processor 353 is optional, and when present, includes algorithms to perform GPS	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	based geolocation and/or non-GPS based geolocation. In an embodiment, sensor reader 340 serves as a geolocation beacon for RFID-sensors in Synchrony with other readers. In an embodiment, the antenna serves as a means for directional geolocation of RFID sensors.” Bandy at 13:6-20. FIG. 3 <pre>graph TD subgraph 340 [340] 344[CONTROLLER] --- 342[NETWORK COMMUNICATIONS MODULE] 344 --- 346[USER INTERFACE] subgraph 352 [RF ADDRESSABLE SENSOR LOGIC MODULE] 355[RF ADDRESSABLE SENSOR COMMUNICATIONS MODULE] 353[SENSOR DATA PROCESSING LOGIC] 356[GEOLOCATION PROCESSOR] end 352 --- 356[RFID TAG PROCESSOR] end 348[348] 349a_n[349a-n]</pre>	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 3. “In step 564, the wireless sensor reader 140/340 communicates the received sensor data to sensor network processor 190 over communications network 180. In an embodiment, the wireless sensor reader may also communicate additional data to the sensor network processor 190 such as data needed to perform geolocation. Upon receipt, sensor network processor 190 may perform additional processing on the data and/or perform geolocation to determine the location of the RF addressable sensor 110 that generated the sensor data.” Bandy at 15:65-67; 16:1-5.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 5 <pre> graph TD 510[INITIATE READ OF RF ADDRESSABLE SENSOR] --> 520[COMMUNICATE RF SIGNALS TO RF ADDRESSABLE SENSORS] 520 --> 530{READ POPULATION OR SPECIFIC SENSORS?} 530 -- POPULATION --> 550[ISOLATE SPECIFIC RF ADDRESSABLE SENSOR] 530 -- SPECIFIC --> 540[ISOLATE SPECIFIC RF ADDRESSABLE SENSOR] 550 --> 552[INSTRUCT RF SENSOR TO OBTAIN SENSOR DATA] 540 --> 542[INSTRUCT RF SENSOR TO OBTAIN SENSOR DATA] 552 --> 554[RECEIVE SENSOR DATA] 542 --> 544[RECEIVE SENSOR DATA] 554 --> 556{ADDITIONAL SENSORS TO READ?} 544 --> 546{ADDITIONAL SENSORS TO READ?} 556 -- YES --> 550 546 -- YES --> 540 556 -- NO --> 560{ADDITIONAL PROCESSING?} 546 -- NO --> 560 560 -- YES --> 562{PERFORM PROCESSING LOCALLY?} 560 -- NO --> 570[DISPLAY DATA] 562 -- YES --> 568[PROCESS RECEIVED SENSOR DATA] 562 -- NO --> 564[COMMUNICATE SENSOR DATA TO SENSOR NETWORK PROCESSOR] 568 --> 566[RECEIVE PROCESSED SENSOR DATA] 564 --> 566 566 --> 570 </pre> Bandy at Fig. 5. “In step 950, the wireless sensor reader 840 performs geolocation processing to determine the exact location of the RF addressable	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	sensor associated with data indicating the presence of a dangerous agent. The geolocation processing could use GPS-based or non-GPS based techniques." Bandy at 17:63-67. <i>See also, e.g.,</i> Fig. 8, and 18:1-20. FIG. 9 <pre> graph TD 910[DISTRIBUTE PLURALITY OF RF ADDRESSABLE SENSORS] --> 920[INITIATE READ OF SENSOR ELEMENTS] 920 --> 930[RECEIVE SENSOR DATA] 930 --> 940{DANGEROUS AGENT PRESENT?} 940 -- Yes --> 950[PERFORM GEOLOCATION ON SENSOR ASSOCIATED WITH DATA INDICATING DANGEROUS CONDITION] 940 -- No --> 920 style 950 stroke:#f00,stroke-width:2px </pre> Bandy at Fig. 9.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	“Sensors 1110 communicate data to reader 1140. This embodiment can further include geolocation processing in the reader or network to determine the location of the smart card or badge 1103 and/or reader 1140.” Bandy at 20:3-16. [sic] FIG. 11 Bandy at Fig. 11. “37. The wireless sensor reader of claim 36, wherein the logic module further comprises a geolocation processor.”	

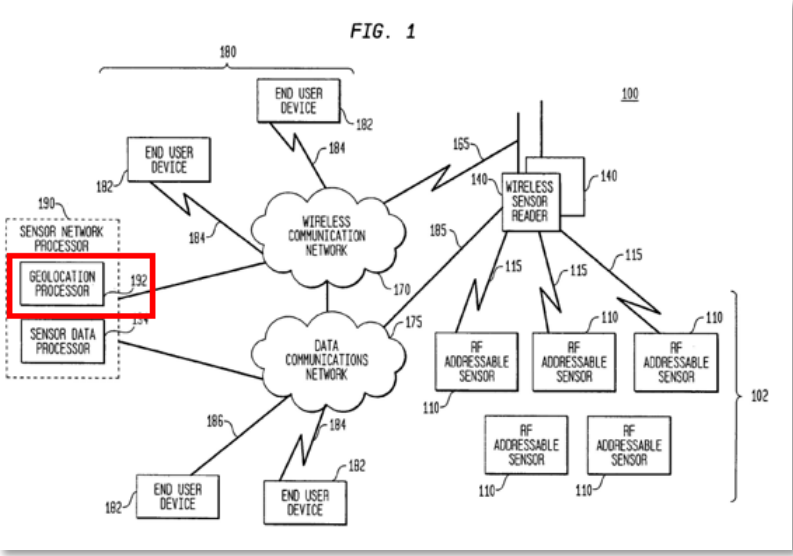
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	38. The wireless sensor reader of claim 37, wherein the geolocation processor comprises logic to perform at least one of GPS-based geolocation and non GPS-based geolocation." Bandy at Claims 37 and 38. "63. A RF addressable sensor network, comprising: one or more RF addressable sensors; one or more wireless sensor readers coupled to a communications network; and one or more end user devices coupled to the communications network; wherein the one or more wireless sensor readers communicate with the one or more RF addressable sensors to obtain sensor data for transmission over the communications network, and a sensor network processor coupled to the communications network, wherein the sensor network processor comprises a geolocation processor and a sensor data processor." Bandy at Claim 63. "64. The RF addressable sensor network of claim 63, wherein the geolocation processor includes logic to perform GPS based geolocation and non-GPS based geolocation." Bandy at Claim 64.	
CLAIM 10		

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
10 The system according to claim 1 further including a non-GPS geolocation means for geolocating said system.	Bandy discloses and/or renders obvious, alone or in combination with other prior art, “non-GPS geolocation means for geolocating said system,” through the various disclosures in the reference. For example: Bandy discloses or renders obvious “wherein said wireless device is a cell phone.” <i>See</i> Claim 2. Gentag admits that “Any device that emits a wireless signal can be geolocated by a non-GPS geolocation means. For example, cell phones include triangulation technology (in addition to GPS) as a standard feature.” IIC, Appendix A at 37. Accordingly, Bandy disclose and/or renders obvious claim 10. In addition, claim 10 is anticipated and/or or rendered obvious as described below. The term “non-GPS geolocation means for geolocating said system” is subject to 35 U.S.C. § 112(6). The function of “non-GPS geolocation means for geolocating said system” is “geolocating without GPS.” The structures disclosed in Bandy that perform that function include: “Sensor network processor 190 includes a geolocation processor 192 and a sensor data processor 194.” Bandy at 6:12-14. “Geolocation processor 192 includes logic to receive data from one or more RF addressable sensors 110 and to perform GPS and/or non-GPS geolocation of the RF addressable sensors 110 based on the received data and/or signals. In GPS based geolocation, location is determined using signals provided to wireless sensor readers 140 via geo-stationary satellites. A limitation of GPS based geolocation is that signals are not available if the device is shielded (e.g., underground, in a building, etc.). In non-GPS based	Bandy does not anticipate or render obvious claim 10 of the '307 patent, at least because it does not anticipate or render obvious claim 1 of the '307 patent from which claim 10 depends. Whether “non-GPS geolocation means for geolocating said system” is subject to 35 U.S.C. § 112(6) is a matter of claim construction that has not yet been decided by the court. Further, Gentag has not admitted that cell phones included triangulation technology as a standard feature on cell phones before the priority date of the '307 patent. The cited statement is referring to more modern cell phones, such as those used in the FreeStyle Libre system.

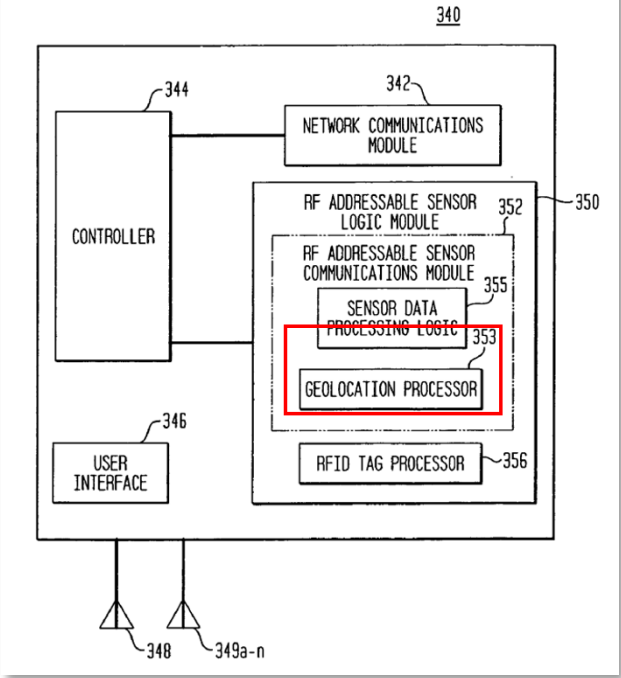
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	geolocation, location is determined by triangulation based on transmission systems as reference points (e.g., mobile base stations) and time to signal calculations. In this manner, cell phone towers can geolocate wireless sensor readers 140 through calculations done by processor 190. Similarly, wireless sensors readers 140 may be used as a basis to identify the precise location of individual sensors 110 by triangulation and synchronization of internal clocks. Since either the location of cellphone towers and/or wireless sensor readers is usually known and can include GPS coordinates, precise geolocation of sensors can be achieved using either GPS, non-GPS or hybrid systems.” Bandy at 6:16-36. 	

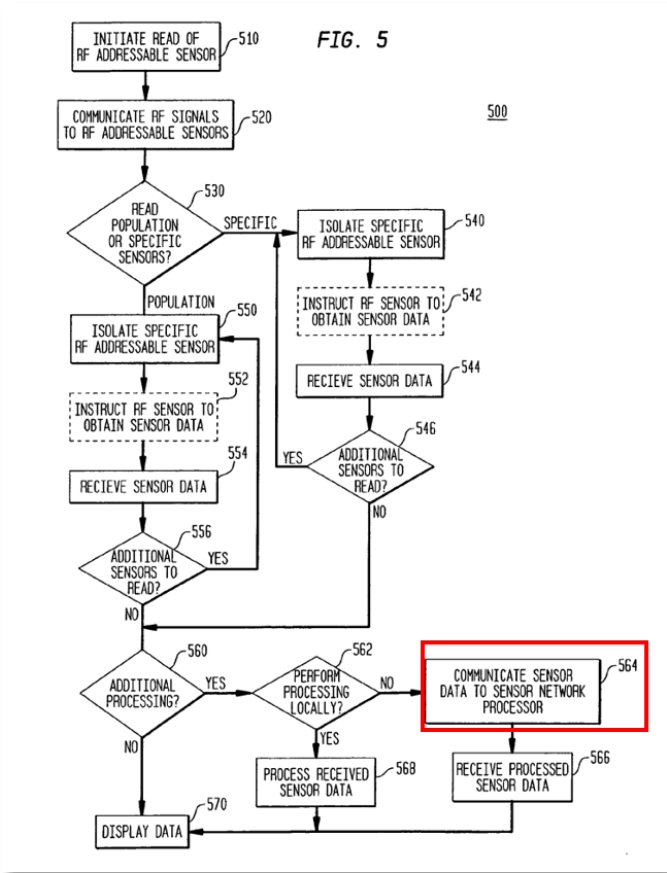
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 1. “RF addressable sensor communications module 352 includes sensor data processing logic 355 and geolocation processing logic 353. Sensor data processing logic 355 is configured to request a read of one or more addressable sensors 110 based on input from a user, after a certain interval of time, and/or upon the occurrence of a pre-defined event. Sensor data processing logic 355 is also configured to process received sensor data. Geolocation processor 353 is optional, and when present, includes algorithms to perform GPS based geolocation and/or non-GPS based geolocation. In an embodiment, sensor reader 340 serves as a geolocation beacon for RFID-sensors in Synchrony with other readers. In an embodiment, the antenna serves as a means for directional geolocation of RFID sensors.” Bandy at 13:6-20.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	FIG. 3  Bandy at Fig. 3. “In step 564, the wireless sensor reader 140/340 communicates the received sensor data to sensor network processor 190 over communications network 180. In an embodiment, the wireless sensor reader may also communicate additional data to the sensor network processor 190 such as data needed to perform geolocation. Upon receipt, sensor network processor 190 may perform additional processing on the data and/or perform geolocation to determine	

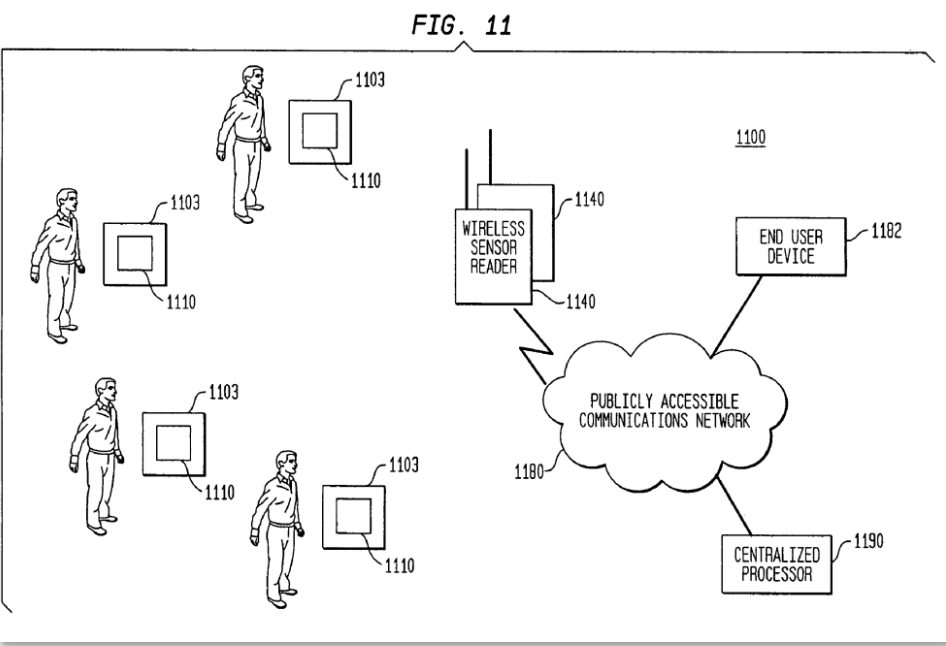
Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	the location of the RF addressable sensor 110 that generated the sensor data.” Bandy at 15:65-67; 16:1-5.  Bandy at Fig. 5.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	“In step 950, the wireless sensor reader 840 performs geolocation processing to determine the exact location of the RF addressable sensor associated with data indicating the presence of a dangerous agent. The geolocation processing could use GPS-based or non-GPS based techniques.” Bandy at 17:63-67. <i>See also, e.g.,</i> Fig. 8, and 18:1-20. FIG. 9 <pre> graph TD 910[DISTRIBUTE PLURALITY OF RF ADDRESSABLE SENSORS] --> 920[INITIATE READ OF SENSOR ELEMENTS] 920 --> 930[RECEIVE SENSOR DATA] 930 --> 940{DANGEROUS AGENT PRESENT?} 940 -- NO --> 920 940 -- YES --> 950[PERFORM GEOLOCATION ON SENSOR ASSOCIATED WITH DATA INDICATING DANGEROUS CONDITION] </pre>	

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Claim	Bandy's Exemplary Disclosures	Gentag's Response
	Bandy at Fig. 9. “Sensors 1110 communicate data to reader 1140. This embodiment can further include geolocation processing in the reader or network to determine the location of the smart card or badge 1103 and/or reader 1140.” Bandy at 20:3-16.  Bandy at Fig. 11.	

Gentag's Response to Abbott's Initial Invalidity Contentions - Response to Exhibit 1

Claim	Bandy's Exemplary Disclosures	Gentag's Response
	“37. The wireless sensor reader of claim 36, wherein the logic module further comprises a geolocation processor. 38. The wireless sensor reader of claim 37, wherein the geolocation processor comprises logic to perform at least one of GPS-based geolocation and non GPS-based geolocation.” Bandy at Claims 37 and 38. “63. A RF addressable sensor network, comprising: one or more RF addressable sensors; one or more wireless sensor readers coupled to a communications network; and one or more end user devices coupled to the communications network; wherein the one or more wireless sensor readers communicate with the one or more RF addressable sensors to obtain sensor data for transmission over the communications network, and a sensor network processor coupled to the communications network, wherein the sensor network processor comprises a geolocation processor and a sensor data processor.” Bandy at Claim 63. “64. The RF addressable sensor network of claim 63, wherein the geolocation processor includes logic to perform GPS based geolocation and non-GPS based geolocation.” Bandy at Claim 64.	