

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

ABBOTT LABORATORIES AND
ABBOTT DIABETES CARE INC.,

Petitioner,

v.

ALTIVERA LLC,

Patent Owner.

Case No. IPR2024-00425

Patent No. 7,969,307 B2

DECLARATION OF WILLIAM BANDY, PHD

I, William Bandy, declare as follows:

1. I am submitting this declaration to provide information about U.S. Patent No. 7,148,803 (“the ’803 Patent”) (Ex. 1005), on which I am listed as a named inventor. I have been asked by counsel for the Patent Owner to describe the extent of my contribution to various portions of the ’803 Patent.

2. I have personal knowledge of the facts set forth in this Declaration. All statements made in this Declaration are true to the best of my knowledge. If called on to testify, I could and would testify competently as to the topics addressed in this declaration. I am not being compensated for my participation in this case and do not have any financial interest in the outcome of this matter.

3. I received a PhD in Physics from the University of Maryland in 1974. I worked as a physicist for the National Security Agency for over 30 years. In 1999, I co-founded Matrics with Michael Arneson. Matrics provided UHF RFID systems to the retail industry. In 2004, Matrics was purchased by Symbol Technologies. I am currently Chief Scientist of Matrics2, a company I co-founded in 2016.

4. By the early 2000s, I had developed particular expertise in RFID reader performance technology. At Matrics, I worked on designing features of RFID systems that would allow for faster reading of large volumes of RFID tags and for reading of RFID tags from increased distances.

5. On or about May 5, 2003, Professor John Melngailis of the University of Maryland introduced John Peeters to Michael Arneson and me. At that meeting, we discussed Matrics' RFID chip technology and Dr. Peeters explained his background on sensors, health, threat detection, and geolocation.

6. At the meeting, Dr. Peeters came up with the idea of incorporating an NFC reader into cell phones and then allowing these modified cell phones to read RFID sensors, creating NFC cell phone sensor networks. In light of Matrics' expertise in the nuances of RFID systems, we discussed working together to develop the technology for applications such as threat sensors and food safety. Dr. Peeters prepared the draft of the patent application, which I reviewed.

7. Shortly after the meeting in May 2003, Dr. Peeters came up with the idea that a wireless RFID sensor could be incorporated into a disposable diagnostic skin patch, which people could use to self-test themselves (e.g., they could use a disposable wireless glucose sensor read by a cell phone that would become a glucometer). That invention was part of a separate patent invented solely by Dr. Peeters, U.S. Patent No. 7,969,307 ("307 Patent") (Ex. 1001). I did not contribute any details recited in the claims of the '307 Patent.

8. My contributions to the '803 Patent related to specific, nuanced features for enhancing RFID systems, namely initialization of an RFID tag (as recited in

claims 65, 81, and 83 of the '803 Patent, as originally issued) and a method for rapidly reading multiple tags.

9. Dr. Peeters contributed the remainder of the '803 Patent, including integration of RFID into cell phones, diagnostic applications, software download for analyzing sensor data, sensor networks based on cell phones and RFID sensors, specific types of sensors (MEMs sensors/microcantilevers, food sensors, pharma sensors, threat detection sensors, and antenna sensors), the use of reference sensors, on-person sensor cards or badges, wireless geolocation technologies, container monitoring and security, and smart shopping. I did not conceive the disclosures of the '803 Patent relating to these features.

10. I understand from Gentag's counsel that Petitioner is citing passages and figures from the '803 Patent as disclosing the limitations of Claims 1, 2, 3, 5, 9, and 10 of Dr. Peeters' '307 Patent. Independent claim 1 of the '307 Patent recites:

1. A radio frequency (RF) addressable diagnostic sensor unit comprising:
 - at least one sensor element;
 - at least one reference sensor element;
 - a unique identification ID number;
 - a sensor interface having an analog to digital converter coupled to the at least one sensor and reference sensor element;
 - at least one antenna;
 - a substrate;
 - an RF power and communication interface coupled to the at least one antenna and sensor interface;

a controller coupled to the RF power and communications interface and the sensor interface; and

a memory coupled to the controller and the sensor interface;

wherein 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 at least one remote server; and

wherein the wireless device communicates with the RF addressable sensor interface to obtain the ID and sensor data;

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, thereby allowing said wireless device to interpret said sensor anywhere worldwide.

The dependent claims add that “said wireless device is a cell phone” (claim 2); “said sensor unit is integrated into a disposable wireless skin patch for diagnostic applications” (claim 3); “said sensor is a chemical sensor” (claim 5); “a GPS means for geolocating said system” (claim 9); and “a non-GPS geolocation means for geolocating said system” (claim 10).

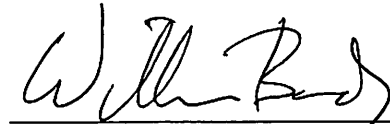
11. My contributions to the '803 Patent did not relate to the sensor features recited in claims 1, 2, 3, 5, 9, and 10 of the '307 Patent. Thus, to the extent that any of these features were disclosed in the '803 Patent, they were contributed by Dr. Peeters.

12. I declare under penalty of perjury under the laws of the United States of America that all statements made herein of my own knowledge are true, and that all statements made on information and belief are believed to be true. I further

declare that these statements are made with the full knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed on

3/12/24



William Bandy, PhD