UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DEXCOM, INC.
Petitioner,

v.

AGAMATRIX, INC.
Patent Owner

IPR2016-01679
Patent 7,146,202

Before Steven M. Amitrani, *Trial Paralegal*

DECLARATION OF MATTHEW J. SCHURMAN, Ph.D.

Table of Contents

Page

I. ASSIGNMENT AND OVERVIEW

1. I have been retained by Patent Owner AgaMatrix, Inc. ("AgaMatrix"), through its counsel, to review and provide opinions in connection with U.S. Patent No. 7,146,202 ("the '202 patent") belonging to AgaMatrix, and certain prior art references relied upon by Petitioner Dexcom, Inc., including a translation of Japanese Application No. S57-110236 to Hagiwara ("Hagiwara"), U.S. Patent No. 2,719,797 to Rosenblatt ("Rosenblatt") and U.S. Patent No. 6,275,717 to Gross ("Gross").

II. SUMMARY OF OPINIONS

2. As explained more fully in this declaration, in my expert opinion:

a. Hagiwara does not disclose a structurally flexible core.

b. Gross discloses a stainless steel sensor core that is rigid and not structurally flexible.

c. Rosenblatt discloses a process of platinizing tantalum that forms a three layer composite – (1) platinum on the outer surface; (2) a platinum-tantalum alloy intermediate layer that is not electrochemically active; and (3) a tantalum core. In contrast, the '202 patent discloses a two layer composite with a structurally flexible core, such as tantalum, covered by an electrochemically active metal, such as platinum.

III. QUALIFICATIONS AND EXPERIENCE

3. I am a consultant in the areas of material sciences and medical devices. I hold a Bachelor of Arts degree in Physics from Franklin and Marshall College and a Ph.D. in materials science and engineering from Rutgers University.

4. I have over 20 years of experience in material sciences, and, in particular, metals.

5. For the past 7 years, I have consulted on materials selection and performance in the fields of medical devices, particularly in the field of glucose monitoring and insulin delivery, semiconductors, and alternative energy. Much of my medical device work has centered around the interaction of materials and living tissue as this relates to device performance.

6. I am currently the managing partner of a specialty engineering firm that develops products, performs contract research, and consults on science and engineering issues in the medical device, semiconductor, space power, and alternative energy industries. Much of our work includes the testing, analysis, and selection of materials such as metals for various applications.

7. Prior to being a consultant, I was a founder of GlucoLight Corporation, a non-invasive glucose sensor company. During my time at GlucoLight, I developed several generations of Optical Coherence Tomography based glucose sensors and systems. I co-designed over 12 clinical trials with over

500 subjects for system validation and am named as an inventor on 15 U.S. patents relating to glucose sensors.

8. For over a decade I worked in the compound semiconductor field where I developed micro- and nano-scaled semiconductor and metal structures and alloys for high performance optical and electrical devices.

9. In the past four years, I have not testified as an expert witness in any lawsuit.

10. The full details of my education, employment, and consulting history are in my *curriculum vitae*, attached hereto as Appendix A.

IV. INFORMATION CONSIDERED IN FORMING OPINIONS

11. In addition to my considerable experience in material sciences, I considered the following documents in forming the expert opinions expressed in this declaration:

- Ex. 1001 – the ’202 patent;
- Ex. 1003 – Gross;
- Ex. 1005 – Rosenblatt;
- Ex. 1006 – Declaration of David Vachon.
- Ex. 1007 – Hagiwara;

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.