

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNIVERSITY OF WATERLOO,

Assignee of U.S. Patent Application No. 15/513,914

Petitioner,

v.

SALIENT ENERGY INC.

Assignee of U.S. Patent No. 9,780,412

Respondent.

Case No.: _____

**DECLARATION OF LINDA F. NAZAR IN SUPPORT OF PETITION TO
INSTITUTE DERIVATION PROCEEDING PURSUANT TO 35 U.S.C. § 135**

Declaration of Linda F. Nazar

I, Linda F. Nazar, make the following declaration upon my knowledge and belief and hereby declare as follows:

I. PROFESSIONAL BACKGROUND

1. I am a citizen of Canada and reside at Waterloo, Ontario, Canada.
2. I am currently a Professor and faculty member of the Department of Chemistry at the University of Waterloo (“UW”). I am also cross-appointed to the Department of Chemical Engineering and Physics and have held a Tier 1 Canada Research Chair in Solid State Materials since 2004.
3. For the past 20 years, my research has been focused on developing new materials for energy storage (i.e., batteries). I have published or have in press over 230 papers, review articles, and patents (or patent applications) in this field, which have been cited over 27,000 times.
4. I received an Honours Bachelor of Science in Chemistry from the University of British Columbia in 1978. After this, I completed my PhD in Chemistry at the University of Toronto in 1984.
5. Below I discuss my employment activities at UW in the timeframe of 2014 through 2016. During that time, my title was Professor in the Department of

Declaration of Linda F. Nazar

Chemistry. I was also the Director of the Nazar Group Laboratory (the “Nazar Lab”) at UW.

6. My responsibilities as Director of the Nazar Lab included developing, directing, and overseeing all research projects taking place in the laboratory. The Nazar Lab’s research focus encompassed complex material synthesis, physical, and structural characterization, electrochemical testing, and electrode design for various energy storage devices.
7. In connection with those responsibilities, I was responsible for supervising Postdoctoral Research Associates, Graduate Students, and Undergraduate Students (collectively “Nazar Lab Members”). I directed and was extensively involved in all projects taken on by Nazar Lab Members.
8. One such project related to Zn-Ion Battery Technologies. By way of example and more particularly, the project resulted in the development of a low-cost, rechargeable Zn-ion battery based on a cathode comprised of nanostructured pillared hydrated vanadium oxides as robust materials for high rate and long term reversible Zn^{2+} ion intercalation storage at the cathode, that are coupled with a metallic Zn anode, and an aqueous electrolyte (the “Zn-Ion Battery”).

Declaration of Linda F. Nazar

9. In connection with the Zn-Ion Battery Project, I was extensively involved as the Principle Investigator for the initial phases of scientific development. I was routinely involved with directing, supporting, reviewing, and communicating with all Nazar Lab Members involved in the project in order to realize the development of the Zn-Ion Battery to a viable energy storage solution.

II. DOCUMENTS CONSIDERED

10. I have reviewed the Exhibits listed below. Based on my work at UW, including my direct involvement in the development of the Zn-Ion Battery, I affirm that these Exhibits are true and accurate printed copies of documents retrieved from UW's document management system, are business records of UW, were kept in the course of the regularly conducted business and activity of UW, were generated and in existence on or about the date indicated, and I reviewed and had knowledge of each such document on or about the dates indicated.

UW Exhibit 1003	U.S. Provisional Patent Application No. 62/230,502
UW Exhibit 1016	Technology Disclosure Form for "Aqueous Zn-Ion Batteries Using a Metallic Zn Negative Electrode and Vanadate Positive Electrodes," dated May 28, 2015

Declaration of Linda F. Nazar

UW Exhibit. 1017	PowerPoint Presentation dated January 12, 2015, [REDACTED]
UW Exhibit 1018	U.S. Patent Application No. 13/794,508
UW Exhibit 1019	PowerPoint Presentation, [REDACTED] [REDACTED]

11. I have also reviewed the other patents, patent applications and claims as mentioned below.

III. DEVELOPMENT BY UW OF THE Zn-ION BATTERY

12. I understand that the UW Commercialization Office (“WATCO”) paid for and assisted with the filing of U.S. Provisional Patent Application No. 62/230,502 (“the Provisional Application”), which was entitled “Electrode Materials for Rechargeable Zinc Cells and Batteries Produced Therefrom.” (UW Exhibit 1003.) I am aware that this Provisional Application was filed on June 8, 2015, because I was actively involved in the filing of the application. I am a named inventor on the Provisional Application.
13. I understand that a PCT Application (No. PCT/CA2016/050613) (“the PCT Application”) was filed on May 31, 2016, and was published as WO2016/197236 on December 15, 2016. (UW Exhibit 1004.) I generated the claims for the patent together with Dr. Dipan Kundu and the patent agent and am a named inventor on the PCT Application.

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.