#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

For: LIGHT EMITTING DEVICE AND DISPLAY

MAIL STOP PATENT BOARD
Patent Trial and Appeal Board
United States Patent and Trademark Office
Post Office Box 1450
Alexandria, Virginia 22313-1450

SUPPLEMENTAL DECLARATION OF DR. ERIC BRETSCHNEIDER IN SUPPORT OF PETITION FOR *INTER PARTES* REVIEW OF UNITED STATES PATENT NO. 7,915,631



- I, Dr. Eric Bretschneider, hereby declare under penalty of perjury under the laws of the United States of America:
- 1. I have been retained by VIZIO, Inc. to submit this supplemental declaration in connection with the Petition for Inter Partes Review of claims 1-2 and 6-11 of U.S. Patent No. 7,915,631 ("the '631 patent") (Ex. 1001).
- 2. I am the same Eric Bretschneider who provided a Declaration in Case No. IPR2018-00066 executed on October 9, 2017 as Lowe's Exhibit 1003 in that proceeding, which, including its appendix, is incorporated by reference herein in its entirety. Ex. 1003 ("First Declaration"), ¶¶ 1-205, Appendix A.
- 3. I have been informed that another IPR petition is to be filed against the '631 patent, which will be accompanied by a copy of my First Declaration. Ex. 1003. I understand that the new petition will address the same claims of the '631 patent using the same combinations of prior art as the petition set forth in IPR2018-00066. My First Declaration offered statements and opinions generally regarding the validity, prior art, obviousness considerations, and understanding of a person of ordinary skill in the art ("POSITA") as it relates to the '631 patent.
- 4. The opinions and statements I put forth in my First Declaration have not changed.
- 5. Attached hereto as Appendix A, is a true and correct copy of my Curriculum Vitae describing my background and experience.



- 6. Further information regarding my experience and qualifications are provided along with my First Declaration. Ex. 1003 (First Declaration), ¶¶ 1-13.
- 7. I am being compensated for my time at my standard consulting rate of \$400 per hour. I am also being reimbursed for expenses that I incur during the course of this work. My compensation is not contingent upon the results of my study, the substance of my opinions, or the outcome of any proceeding involving the challenged claims. I have no financial interest in the outcome of this matter or on the pending litigation between Petitioner and Patent Owner.
- 8. I reserve the right to supplement my opinions in the future to respond to any arguments that Patent Owner or its expert(s) may raise and to take into account new information as it becomes available to me.
  - 9. I declare under penalty of perjury that the foregoing is true and correct.

	10.	Sworn	to	this	14th	day	of	May,	2018
in _	Corin	th, TX						,	

Eric Bretschneider, Ph.D.



## APPENDIX A (CURRICULUM VITAE)



## Eric Bretschneider, Ph.D.

2622 Westwind Dr Corinth, TX 76210 Phone: +1 (248) 766-4665

E-mail: eric@led.expert

**Skills Summary** 

- > Successful Management and Team building with personnel at levels ranging from Sr. Scientists and Engineers to Technicians/Operators. Maximum Department size >100; Budget >\$25 million/yr.
- > Strong New Product Development background; over 100 new SSL products taken from concept to manufacturing, including regulatory, Energy Star certification and DLC certification.
- Excellent communication skills sales and sale support experience as evidenced by development of new 8+ figure accounts for LED die, packages and applications. Proven ability to match customer demands/needs/desires with existing products.
- Comprehensive technical background in the full range of LED production technologies including MOCVD hardware/process, fabrication, LED chip/package test/reliability, optical design, thermal management, color conversion, SSL fixture/lamp design/integration and reliability.
- ➤ Direct Design and Development experience of LEDs (structures, die, packages) and SSL fixtures/components using TracePro and SolidWorks.

### **Employment**

# CTO; EB Designs & Technology Corinth, TX 2014 –

- Design and development of innovative solid-state lighting technology and designs, with a primary focus on optical design, thermal design and production/assembly technologies.
- Manage technology roadmap and draft IP disclosures/patent filings.
- Provide technical support and conduct research/technology development for clients in the field of solid state lighting. This work additionally includes serving as an expert witness.

# Director of Engineering; HeathCo, LLC Bowling Green, KY 2013 – 2014

- Managed Engineering Department Staff (11 domestic, 14 international); Responsibilities included preparation and administration of the department budget (\$3.5 million annual). The department was charged with developed advanced technology/products related to: Solid State Lighting, Sensors, Notifications and Control Products and included regulatory/certifications for UL, FCC, Energy Star and DLC.
- Developed technology, IP and product roadmaps for all three business units (Lighting, Sensors, Notifications). Provided solid state lighting technology support for The Chamberlain Group.
- Additional responsibilities included establishing career development paths and training goals for all members of the department.
- Key accomplishments:
  - Led team for product recall issue dating back to 2006. Reduced recall scope (# units) by >80% and financial exposure by >85% through detailed investigation and analysis of production records and analysis of excess and obsolete inventory.
  - Completed review for entire product portfolio to comply with new cUL bi-lingual language requirements.
     Project required warning requirement changes to physical components (tooling), warning labels, documents and packaging on >400 products.

# Elec Tech International Zhuhai, Guangdong Province, P.R. China Chief Engineer ETi Lighting Research Institute VP Research & Development ETi Solid State Lighting 2011 – 2013

- Managed Engineering and R&D staff for newly formed vertically integrated LED company (107
  Engineering, Scientists, Designers); responsibilities included preparation and administration of the
  department budget (>\$25 million annual)
- Worked directly with President and CEO of the company to develop IP and product roadmaps for all LED based lighting products/projects for markets in the US, Europe, Japan and China.
- Key accomplishments:



# DOCKET

# 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.

