UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

AMERICAN NATIONAL MANUFACTURING INC., Petitioner,

v.

SLEEP NUMBER CORPORATION f/k/a SELECT COMFORT CORPORATION, Patent Owner.

> Case No. <u>IPR2019-00497</u> Patent No. 8,769,747

> Case No. <u>IPR2019-00500</u> Patent No. 9,737,154

DECLARATION OF MATTHEW R. LYNDE, Ph.D. IN SUPPORT OF PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

January 22, 2020

A L A R M Find authenticated court documents without watermarks at <u>docketalarm.com</u>.

DOCKET

TABLE OF CONTENTS

| I. | Qualifications1 | | | | | | |
|------|--|---|--|--|--|--|--|
| II. | Assig | Assignment and Materials Considered 4 | | | | | |
| III. | Exec | Executive Summary and Conclusions | | | | | |
| | | A. | Degen Declaration Analyses | | | | |
| | | В. | Summary of Opinions7 | | | | |
| IV. | Back | Background | | | | | |
| | | А. | Parties9 | | | | |
| | 1. | I. Sleep Number | | | | | |
| | 2. | 2. ANM | | | | | |
| | 3. | 3. Alleged Intellectual Property Use by ANM | | | | | |
| V. | Unit | Unit Sales Analysis | | | | | |
| | A. Unit Sales Do Not Establish Commercial Success | | | | | | |
| | | B. | Mr. Degen's Unit Sales Analysis Does Not Establish Any | | | | |
| | Causal Connection Between the Patents and Demand for the | | | | | | |
| | | | Products | | | | |
| | 1. | The Unit Sales Analysis Does Not Identify the Effect of the '172 Patent | | | | | |
| | 2. | The Unit Sales Analysis Cannot Identify the Impacts of the '154 Patent and the '747 Patent Without Controlling for Confounding | | | | | |
| | | Factors | | | | | |
| | 3. | Data Considerations | | | | | |
| | 4. | Confounding Factors | | | | | |
| | | C. | Issues With Including Third-Party Sales | | | | |
| | 1. | Major Competitor Exiting the Market | | | | | |
| | 2. | 2. Sporadic Third-Party Controller Sales | | | | | |
| | 3. | 3. Third-Party and Retail Sales Act Differently | | | | | |

| | | D. | Higher Level of Sales vs. Higher Sales Growth | 35 | |
|------|------------------------|--------------------------|--|----|--|
| | | Е. | Consumer Information and Valuation | 37 | |
| VI. | Adoption Rate Analysis | | | 40 | |
| | 1. | Manifold Adoption Rate | | | |
| | 2. | Software Adoption Rate 4 | | | |
| | 3. | | g More Accused Pumps/Air Controller than Accused esses Does Not Indicate Demand | 43 | |
| VII. | Signature | | | | |

I. Qualifications

1. My name is Matthew R. Lynde. I am an economist and a Senior Vice President of Cornerstone Research, an economic and financial consulting firm with offices in San Francisco; Silicon Valley; Los Angeles; Chicago; Washington, D.C.; New York; Boston; and London. My work address is Two Embarcadero Center, San Francisco, CA, 94111.

2. I have over 35 years of experience as a practicing applied economist in academia, government, and business. I earned both a B.A. and a Ph.D. in economics from the University of California at Berkeley. As an undergraduate at UC Berkeley, I studied electrical engineering as well as economics. I also studied at the Université de Poitiers in France. During the interval between degrees, I worked in the federal government in Washington, D.C., attached to the President's Council on Wage and Price Stability, and at the Brookings Institution.

3. At Brookings, I worked on studies of small business formation and its importance to innovation and employment growth. My dissertation research for my Ph.D. at UC Berkeley concerned an empirical, econometric investigation of the impact of technological innovation on international competition. At that time, and continuing to today, UC Berkeley was a center for research on the economics of innovation, and on the interaction of industrial organization and patent system public policies.

4. Following my doctorate, I was on the faculty of the City University of New York where I continued my research on innovation economics as well as teaching microeconomics, trade, corporate finance, and econometrics courses. I also taught intersession courses at the Universidad Interamericana de Puerto Rico.

5. In 1992, I joined Price Waterhouse in New York as a senior economist. I worked on litigation support assignments, including coordinating valuation matters across practices and with the London office. As a partner in the firm, I was responsible for leading the intellectual property practice in San Francisco and Menlo Park.

6. In 2001, I joined Cornerstone Research as the founding partner for its San Francisco office. I have served the firm as head of that office and in various managerial functions, as well as heading up the intellectual property practice for a number of years. I have served on the advisory boards of both UC Berkeley Law's Center for Law and Technology and Stanford Law's Program in Law, Science, and Technology. I spearheaded the firm's research efforts as one of the founding supporters of the Stanford Intellectual Property Clearinghouse in conjunction with Professor Mark Lemley, and serve as an advisor to its primary descendant, the LexMachina intellectual property database firm.

7. As a consultant and expert witness, I specialize in the applied economic, financial, and statistical analyses of complex business and regulatory matters. Since

DOCKET A L A R M



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.