

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

TRISTAR PRODUCTS, INC.  
Petitioner

v.

CHOON'S DESIGN INC.  
Patent Owner

---

Patent No. 8,622,441

---

**DECLARATION OF YOUJIANG WANG, Ph.D., P.E.**

I, Youjiang Wang, Ph.D., declare as follows:

1. I have been retained by counsel for Petitioner, Tristar Products, Inc. to offer technical opinions with respect to U.S. Patent No. 8,622,441 (“the ‘441 Patent”). Ex. 1001.<sup>1</sup>

2. I was awarded a Bachelor of Science in Textile Engineering from Donghua University (Shanghai, China) in 1982, a Master of Science in Mechanical Engineering from the Massachusetts Institute of Technology (“MIT”) in 1985, and a Doctor of Philosophy in Mechanical Engineering, with a Minor in Electrical Engineering and Computer Science, from MIT in 1989. My current *curriculum vitae* is attached hereto as Ex. WANG-0001 and made part of this Declaration.

3. I was an Assistant Professor in the School of Textile & Fiber Engineering (the School later became part of School of Materials Science and Engineering) at the Georgia Institute of Technology (“Georgia Tech”) from 1989 to 1995. I was an Associate Professor at Georgia Tech from 1995 to 2002. I am currently a Professor (with tenure) in the School of Materials Science and Engineering at Georgia Tech, where I teach Introduction to Textile Engineering, Fiber Science, Structure & Properties of Polymers, Yarn & Fabric Formation

---

<sup>1</sup> Where applicable, exhibits contained in Petitioner’s Exhibits will be referenced herein by their corresponding Exhibit numbers.

Processes; Mechanics of Textile Structures, Carpet Technology, Textile Testing; Advanced Fiber Science, Fiber Mechanics; and Composite Materials & Processing.

4. I am a Fellow of the American Society of Mechanical Engineers (ASME). I was the Chairman of the Textile Engineering Division of ASME from 2001 to 2002. I was also elected a Fellow of the Textile Institute (U.K.) in 1998. I am a member of the Editorial Boards of the *Textile Research Journal*, *Journal of Industrial Textiles*, and *Journal of Fiber Bioengineering and Informatics*. I am also a registered Professional Engineer in the State of Georgia.

5. I am a named inventor of five issued U.S. patents dealing with textile materials and textile manufacturing: U.S. Patent Nos. 6,260,783; 8,082,761; 8,161,775; 8,341,980; and 8,653,194. I have over 33 years of experience in the field of mechanical engineering and textile engineering, including but not limited to, work and research regarding textile engineering and the textile manufacturing industry, and as such am fully qualified to offer technical opinions associated with the '441 Patent to the United States Patent Trial and Appeal Board ("PTAB").

6. In preparation of this Declaration, I have reviewed the following documents:

- a. U.S. Patent No. 8,622,441 ("the '441 Patent") and its USPTO file wrapper;

- b. U.S. Patent Application Serial No. 13/626,057 filed September 25, 2012 (“the ‘057 Application”);
- c. U.S. Provisional Patent Application No. 61/846,270 filed July 15, 2013 (“the ‘270 Provisional Application”);
- d. U.S. Patent No. 5,426,788 to Meltzer (“Meltzer”);
- e. U.S. Patent No. 8,418,434 to Carruth (“Carruth”);
- f. A printed book entitled “Loom Knitting Primer, A Beginner’s Guide to Knitting on a Loom with Over 30 Fun Projects” and authored by Isela Phelps and published on or about March 20, 2007 by St. Martin’s Griffin (“Phelps”);
- g. A printed book entitled “I Can’t Believe I’m Loom Knitting!” and authored by Kathy Norris and published on or about May 1, 2010 by Leisure Arts, Inc. (“Norris”);
- h. Zaltzman U.S. Patent No. 4,023,245 (“Zaltzman”);
- i. Yates U.S. Patent No. 2,274,223 (“Yates”);
- j. Linstead U.S. Patent No. 3,438,223 (“Linstead”);
- k. Website entitled “The Horde of Vigdis”;
- l. Nedry U.S. Patent Publication No. 2014/0373966 (“Nedry”);
- m. Nedry U.S. Provisional Application No. 61/838,952; and
- n. Other documents discussed below in this Declaration.

7. I am being compensated hourly by counsel for the Petitioner, and my compensation is not dependent on the outcome of either my opinions or the proceedings.

8. Based on my experience as a professor in the area of textile engineering and materials engineering, as well as my work and research regarding textile engineering and the textile manufacturing industry, it is my opinion that a person having ordinary skill in the art (“PHOSITA”) during the 2010 to 2013 time frame covering November 5, 2010 and July 15, 2013 would possess a baccalaureate degree in textile engineering or mechanical engineering and at least two years of industrial or research experience in textile engineering or mechanical engineering. I am at least one of ordinary skill in the art.

#### **Overview of the ‘441 Patent/ Brunnian Links/Knitting**

9. The ‘441 Patent issued on January 7, 2014 from U.S. Application No. 14/018,542 (“the ‘542 Application”), which was filed on September 5, 2013. The ‘542 Application was filed as a “continuation” of U.S. Application Ser. No. 13/626,057 (“the ‘057 Application”) filed September 25, 2012, and the ‘542 Application claims priority to U.S. Provisional Application Serial No. 61/846,270 filed on July 15, 2013 (“the ‘270 Provisional”).

10. Based on my review of the above applications, the features “upper and lower tabs” and “a first arm and a second arm and an access slot disposed

# 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.