



Ling Du, Ph.D

Associate

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OVERVIEW

Ling Du, Ph.D, is a USPTO-registered patent attorney with technical expertise in polymer science and engineering, material science, tire and rubber technology, fuel cells and batteries, pharmaceuticals, nanotechnology, biotechnology, medical devices, semiconductor materials, and mechanical engineering.

She focuses her practice on IP procurement and portfolio management.

She also provides strategic IP counseling, due diligence research and analysis for portfolio acquisitions, and opinion work such as patentability, validity, non-infringement, and freedom-to-operate opinions. She assists clients in all phases of post-grant proceedings at the Patent Trial and Appeal Board (PTAB). She also assists clients in filing trademark and copyright applications.

PROFESSIONAL BACKGROUND

Ling previously worked as a law clerk at an IP boutique firm focusing on diligence work for pharmaceutical companies, such as early market opportunities, matters related to drug approval, development of Abbreviated New Drug Application (ANDA) strategies, and product launch management.

Prior to entering the legal field, Ling had worked as a senior research engineer and project leader at Goodyear Tire & Rubber Co for 8 years. She led research projects in developing new materials, designing new formulations, assessing new compounding technologies, and commercializing new products in tire and rubber industry.

Ling has conducted research in proton exchange membrane fuel cells in her Ph.D program.

EDUCATION

- J.D., University of Akron School of Law, 2017
- Ph.D., University of Akron, 2008 (*Polymer Engineering*)
- M.S., Wuhan University, 2003 (*Mechanical Engineering*)
- B.S., East China University of Science and Technology, 1993 (*Polymer Science and Engineering*)

ADMISSIONS

- Bar of Illinois
- United States Patent and Trademark Office

LANGUAGES

- Chinese (Mandarin)

OTHER PUBLICATIONS

ARTICLES

- "Methods For Using Natural Compounds Can Be Patent-Eligible," *Law360*, 6 May 2019

BOOKS

- Sadhan C. Jana, Ling Du, " Highly Filled Graphite-Polymer Composites: Synthesis, Processing and Characterization." in *Graphite, Graphene, and Their Polymer Nanocomposites*, Prithu Mukhopadhyay and Rakesh K. Gupta (Ed.), CRC Press, Taylor & Francis Group, 2013.

PATENTS

- Ling Du, Ralf Mruk, Leena Nebhani, US 10005896, Rubber comprised of product of diene-based elastomer, branched PEI oligomer and reinforcing filler, and tire with component, 06/26/2018
- Ling Du, US 9758651, Rubber composition and pneumatic tire, 09/12/2017
- Ling Du, Xiaoping Yang, Carl T. R. Pulford, US 9757983, Tire with rubber component comprised of precipitated silica and functionalized graphene, 09/12/2017
- Ling Du, David A. Benko, Paul H. Sandstrom, US 9574066, Rubber composition containing algae oil and tire with component, 02/21/2017
- Ling Du, Xiaoping Yang, Carl T.R. Pulford, US 9162530 B2, Tire with rubber tread containing precipitated silica and functionalized carbon nanotubes, 10/20/2015.
- Ling Du, Ralf Mruk, Annette Lechtenboehmer, Klaus Unseld, Claude E. F. Boes, Federic G.A. Siffer, Robert Roskamp, Leena Nebhani, US 9090757 B2, Preparation of Rubber Reinforced with at Least One of Graphene and Carbon Nanotubes with Specialized Coupling Agent and Tire with Component, 07/28/2015.
- Ling Du, Xiaoping Yang, Carl T. R. Pulford, US9090756 B2, Tire with Component Comprised of Rubber Composition Containing Silica and Graphene Platelet Reinforcement, 07/28/2015.
- Ling Du, Ralf Mruk, Leena Nebhani, William P. Francik, Tang H. Wong, US 9045627 B2, Rubber Composition and Pneumatic Tire, 06/02/2015

- Kuo-Chih Hua, Ling Du, US 8415426 B1, Tire with rubber component containing combination of carbon black, silica and functionalized mineral, 04/09/2013
- Kuo-Chih Hua, Ling Du, EP2607421 A3, Tire with rubber component containing combination of carbon black, silica and functionalized mineral, 08/07/2013

TECHNICAL PUBLICATIONS

- Jeffrey R. Potts, Om Shankar, Shanthi Murali, Ling Du, Rodney S. Ruoff, Latex and two-roll mill processing of thermally-exfoliated graphite oxide/natural rubber nanocomposites, *Composites Science and Technology* 74 (2013) 166–172 (104 citations)
- Jeffrey R. Potts, Om Shankar, Ling Du, Rodney S. Ruoff, Processing–Morphology –Property Relationships and Composite Theory Analysis of Reduced Graphene Oxide/Natural Rubber Nanocomposites, *Macromolecules* 45 (2012) 6045–6055 (232 citations)
- Ling Du, Sadhan. C. Jana, Highly Conductive Epoxy/Graphite Composites for Bipolar Plates in Proton Exchange Membrane fuel cells, *J. Power Sources* 172 (2007) 734-741 (126 citations)
- Ling Du, Sadhan. C. Jana, Hygrothermal Effects on Properties of Highly Conductive Epoxy/ Graphite Composites for Appl. as Bipolar Plates, *J. Power Sources* 182 (2008) 223-229 (32 citations)
- Ling Du, Highly Conductive Epoxy/Expanded Graphite Polymer Composite Bipolar Plates in Proton Exchange Membrane (PEM) Fuel Cells, Univ. of Akron, Ph.D Dissertation, 2008 (14 citations)

AREAS OF FOCUS

- IP Procurement and Portfolio Management

INDUSTRIES

- Energy
- Power Generation and Transmission
- Utilities