



Dr.-Ing. Stefan Neumann

Dipl.-Ing. (Materials Science & Materials Technology)

Patent Attorney Trainee

Languages

German, English, Italian, Japanese

Contact

Dr.-Ing. Stefan Neumann

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Technical Expertise

Materials Science

Medical Engineering

Mechanical Engineering

Physics



Legal Expertise

Patent and utility model protection

Opposition and appeal proceedings

Trademarks and labels

Dr. Stefan Neumann has been a patent attorney trainee at the law firm Wallinger Ricker Schlotter Tostmann since December 2023. Before starting his career in the field of intellectual property, Dr. Neumann completed his doctorate in Freiberg with a focus on the characterization of various nanomaterials, in particular by means of transmission electron microscopy.

Legal Practice

Based on his experience gained in research, Dr. Neumann is particularly involved in drafting patent and utility model applications and conducting patent grant, opposition and utility model cancellation proceedings before the German and European Patent Office as well as conducting patent searches and monitoring third-party property rights..

Technical Expertise

Dr. Neumann completed his studies in materials science and materials technology at the TU Bergakademie Freiberg based on an interdisciplinary foundation course in general physics and chemistry, mechanics, electrical engineering and materials testing with a subsequent focus on solid state physics, crystallography and materials characterization. During his studies, Dr. Neumann spent a semester abroad at Akita University in Japan. From 2017 to 2023, Dr. Neumann worked as a research associate at the Institute of Materials Science at TU Bergakademie Freiberg, where he received his doctorate with "summa cum laude" for his thesis on the statistical quantification of atomic-scale properties of various nanomaterials based on correlative multiscale transmission electron microscopy. .



Career | Awards



Dr.-Ing. Stefan Neumann

Dipl.-Ing. (Materials Science & Materials Technology)

Career

since 2023

Practice in the field of intellectual property law
Patent attorney training at Wallinger Ricker Schlotter Tostmann

2017 - 2023

Doctorate with “summa cum laude” at the Institute of Materials Science at TU Bergakademie Freiberg (Dr.-Ing.)

2015–2016

Research stay at Akita University, Akita, Japan

2012–2017

Studies of materials science and materials technology at TU Bergakademie Freiberg (Dipl.-Ing.)



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Awards

+ „Medaille zur Ermunterung des Fleißes“ for completing the doctorate with the distinction “summa cum laude”

+ I „Agricola-Medaille“ in recognition of outstanding achievements during the course of study

+ I „Deutschlnadstipendium“ for the promotion of gifted and highly talented students



Publications



Dr.-Ing. Stefan Neumann

Dipl.-Ing. (Materials Science & Materials Technology)

Publications

- + S. Neumann, D. Rafaja: Correlative Multi-Scale Characterization of Nanoparticles Using Transmission Electron Microscopy, *Powders* 3(4) (2024) 531-549.
- + A. Rezvani, Y. Li, S. Neumann, O. Anwar, D. Rafaja, S. Reichenberger, D. Segets: Stability of binary colloidal mixtures of Au noble metal and ZnS semiconductor nanoparticles, *Colloids Surf. A: Physicochem. Eng. Asp.* 682 (2024) 132832.
- + S. Neumann, L. Kuger, C. R. Arlt, M. Franzreb, D. Rafaja: Influence of the hierarchical architecture of multi-core iron oxide nanoflowers on their magnetic properties, *Sci. Rep.* 13 (2023) 5673.
- + S. Neumann, A. Rezvani, M. Barasinski, G. Garnweitner, D. Segets, D. Rafaja: Statistical determination of atomic-scale characteristics of Au nanocrystals based on correlative multiscale transmission electron microscopy, *Microsc. Microanal.* 29(1) (2023) 118–130.
- + M. Barasinski, J. Hilbig, S. Neumann, D. Rafaja, G. Garnweitner: Simple Model of the Electrophoretic Migration of Spherical and Rod-shaped Au Nanoparticles in Gels with Varied Mesh Sizes, *Colloids Surf. A: Physicochem. Eng. Asp.* 651 (2022) 129716.
- + C. R. Arlt, D. Brekel, S. Neumann, D. Rafaja, M. Franzreb: Continuous size fractionation of magnetic nanoparticles by using simulated moving bed chromatography, *Front. Chem. Sci. Eng.* 15(5) (2021) 1346-1355.
- + A. Walnsch, M. J. Kriegel, P. D. B. Fischer, S. Neumann, D. Rafaja, A. Leineweber: Nanoscale twinning and superstructures of martensite in the Fe-Mn-Al-Ni system, *Materialia* 16 (2021) 101062.
- + S. Neumann, C. Menter, A. S. Mahmoud, D. Segets, D. Rafaja: Microstructure characteristics of non-monodisperse quantum dots: On the potential of transmission electron microscopy combined with X-ray diffraction, *CrytEngComm* 22 (2020) 3644–3655.
- + S. Neumann, C. Wüstefeld, M. Motylenko, L. Haus, S. Bräunig, M. Müller, D. Rafaja: Microstructure and thermal stability of Mo-(Ag)-N coatings with high nitrogen content, *Surf. Coat. Technol.* 352 (2018) 257-264.



Technical Expertise

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