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Daan Wouters

Engineering

European, Dutch and Belgian Patent Attorney, European Patent Litigator

Associate

Daan Wouters graduated (2000) at and received his PhD (2005) from the faculty of Chemistry and Chemical Engineering at the Eindhoven University of Technology. Here he gained experience in fields as surface chemistry, nanotechnology, (supramolecular) polymer chemistry, catalysis, and electron microcopy as well as atomic force spectroscopy.

Daan is (co)author of over 60 scientific publications. During his professional career at a Flemish R&D and innovation hub in nanoelectronics and digital technologies, he developed various sensors and sensor technologies for air and water quality monitoring. During this period he gained experience in microelectromechanical and resonator systems, electrochemical sensors, drop-on-demand deposition methods and ionic liquids. Besides the scientific aspects, Daan has, as inventor, been involved in a number of patent applications. Daan joined V.O. in December 2017.

Working experience

- Patent Attorney (2021-present)
- Senior Researcher, imec “Working on the development of various sensor and actuator systems” 2007 – 2017
- Postdoctoral researcher, Dutch Polymer Institute (DPI) & Eindhoven University of Technology, 2005 – 2007
- PhD research assistant, Chemistry and Chemical Engineering at the Eindhoven University of Technology, 2001 – 2005
- Chess teacher, Children levels 1-3, 2012 – current

Education

- 2005: PhD in Chemistry and Chemical Engineering, Eindhoven University of Technology, thesis on: “Bottom-up and top-down assembly of functional nanostructures: Scanning Probe Microscopy as an imaging and patterning tool”
- 2000: MSc in Chemistry and Chemical Engineering, Eindhoven University of Technology, dissertation on: “A surface science model of the Phillips catalyst”

Publications

- US9213013, Electrochemical Ethylene Sensor and Method for Monitoring Ethylene
- US2017010231 (A1), Gas Sensor With Frequency Measurement of Impedance
- EP3264074 (A1), Solid State Electrolyte
- Electrochemical Sensing of Ethylene Employing a Thin Ionic-Liquid Layer M. A. G. Zevenbergen, D. Wouters, V.-A. Dam, S. H. Brongersma, and M. Crego-Calama Anal. Chem. 2011, 83, 6300
- Local Probe Oxidation of Self-Assembled Monolayers on Hydrogen-Terminated Silicon M. Yang, D. Wouters, M. Giesbers, U. S. Schubert, and H. Zuilhof ACS NANO, 2009, 3, 2887

- Supramolecular Self-Assembled Ni(II), Fe(II), and Co(II) ABA Triblock Copolymers M. Chiper, M.l A. R. Meier, D. Wouters, S. Hoeppener, C.-A. Fustin, J.-F. Gohy, and U. S. Schubert Macromolecules, 2008, 41, 2771
- Block copolymer libraries: modular versatility of the macromolecular Lego system B. G. Lohmeijer, D. Wouters, Z. Yin, U. S. Schubert Chem. Commun. 2004, 24, 2886
- Constructive nanolithography and nanochemistry: local probe oxidation and chemical modification D. Wouters, U.S. Schubert Langmuir 2003, 19, 9033
- The CrOx/SiO2/Si(100) catalyst – a surface science approach to supported olefin polymerization catalysis P. C. Thüne, J. Loos, D. Wouters, P. J. Lemstra, J. W. Niemantsverdriet Macromol. Symp. 2011, 173, 37

Languages

- Dutch
- English
- German