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# Mohammad Ahmadi Bidakhvidi

## Engineering

European and Dutch Patent Attorney  
*Associate*

Mohammad Ahmadi Bidakhvidi started at V.O. in 2014, after receiving his PhD degree in electro-mechanical engineering at the Vrije Universiteit Brussel. His research had a strong multidisciplinary character. Mohammad's patent expertise lies in the general field of mechanics, physics and electronics.

He has strengthened his knowledge and developed expertise i.a. in the areas of electro-mechanical engineering, software related inventions, high-tech systems, telecommunications and artificial intelligence. He has substantial experience in drafting and prosecution of patent applications and advising on patentability and infringement. Mohammad enjoys combining his technical and legal expertise to translate research into patent strategies for both small and large sized companies.

Mohammad considers it an important aspect of his work to make insightful to clients how the patent system works in order to help them make informed decisions on research and business strategy.

## Working experience

- Patent Attorney, V.O. (2018-present)

## Education

- PhD in Mechanical Engineering, University of Brussels (2014)
- MSc in Mechanical Engineering, University of Brussels (2009)
- MSc in Industrial Electro-Mechanical Engineering, University of Antwerp (2007)

## Publications

- M.A. Bidakhvidi et al., Experimental study of the flow field induced by a resonating piezoelectric flapping wing, *Journal of Experiments in Fluids*, Vol.54, issue 11, pp. 1-16, November 2013, doi: 10.1007/s00348-013-1619-y.
- R. Shirzadeh, C. Devriendt, M.A. Bidakhvidi and P. Guillaume, Experimental and computational damping estimation of an offshore wind turbine on a monopile foundation, *Journal of Wind Engineering & Industrial Aerodynamics*, vol.120, n.10, pp.96-106, 2013, doi:10.1016/2013-07-004.
- M.A. Bidakhvidi et al., Numerical and Experimental Investigation of the Piezoelectric Flapping Wing Micro-air-vehicles Propulsion, *SAE Int. J. Aeroesp.*, 5(1):281-287, 2012, doi:10.4271/2012-01-2245.
- M.A. Bidakhvidi et al., Study of the cooling performance of oscillating piezoelectric fans, in *Proceedings of the ASME International Mechanical Engineering Congress Exposition (IMECE)*, San Diego (California, USA), 2013.
- D. Vucinic, A. Suol, M.A. Bidakhvidi, S. Vanlanduit, CFD validation of the Coanda based thrust vectoring nozzle, in *Proceedings of the 7th International Conference on Advanced Computational Engineering and Experiment*, Madrid (Spain), 2013.
- M.A. Bidakhvidi et al., Study of the cooling performance of resonating piezoelectric fans, in *Proceedings of the 20th International Congress on Sound and Vibration*, Bangkok (Thailand), 2013.
- R. Shirzadeh, C. Devriendt, M.A. Bidakhvidi and P. Guillaume, Aerodynamic damping of an offshore wind turbine in operational and parked conditions: A comparison between simulations and measurements, in *Proceedings of the 12th Americas Conference on Wind Engineering (12ACWE)*, Seattle (Washington, USA), 2013.
- R. Shirzadeh, C. Devriendt, M.A. Bidakhvidi and P. Guillaume, Experimental and computational aeroelastic damping of an Offshore Wind Turbine on a monopile foundation, in *Proceedings of the Conference on Noise and Vibration Engineering (ISMA2012)*, Leuven (Belgium), 2012.
- M.A. Bidakhvidi et al., Analysis of flows induced by piezoelectric flapping wings, in *Proceedings of the 5th International Conference on Optical Measurement Techniques for Structures and Systems (OPTIMESS2012)*, Antwerp (Belgium), 2012.
- M.A. Bidakhvidi et al., Multiphysics optimization of the piezoelectric flapping wing propulsion, in *Proceedings of the 3rd International Conference on Engineering Optimization (EngOpt2012)*, Rio de Janeiro (Brazil), 2012.
- R. Shirzadeh, P. Guillaume, M.A. Bidakhvidi, Experimental study of aerodynamic damping of a piezoelectric fan, in *Proceedings of the 15th International Conference on Experimental Mechanics (ICEM15)*, Porto (Portugal), 2012.
- R. Shirzadeh, C. Devriendt, M.A. Bidakhvidi and P. Guillaume, The dynamics of an Offshore Wind Turbine subjected to wind and wave actions: A comparison between simulations and measurements, in *Proceedings of the 11th German wind energy conference (DEWEK 2012)*, Bremen (Germany), 2012.
- M.A. Bidakhvidi et al., Experimental and computational analysis of the flow induced by a piezoelectric fan, in *Proceedings of the 15th International Symposium on Flow Visualization (ISFV15)*, Minsk (Belarus), 2012.
- M.A. Bidakhvidi et al., Time-resolved PIV of flows induced by piezoelectric flapping wings, in *Proceedings of the International Symposium on Particle Image Velocimetry (PIV11)*, Kobe (Japan), 2011.
- R. Shirzadeh, M. Runacres, P. Guillaume and M.A. Bidakhvidi, An investigation of the lock-in behavior of an oscillating cylinder in transverse flow, in

Proceedings of the IUTAM Symposium on Bluff Body Flows (blubof2011), Kanpur (India), 2011.

- M.A. Bidakhvidi, S. Vanlanduit and T. De Troyer, Design and testing of a piezo fan for MAV propulsion, in Proceedings of the International Symposium on Light Weight Unmanned Aerial Vehicle Systems and Subsystems (LW-UAS 2009), Oostende (Belgium), 2009.
- M.A. Bidakhvidi et al., Numerical and experimental study of the flapping wing induced flow for micro-air-vehicles propulsion, in Proceedings of the International Symposium on Coupled Methods in Numerical Dynamics (CMND 2009), Split (Croatia), 2009.

## **Languages**

- Dutch
- English
- French
- Persian