## Patent Pledge and Technological Innovation: The "Good Faith" of Tesla

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This paper investigates effects of Tesla's 2014 patent pledge, in which the company announced it would not pursue litigation against any party that uses its patents "in good faith." While stated as a move to promote electric vehicle (EV) adoption by Elon Musk, the pledge also represents a novel corporate strategy: a firm-wide, conditional patent openness. Using a Difference-in-Differences framework and synthetic DID, the study draws on patent data and firm data from 2009 to 2019 to evaluate the impact on both Tesla's own innovation and on broader follow-on innovation activity.

The analysis reveals three key findings. First, the technological similarity between Tesla's patents and those of citing follow-on innovators increased significantly, suggesting that the pledge encouraged innovation that built more directly on Tesla's technologies—expanding its innovation ecosystem. Second, Tesla's patenting activity increased by over 130% without corresponding change of its innovation activities including innovation intensity and quality, indicating an effort to broaden the reach and scope of its intellectual property. Third, the pledge didn't lead to a meaningful increase in the number of new innovations by other firms building on Tesla's technology, possibly due to the legal ambiguity and perceived risk associated with the "good faith" condition.

The findings suggest that patent pledges can be powerful tools for firms aiming to shape ecosystems around their core technologies. Conditional pledges, such as Tesla's, may strike a strategic balance—stimulating complementary innovation while preserving control and deterring opportunistic misuse. Managers considering such strategies should ensure clarity in pledge terms to maximize engagement from external innovators and minimize legal uncertainty.

For policymakers, the results highlight that the effectiveness of patent pledges in promoting innovation is highly sensitive to the terms and context. Conditional pledges, though more attractive to firms, may yield limited public benefit if they deter broad uptake or reinforce incumbent dominance. Regulators and competition authorities should evaluate not just whether a pledge exists, but how open and enforceable it is—considering dimensions such as accessibility, compensation, and conditionality. Frameworks from IP law (e.g., Ehrnsperger & Tietze, 2019; Contreras,



2023) offer useful tools for assessing these aspects. As patent pledges become more common, especially in sectors with network effects and rapid technological change, coordinated policy approaches will be necessary to align corporate strategy with public innovation goals.

Contreras, J. L. (2023). Patent Pledges as Portfolio Management Tools: Benefits, Obligations and Enforcement. A Modern Guide to Patenting. Challenges of Patenting in the 21st Century (K. Blind, N. Thumm, eds., Edward Elgar: 2024, Forthcoming), University of Utah College of Law Research Paper, (562).

Ehrnsperger, J. F., & Tietze, F. (2019). Patent pledges, open IP, or patent pools? Developing taxonomies in the thicket of terminologies. *PloS one*, 14(8), e0221411.

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