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## **Corporate Patent Strategy for Open Innovation: A Game Theory Model Based on Technical Features in Patents**

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**Initial abstract**

Achieving a community of open innovation, where innovative ideas can be freely shared, will increase costs of corporate monopolisation thereby enhancing the role of ordinary citizens as Intellectual Property generators. Based on analysis of technical features in patents, this research applies non-zero-sum game theory to model multi-layered patent strategies including application, litigation and transaction. To maximise benefit to the common good, it is a suitable way to arbitrate fairly between the players. The results reveal the threshold values of novelty and inventive steps. In conclusion, an effective patent strategy can be to turn a patent from a competition lock into a positive catalyst for open innovation, which is the preferred equilibrium result between the interests of corporations, governments and individuals. [120 words]

**Keyword** Patent Strategy; Open Innovation, Intellectual Property, Game Theory, Technical Features

**Biography**

**Zheng Li** received his MEng degree in Mechanical Engineering from China and MA degree in Design Strategy and Innovation from the UK. He is a PhD student at Brunel University, interested in design research including patent strategy and design evaluation. [Zheng.Li@brunel.ac.uk](mailto:Zheng.Li@brunel.ac.uk)

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