

MINISTRY OF EDUCATION OF THE REPUBLIC OF BELARUS
МИНИСТЕРСТВО ОБРАЗОВАНИЯ РЕСПУБЛИКИ БЕЛАРУСЬ
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MASTER'S THESIS
МАГИСТЕРСКАЯ ДИССЕРТАЦИЯ

for a master's degree
на соискание степени магистра

China's intellectual property market: trends and development prospects
Рынок интеллектуальной собственности Китая: состояние и тенденции
развития

Speciality 7-06 0311-01 Economics
Специальность 7-06 0311-01 Экономика

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GENERAL CHARACTERISTICS OF THE WORK

1. Connection with Major Scientific Programs (Projects) and Topics

The Master's thesis is directly aligned with China's core national development strategies and global technological trends, positioning intellectual property (IP) as a fundamental driver of economic transformation:

"Made in China 2025" and Innovation-Driven Development Strategy. The research directly supports the strategic shift from manufacturing to innovation, analyzing how a robust IP market is crucial for mastering key technologies and moving up the global value chain.

14th Five-Year Plan (2021-2025) and Long-Range Objectives Through 2035. The thesis addresses the plan's emphasis on achieving greater self-reliance in science and technology (科技自立自强), with IP protection being a critical component of this technological sovereignty.

"Dual Carbon" Goals (Peak Carbon, Carbon Neutrality). The focus on promoting "green" patents and technologies aligns with national strategies for sustainable development and creating new high-tech markets in environmental protection.

Belt and Road Initiative (BRI). The research on expanding Chinese IP abroad and harmonizing laws responds to the need for facilitating technological cooperation and protecting IP rights within BRI partner countries.

2. Purpose and Tasks of the Thesis

The aim of the master's thesis is to analyze the intellectual property market in China and to develop directions for its development.

Research objectives:

- to study the theoretical foundations of the intellectual property market;
- to analyze the current state of the intellectual property market in China;
- to identify the problems of the intellectual property market in China and develop solutions for them.

3. Object and Subject of Research

Object of research: the intellectual property market in China.

Subject of research is the trends, problems and prospects for the development of the intellectual property market in China.

4. Provisions Submitted for Defense

Theoretical Innovation: The thesis conducts a comprehensive study of the national IP market as a complex system of economic and legal relations, moving beyond a purely legalistic view. It develops and applies a novel integrated methodology for its analysis.

Empirical Conclusion: China's IP market has undergone a monumental transformation from a weak, underdeveloped system to a world-leading ecosystem, characterized by quantitative dominance in patent filings and a strategic focus on high-tech industries. Growth, however, is uneven, with a need to balance quantity with quality and address regional disparities.

Problem Mechanism: The root causes of the identified challenges stem from the tension between rapid technological change and regulatory adaptation, the conflict between open innovation and state control, and the pressures of transitioning from a catch-up model to a front-runner model in global technology standards.

Practical Recommendations: A set of specific measures is proposed for the market's development, including a phased path for: implementing digital tools (blockchain for IP registration), accelerating the examination of "green" technologies, establishing international IP support centers (e.g., within BRI), and developing a national intellectual property exchange to enhance commercialization.

5. Scientific and Practical Significance

Scientific Significance. The work possesses high scientific novelty by examining China's IP market dynamically during its critical transformation phase. It enriches the theoretical understanding of IP markets in state-led economies and provides a new analytical framework for their study.

Practical Significance. The findings are directly applicable for:

- government bodies (e.g., CNIPA) in formulating innovation and IP policy;
- chinese corporations in managing intellectual assets and formulating patent strategies;
- international investors and businesses seeking to understand and navigate the Chinese IP landscape;
- research institutes and venture funds in assessing technological trends and commercialization potential.

6. Structure and Scope of the Thesis

The Master's thesis includes 76 pages, 16 figures, 3 tables, and 56 sources. It is composed of an introduction, a general description of the work, three chapters, a conclusion, and a bibliography.

Introduction: expounds the research background, relevance, purpose, tasks, methods, and theoretical basis.

Chapter 1: explores the theoretical foundations of the state intellectual property market, including its concept, key participants, and methodological approaches for analysis.

Chapter 2: analyzes the historical development, current state, and core problems of the intellectual property market in China through statistical data and

trend analysis.

Chapter 3: proposes future development trends and directions for China's IP market based on foreign experience and strategic national needs, culminating in practical recommendations.

Conclusion: summarizes the main research results and confirms that the work correctly and objectively reflects the state of the process under study.).

BIBLIOGRAPHY

1. Alhamdi, A.N. National innovation systems (NIS): formation, structure, functions / A.N. Alhamdi, H.M.A. Algzvani // Forum of Young Scientists. – 2022. – № 5 (69). – P. 43-48.
2. Appelbaum, R.P. Innovation in China: challenging the global science and technology system (China Today) / R.P. Appelbaum, C. Cao, X. Han. – Cambridge: Polity, 2018. – 200 p.
3. Bently, L. Intellectual Property Law / L. Bently, B. Sherman. – Oxford: Oxford University Press, 2023. – 1120 p.
4. Burk, D. The Patent Crisis and How the Courts Can Solve It / D. Burk. – Chicago: University of Chicago Press, 2019. – 248 p.
5. Cao, C. China's innovation system: reforms and challenges / C. Cao, R.P. Suttmeier // Issues in Science and Technology. – 2020. – № 36(4). – P. 63-70.
6. Cao, Ya. Strategic guidelines for China's innovative development / Ya. Cao, Ts. Xu // Eurasian Scientific Association. – 2019. – № 9-2 (55). – P. 158-160.
7. Chaminade, C. National innovation systems in times of crisis: resilience, change, and transformation / C. Chaminade, J. Vang, M. Gorynia // European Planning Studies. – 2021. – № 29(2). – P. 213-232.
8. Chen, J. The Evolution of China's national innovation system: a review and future directions / J. Chen, S. Li // Science, Technology & Human Values. – 2023. – № 48(2). – P. 334-359.
9. Cornell Legal Information Institute (LII) – Intellectual Property [Electronic resource]. – Mode of access: https://www.law.cornell.edu/wex/intellectual_property. – Date of access: 19.04.2025.
10. Cornish, W. Intellectual Property: Patents, Copyright, Trade Marks and Allied Rights / W. Cornish, D. Llewelyn, T. Aplin. – London: Sweet & Maxwell, 2021. – 1024 p.
11. Dinwoodie, G.B. Trademarks and Unfair Competition: Law and Policy / G.B. Dinwoodie, M.D. Janis. – New York: Wolters Kluwer, 2022. – 928 p.
12. Dodgson, M. Innovation: a very short introduction / M. Dodgson, D. Gann. – Oxford: Oxford University Press, 2018. – 176 p.
13. Dollar, D. China 2049: economic challenges of a rising global power / D. Dollar, Y. Huang. – Washington: Brookings Institution Press, 2020. – 442 p.
14. Edquist, C. Systems of innovation: technologies, institutions and organizations / C. Edquist. – Abingdon: Routledge, 2013. – 168 p.
15. European Patent Office (EPO) [Electronic resource]. – Mode of access: <https://www.epo.org/>. – Date of access: 19.04.2025.

16. European Union Intellectual Property Office (EUIPO) [Electronic resource]. – Mode of access: <https://euipo.europa.eu/>. – Date of access: 19.04.2025.
17. Freeman, C. As time goes by: from the industrial revolutions to the information revolution / C. Freeman, F. Louca. – Oxford: Oxford University Press, 2001. – 251 p.
18. Fu, X. Indigenous innovation and economic growth: theory and evidence / X. Fu, J. Gong // *World Development*. – 2021. – № 145. – P. 105-118.
19. Gangjee, D. Research Handbook on Intellectual Property and Geographical Indications / D. Gangjee. – Cheltenham: Edward Elgar Publishing, 2023. – 512 p.
20. Gervais, D.J. The TRIPS Agreement: Drafting History and Analysis / D.J. Gervais. – London: Sweet & Maxwell, 2021. – 768 p.
21. Goldstein, P. Bernt. International Copyright: Principles, Law, and Practice / P. Goldstein, P. Hugenholtz. – Oxford: Oxford University Press, 2023. – 592 p.
22. Guan, J.C. Mapping knowledge flows within China's national innovation system: a combined patent analysis and in-depth interview approach / J.C. Guan, R. Smits // *Technovation*. – 2021. – № 14. – P. 102-118.
23. Hanusch, H. National innovation systems and regional clusters: concepts and policies / H. Hanusch, A. Pyka // *Regional Studies*. – 2020. – № 54. – P. 10-15.
24. Harvard Law School – Berkman Klein Center for Internet & Society [Electronic resource]. – Mode of access: <https://cyber.harvard.edu/>. – Date of access: 19.04.2025.
25. Hekkert, M. Innovation system dynamics: a systematic review and future research directions / M. Hekkert, K. Weber // *Technological Forecasting and Social Change*. – 2022. – № 174. – P. 121-128.
26. Hung, H. The China boom: why China will not rule the world / H. Hung. – New York: Columbia University Press, 2015. – 260 p.
27. Johannessen, J.-A. China's Innovation Economy: Artificial Intelligence and the New Silk Road / J.-A. Johannessen. – Abingdon: Routledge, 2021. – 169 p.
28. Kroeber, A.R. China's economy: what everyone needs to know / A.R. Kroeber. – Oxford: Oxford University Press, 2020. – 464 p.
29. Landes, W. The Economic Structure of Intellectual Property Law / W. Landes. – Cambridge: Harvard University Press, 2019. – 448 p.
30. Lemley, M. Intellectual Property in the New Technological Age / M. Lemley. – New York: Wolters Kluwer, 2023. – 1200 p.
31. Li, N. Towards a green economy: Coevolution of environmental policy and innovation system in China / N. Li, Q. Lu // *Environmental Science and Pollution Research*. – 2022. – № 29. – P. 122-131.

32. Li, X. The role of government in China's national innovation system: an evolutionary perspective / X. Li, Y. Wang // *Journal of Chinese Economic and Business Studies*. – 2022. – № 20(4). – P. 385-402.
33. Liu, Y. Technological catch-up and innovation system development in China: the case of the high-speed rail industry / Y. Liu, T. Buck // *Technological Forecasting and Social Change*. – 2021. – № 162. – P. 120-136.
34. Lundvall, B.Å. Innovation system research and innovation policy: from market failures to system failures / B.Å. Lundvall, E. Lorenz, K.J. Joseph // *Industrial and Corporate Change*. – 2021. – № 30(1). – P. 207-227.
35. Mattes, J. The co-evolution of environmental policy instruments and national innovation systems: Towards a conceptual framework / J. Mattes, J. Weyer // *Environmental Innovation and Societal Transitions*. – 2020. – № 36. – P. 116-130.
36. Mazzucato, M. Mission-oriented innovation policy: challenges and opportunities / M. Mazzucato, R. Rovelli // *Journal of Industry, Competition and Trade*. – 2023. – № 23(1). – P. 199-227.
37. Ministry of Science and Technology of the People's Republic of China [Electronic resource]. – Mode of access: <https://en.most.gov.cn/eng.htm>. – Date of access: 19.04.2025.
38. National Bureau of Statistics of China [Electronic resource]. – Mode of access: <http://www.stats.gov.cn/english>. – Date of access: 19.04.2025.
39. Naughton, B. The Chinese innovation system: toward global leadership? / B. Naughton // *The China Journal*. – 2021. – № 86. – P. 17-23.
40. Pila, J. *European Intellectual Property Law* / J. Pila, P. Torremans. – Oxford: Oxford University Press, 2023. – 656 p.
41. Porter, M.E. *Competitive strategy: techniques for analyzing industries and competitors* / M.E. Porter. – Cambridge: Harvard University Press, 2022. – 417 p.
42. Qian, Y. *How reform worked in China: the transition from plan to market* / Y. Qian. – Cambridge: The MIT Press, 2017. – 412 p.
43. Schilling, M. *Strategic management of technological innovation* / M. Schilling. – New York: McGraw-Hill Education, 2022. – 368 p.
44. Smil, V. *Invention and innovation: a brief history of hype and failure* / V. Smil, T. Fannon. – Cromwell: Recorded Books, 2023. – 240 p.
45. SSRN – Intellectual Property Law eJournal [Electronic resource]. – Mode of access: <https://www.ssrn.com/en/index.cfm/ip/>. – Date of access: 19.04.2025.
46. Stanford Law School – Center for Internet and Society [Electronic resource]. – Mode of access: <https://cyberlaw.stanford.edu/>. – Date of access: 19.04.2025.

47. Stim, R. Patent, Copyright & Trademark: An Intellectual Property Desk Reference / R. Stim. – Berkeley: Nolo, 2023. – 624 p.
48. Sunder, M. From Goods to a Good Life: Intellectual Property and Global Justice / M. Sunder. – New Haven: Yale University Press, 2021. – 304 p.
49. Tidd, J. Managing innovation: integrating technological, market and organizational change / J. Tidd, J.R. Bessant. – Hoboken: Wiley, 2024. – 669 p.
50. United States Patent and Trademark Office (USPTO) [Electronic resource]. – Mode of access: <https://www.uspto.gov/>. – Date of access: 19.04.2025.
51. Wan, F. Innovation system, technological capabilities and export performance: Evidence from Chinese manufacturing firms / F. Wan, J. Zhang // Technology Analysis & Strategic Management. – 2021. – № 33(3). – P. 312-325.
52. Wang, Y. Regional innovation systems and economic development in China: a spatial econometric analysis / Y. Wang, Y. Zhou // Growth and Change. – 2020. – № 51(4). – P. 21-41.
53. World Intellectual Property Organization (WIPO) [Electronic resource]. – Mode of access: <https://www.wipo.int/>. – Date of access: 19.04.2025.
54. WTO – TRIPS Agreement [Electronic resource]. – Mode of access: https://www.wto.org/english/docs_e/legal_e/27-trips_01_e.htm. – Date of access: 19.04.2025.
55. Xu, Ch. Innovative variant of the development of the Chinese economy / Ch. Xu, A.S. Troshin // Innovations and investments. – 2021. – № 3. – P. 31-35.
56. Zhang, J. China's national innovation system and the global knowledge economy / J. Zhang, S. White // Routledge Handbook of Chinese Culture and Society. – 2021. – № 3. – P. 105-122.