香港再出發
HONG KONG COALITION

HONG KONG REGIONAL INTELLECTUAL PROPERTY TRADING CENTRE

DEVELOPMENT STRATEGY

MAY 2024

Table of Content

Foreword 4
Executive Summary 7
I. Background and Current Status of Hong Kong as a Regional Intellectual Property Trade Centre 7
II. Opportunities and Challenges for Intellectual Property Development in Hong Kong 10
III. Strategies for Promoting Intellectual Property Trade Development in Hong Kong 13
Chapter 1: Background and Current Status of Hong Kong's Development as a Regional Intellectual Property Trade Centre 26
1.1 National "14th Five-Year Plan" clearly designates Hong Kong as a Regional Intellectual Property Trade Centre 27
1.2 International Intellectual Property Trade Development Trends 29
1.2.1 A robust intellectual property protection system is an important guarantee for IP trade 30
1.2.2 Governments Play a Significant Role in Promoting the Development of Intellectual Property Trade 30
1.2.3 The IP Pledge Financing Model is increasingly gaining attention 31
1.2.4 The Roles of the Government and the Market in Intellectual Property Trading Complement Each Other 32
1.3 Development of Intellectual Property Trade in China 33
1.3.1 China is Number One in Global Patent Applications 33
1.3.2 Rapid Growth in Intellectual Property Exports, but with Significant Potential 34
1.3.3 Expanding Scale of Overseas Licensing for Pharmaceutical Patents 35
1.3.4 Maturation of the Intellectual Property Transaction Network in Mainland China 37
1.4 Current State of Intellectual Property Trade in Hong Kong 37
Chapter 2: Opportunities and Challenges for Hong Kong in Developing a Regional Intellectual Property Trade Centre 40
2.1 Advantages of Hong Kong in Developing Intellectual Property Trade 41
2.1.1 Mature and Robust International Financial System 41
2.1.2 Well-developed Legal System and Professional Arbitration Services 42
2.1.3 Strong R&D and Innovation Capabilities, Especially in the Biomedical Field 43

2.1.4 Bi-directional Internationalized Network 45
2.2 Problems and Challenges Facing the Development of Intellectual Property Trade in Hong Kong 46
2.2.1 Patent Transactions Require High Professionalism 46
2.2.2 Hong Kong Market is Relatively Small, and High-Quality Local Patents are Relatively Scarce 47
2.2.3 Obstacles in Cross-Border Intellectual Property Trade Between Hong Kong and Mainland China 51
Chapter 3: Strategies to Promote the Development of Intellectual Property Trade in Hong Kong 53
3.1 Strategic Directions 54
3.1.2 Leveraging Hong Kong's Strengths, Including Financial and Professional Service Advantages 57
3.1.3 Building an Intellectual Property Trade Platform with Bilateral Connectivity Between the Mainland and Overseas 59
3.1.4 Using biomedicine as an Entry Point, Systematically Establish an IP Trading Centre 60
3.1.5 Phased Long-Term System Deployment 62
3.2 Strategic Recommendations 63
3.2.1 Pilot Phase 63
3.2.2 Short Term 69
3.2.3 Medium to Long Term 79
Summary 88
Acknowledgement 89

List of Figures

Figure 1: Gloal Intellectual Property Royalties.....29
Figure 2: Patent Application Numbers and Share by the Top Five Intellectual Property Offices (2013-2022).....34
Figure 3: Global Intellectual Property Exports in 2021 (in million USD).....35
Figure 4: Number of Overseas Licenses and Total Transaction Amount for Chinese Innovative Drugs 36
Figure 5: Intellectual Property Royalties in Hong Kong (2012-2022) (in million HKD) 39
Figure 6: Percentage share of exports of services by service component, 2022.....48
Figure 7: Cumulative Number of Valid Trademarks, Patents, and Designs Registered / Approved in Hong Kong 49
Figure 8: Geographic Origin of Published Patent Applications in Hong Kong.....49
Figure 9: Number of Patent Applications and Registrations / Approvals in Hong Kong 50
Figure 10: Five Strategic Directions for Developing Hong Kong as a Regional Intellectual Property Trade Centre.....54
Figure 11: Strategy 2: The Platform's Role in Bilateral Connectivity.....60
Figure 12: Phased Long-Term Systematic Layout.....62
Figure 13: South Korea's Intellectual Property Secured Loan Process Flow Chart.....73

Foreword

Developing Hong Kong as a regional intellectual property trade centre is not only an inherent need for the diversification and enhancement of Hong Kong's international competitiveness but also an important part of better integrating into the national development strategy. The national "14th Five-Year Plan" proposes to "support Hong Kong in building a regional intellectual property trade centre." As the "14th Five-Year" period approaches its final two years, Hong Kong should swiftly implement strategies to promote the development of intellectual property trade, fulfilling national expectations.

We are pleased to see that the Hong Kong Government's fiscal budget for 2024 to 2025 includes initiatives like the "Patent Box" tax incentive and the establishment of a World Intellectual Property Organization (WIPO) Technology and Innovation Support Centre in Hong Kong. Additionally, on April 30, the government briefed the Legislative Council's Commerce and Industry, and Innovation and Technology Committee on the progress of developing Hong Kong as a regional intellectual property trade centre. However, we believe that Hong Kong still needs a more focused and detailed strategic plan for intellectual property trade.

As a civil society group in Hong Kong that is committed to understanding Hong Kong and dedicated to national development, the Hong Kong Coalition is duty-bound to coordinate and utilize social resources in collaboration with the nation and assist the Hong Kong Government in jointly promoting the construction of the Hong Kong Regional Intellectual Property Trade Centre. The Alliance has organized a team of local intellectual property industry experts and scholars as advisors and commissioned the One Country Two Systems Research Institute to draft a "Hong Kong Regional Intellectual Property Trade Centre Development Strategy" report, which involved consultations with over a hundred industry experts and analysis of domestic and international trends and case studies.

The report is divided into three chapters with a clear structure. The first chapter outlines the background, origin, and research purpose, and introduces the current state of intellectual property trade from international, national, and Hong Kong perspectives. The second chapter analyzes the strengths, limitations, opportunities, and challenges of developing intellectual property trade from a Hong Kong perspective. The third chapter builds on the first two to propose strategic directions and specific recommendations for promoting intellectual property trade in Hong Kong.

The trade of intellectual properties includes trademarks, patents, designs, and copyrights. With the booming creative industries and commercial brands, trademark and copyright transactions have been Hong Kong's strengths in intellectual property trade. However, in the context of the national strategy to build a strong country in science and technology and Hong Kong's efforts in building a local international innovation and technology centre, the report suggests that Hong Kong's intellectual property trade should focus more on patents and trade in technological achievements, especially prioritizing pharmaceutical patents and related technologies and processes, and trade in non-patented technical secrets, starting with these before gradually expanding to other types of intellectual property trade.

Intellectual property transactions involving technical achievements require specialized knowledge, and given Hong Kong's relatively small economic scale and nascent local innovation industry, although the local basic scientific research capability is outstanding, high-quality patent assets are still scarce. Therefore, Hong Kong needs greater incentives to leverage its advantages in connecting the mainland with overseas markets to stimulate and facilitate related intellectual property trade.

The report suggests a phased, systematic strategic approach, starting with utilizing existing resources in Hong Kong during a pilot phase, which can be initiated by social organizations that understand Hong Kong and the mainland, based on the platform of Hong Kong chambers of commerce, focusing initially on cancer drugs (including Chinese and Western medicines) as a demonstration, connecting mainland and overseas related pharmaceutical patent and trade markets. Concurrently, the report calls on the government to actively explore tax arrangements favorable to

intellectual property trade to give the market a clear signal. In the second phase, learning from pilot experiences, an intellectual property trade and a comprehensive service alliance should be established in the near future, to implement in the Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone, and leveraging the advantages of Hong Kong as a financial centre and in legal professional services to develop legal services for transactions related to biopharmaceutical patents and businesses such as patent pledge financing. At the same time, the report suggests that the Hong Kong Government should actively cultivate multifaceted talents needed for intellectual property trade. In the long-term third phase, based on a certain scale of trade, continue to expand the scope of transactions and improve the intellectual property trade service ecosystem, establishing a patent pool with regional influence in specialized areas. When conditions are mature, apply to the central government to establish an "authorization and licensing docking experimental zone" for mainland enterprises and universities in Hong Kong, breaking through existing barriers to cross-border trade with the mainland, and ultimately aiding in the activation of national patents and their "go global" policy, while Hong Kong can also form a joint force with the mainland to advance towards becoming a leading regional intellectual property trade centre.

Deputy Secretary-General of the Hong Kong Coalition

Maria Tam Wai Chu

May 2024

Executive Summary

I. Background and Current Status of Hong Kong as a Regional Intellectual Property Trade Centre

1. With the rapid development of technology and economic globalization, intellectual property has become an indispensable part of the modern industrial chain. Patent licensing and transactions generated by intellectual property rights are crucial for commercializing core scientific and technological research, maintaining innovation, and promoting technological advancement. The national government has high hopes for Hong Kong to build a regional intellectual property trade centre, as outlined in the "National Intellectual Property Development Outline (2021-2035)," which envisions significant achievements in intellectual property development by 2025. The "14th Five-Year Plan" also supports Hong Kong in this endeavor.

2. Currently, the Hong Kong Government launched the Original Grant Patent (OGP) system in December 2019, providing a direct path for patent applicants to seek up to 20 years of standard patent protection directly in Hong Kong without the need to first register outside Hong Kong. This system makes the patent application process more convenient and faster, helping to attract more patents to execute in Hong Kong. In the first half of 2024, the Hong Kong Government also proposed amendments to the "Tax Ordinance" to implement a "Patent Box" tax incentive, significantly reducing the profit tax rate for eligible intellectual property (mainly patents) to 5%. This provides greater incentives for enterprises to transform scientific research results into products or services with commercial potential, thus facilitating more intellectual property commercialization transactions.

3. Regarding the global development of intellectual property trade, the importance of intellectual property has been widely recognized worldwide, and international intellectual property trade has become increasingly frequent. According to the World Bank, global intellectual property royalty fees grew from $278 billion in 2012 to $446.2 billion in 2022, showing an overall upward trend. Through research on international intellectual

property cases, this report identifies four main development trends affecting intellectual property trade:

First, a robust intellectual property protection system is essential for intellectual property trade, with the development of intellectual property trade predicated on having a sound legal system to protect intellectual property rights and facilitate transactions.

Second, government plays a significant role in promoting the development of intellectual property trade, including helping enterprises use intellectual property to secure bank loans and promoting services related to intellectual property trade. Government involvement also includes implementing tax incentives, e.g. under Luxembourg's domestic intellectual property system the tax rate is 4.99%; Ireland also introduces a "Knowledge Development Box" tax rate of 6.25%. In the area of cross-border patent licensing transactions, Luxembourg and Ireland also offer tax exemptions under certain conditions, attracting cross-border patent licensing transactions and the construction of patent pools in both countries.

Third, the intellectual property pledge financing model is increasingly gaining attention, with countries advancing intellectual property financing business models and product innovation. This approach is a valuable solution for small and micro technology enterprises facing financing difficulties and a new means to promote further intellectual property innovation by enterprises.

Fourth, the roles of the government and the market complement each other in intellectual property trade, including the government’s role in guiding the early stages of market development and the market-driven long-term sustainable development of intellectual property trade, among other models.

4 Development of Intellectual Property Trade in China:

4.1 In recent years, the number of domestic patent applications in China has increased significantly, ranking first globally in international patent applications for four consecutive years, rising from about 830,000 in 2013 to about 1.62 million in 2022. As China's industries rapidly extend to both

ends of the value chain, the demand for utilizing international innovative achievements continue to grow, primarily through the introduction of advanced technologies. However, China's intellectual property exports are not prominent in global rankings.

4.2 Conversely, although countries like the USA and Japan lag behind China in terms of the number of patent applications, they excel in international intellectual property trade. According to the latest global intellectual property export data published by the World Intellectual Property Organization, the intellectual property export values for the USA and China in 2022 were $127.392 billion and $13.539 billion respectively, indicating a still significant gap. This suggests that the overseas markets for mainland China's intellectual property are still underexplored and have potential for development.

4.3 At the same time, an increasing number of First-in-Class or Best-in-Class innovative drugs are emerging from domestic pharmaceutical companies in China. Since 2015, the number and value of outbound licensing (License out) transactions by domestic pharmaceutical companies have been rising annually. In terms of total transaction value, the disclosed outbound licensing transactions in 2023 exceeded $46.5 billion. This indicates that the domestic pharmaceutical sector is active in patent licensing abroad and still has significant growth potential.

4.4 Currently, the intellectual property trade network in mainland China is becoming more mature, with a significant increase in the volume of intellectual property transactions. This has played an important role in facilitating resource allocation through the market, promoting innovation, and transferring and transforming intellectual property rights. Currently, there are several large intellectual property trading platforms in mainland China, as well as some regional and industry-specific intellectual property trading platforms and centres. Many of these platforms have integrated key links such as technology achievement display, evaluation, trading, and investment financing, offering operational services such as intellectual property transfer and licensing nationwide.

5 Development of Intellectual Property Trade in Hong Kong:

5.1 Currently, promoting intellectual property trade is precisely the new economic industry needed in Hong Kong, especially now that the new patent technologies generated by Hong Kong's innovation and technology development can develop synergistically and form a combined force. A thriving intellectual property trade can drive local R&D capabilities and promote technology transfer. It also aligns with the development of high-value-added industries and the promotion of innovative technology in Hong Kong, laying an important foundation for industrial transformation and upgrading, and enhancing Hong Kong's status and influence in the global economy.

5.2 In recent years, Hong Kong has been committed to becoming a regional intellectual property trade centre. By the end of 2022, Hong Kong's intellectual property royalty service exports reached HK$5.78 billion, and service imports reached HK$16.34 billion, both showing an upward trend. Given that mainland China possesses the world's largest number of effective patent resources, Hong Kong can act as a bridge connecting mainland and overseas markets, helping national patents to reach out and to become active in international markets. Additionally, as Hong Kong's local innovation and technology ecosystem forms and more technological achievements emerge, the royalty fees from technology-based patent exports have the potential to increase further.

II. Opportunities and Challenges for Intellectual Property Development in Hong Kong

6. Promoting the commercialization of intellectual property is crucial for the development of a knowledge-based economy. Hong Kong is leveraging its strengths to promote intellectual property trade as a new growth point to help revitalize the economy. Over the years, Hong Kong has utilized various advantages to promote intellectual property trade, enhancing its business environment and ensuring the legal rights of investors, businesses, and creators are protected. The main advantages of developing intellectual property trade in Hong Kong include:

First, a mature and robust international financial system. For many years, Hong Kong has been rated as one of the world's freest economies and acclaimed as a mature and robust trade hub in the Asia-Pacific region.

Second, a well-established legal system and professional arbitration services. Hong Kong's legal system is comprehensive, it is China's as well as the world's only unique judicial jurisdiction practicing bilingual common law (Chinese and English). It has an independent patent system and has been at the forefront of international trade dispute arbitration, offering extensive professional support and providing a reliable platform for resolving intellectual property disputes.

Third, strong research and development capabilities, especially in the biomedical field, enable the use of its R&D capabilities to internationally transform mainland medical patents via the Hong Kong platform, increasing the international market share of mainland medical patents.

Fourth, a bi-directional international network. Under the "One Country, Two Systems" framework, Hong Kong has the potential to become a hub for connecting domestic and international patents in the future.

7. As patents serve as a crucial system for protecting innovation and promoting technological advancement, the trade of technological intellectual property results, including patents and trade secrets, is receiving increasing attention and showing more development potential. While the patent trade welcomes development opportunities, Hong Kong should actively address potential challenges in patent trade development, including:

First, patents, as trademarks, inherently possess certain special characteristics which generally tend to confidential transactions, make it hard for buyers and sellers to match, with high transaction costs and low frequency, and the pricing of patent technologies can vary greatly. Therefore, patent transactions require a high level of professionalism, but Hong Kong currently lacks sufficient multidisciplinary talents who are familiar with patent ownership information, value assessment, industry development, and market application prospects, it is also lacking platform infrastructure that is active, information-centralized, well-supported, and

efficiently operated.

Second, the development of innovation and technology in Hong Kong is just beginning, and its own market is relatively small. According to Hong Kong's service trade statistics, in 2022, intellectual property trade services accounted for only 0.9% of service trade exports. Although Hong Kong's basic scientific research capability is prominent, limited by the scale of a small economy, high-quality local patents are relatively scarce. Most of Hong Kong's standard patents are reissued and original grant patents and with high local transformation costs, the application and registration of these are still in its early stages. Therefore, Hong Kong needs greater incentives to stimulate and facilitate intellectual property trade.

Third, there are still obstacles in cross-border intellectual property trade between Hong Kong and mainland China. Although there are increasingly fewer institutional barriers for mainland patents to conduct international trade via Hong Kong as a platform and bridge, there is no clear cross-border trade pathway and market guidance, many operational details have not been finalized, including legal term differences which make patent dispute resolution highly challenging; difficulties in certifying trademarks make it hard for buyers to identify and authenticate patent details; additional transaction costs pose potential higher costs for mainland patents conducting commercial banking and insurance business in Hong Kong compared to registered companies holding patents, creating certain barriers to cross-border patent trade and becoming a hidden concern for patents "going global."

8. Therefore, Hong Kong needs to proactively establish interface entities for intellectual property trade engagement with Mainland China and overseas, reducing the uncertainty caused by legal differences between the two places, streamlining cross-border trade pathways, reducing cross-border transaction costs, and providing value-added services related to intellectual property trade.

III. Strategies for Promoting Intellectual Property Trade Development in Hong Kong

9. Developing Hong Kong into a regional intellectual property trade hub requires consideration of various factors, including national strategy, time requirements, talent and resource concentration, and industry ecosystem. To this end, the following five strategic directions have been identified:

First, serve national needs: In global intellectual property import and export trade, China is the largest trade deficit country. In 2022, China's intellectual property trade deficit was approximately $30.9 billion, while the United States had an intellectual property trade surplus of about $74.2 billion. Hong Kong is expected to increase the total volume of China's intellectual property import and export trade through relevant institutional designs, organizational construction, human resource allocation, and financial assurances in the international intellectual property trade hub, reducing the trade deficit and helping the country to trade its vast volume of intellectual property, including transformation, sales, and licensing.

Second, leverage Hong Kong's strengths, including financial and professional services: Common models of intellectual property trade include licensing and transfer, as well as intellectual property pledge financing and securitization, which are highly linked to the financial system. Mainland China's intellectual property financing business volume remains relatively small, facing valuation difficulties and liquidity issues. Hong Kong can leverage its unique advantages in intellectual property financing, including having an offshore RMB fund pool, clearing centre, foreign currency centre, and bond market, while continuously exploring new financial investment channels with the mainland.

Third, build an intellectual property trade platform: Establish service carriers that connect the mainland and overseas bidirectionally. Form a service platform, bidirectionally connecting the mainland and overseas: an intellectual property trade and comprehensive service alliance, led by social organizations familiar with the situations in Hong Kong and mainland China, in cooperation with chambers of commerce, to promote intellectual property trade through pilot platforms. The main position of the platform is to conduct pilot services through specialized cooperation based

on the existing commercial platforms of the chambers of commerce, connecting the mainland and overseas pharmaceutical patent markets bidirectionally.
Based on the pilot, further build a more functional and broader coverage comprehensive service alliance, whose main functions include: gathering experts from the special administrative region government, and the financial, business, legal, biopharmaceutical, and innovative technology sectors to construct an interactive network; connecting suppliers and demanders of intellectual property trade; providing comprehensive support services for related stakeholders and trade suppliers and demanders.

Fourth, enter through biopharmaceuticals, orderly establish an intellectual property trade centre: The biopharmaceutical industry has a high compatibility with the construction of an "Intellectual Property Trade and Comprehensive Service Alliance". The nature of the biopharmaceutical industry is that the patents contained in pharmaceutical products are relatively simple and easy to facilitate transactions, which can serve as a pilot for developing a regional intellectual property trade centre. In the pilot phase, cancer treatment drugs, which are relatively common, can be selected as a precedent demonstration; at the same time, the country has a leading position in traditional Chinese medicine, which can also be brought to the global market through Hong Kong as a platform.

Fifth, a phased long-term system layout, including setting up a pilot phase, short-term, and medium-to-long-term goals. According to the principle of "from individual industries to other industries" and "from small-scale trading to large-scale trading," the development plan for Hong Kong to construct an "Intellectual Property Trading Platform" includes pilot, short-term, and medium-to-long-term goals. Here are the specific strategic suggestions:

10. Pilot Phase (Six Strategic Suggestions)

Goal: Utilize Hong Kong's existing resources to launch a pilot project for intellectual property trading services.

The pilot program will be the first to explore and prepare for promoting intellectual property trade work.

10.1 Developing an intellectual property trade centre is a grand plan for Hong Kong to meet national expectations and seek diversified economic development. As the "14th Five-Year Plan" is coming to an end, although work is urgent, it is even more important to lay a solid foundation and plan for the long term. The strategy of piloting first will be used to steadily advance and test the waters for future scale development.

Establish a specialized cooperative trial platform to connect the mainland and international intellectual property trade markets bidirectionally.

10.2 During the initial trial period, it is recommended that a Hong Kong social organization familiar with both Hong Kong and the mainland takes the lead, in collaboration with the Hong Kong Chamber of Commerce, to carry out the pilot work for intellectual property trading services. Based on the existing commercial platform of the Chamber, a trading and service platform for biopharmaceutical patents will be established, initially focusing on cancer drugs, a common type of medication (including Chinese and Western medicines).

10.3 At the same time, utilizing the network resources of the chamber of commerce with the mainland and overseas to connect relevant pharmaceutical patent trade markets bidirectionally. Through the pilot platform, mainland R&D companies can transfer or license patents domestically or internationally to overseas investors; overseas R&D companies can also introduce patents developed abroad to the domestic market.

10.4 The trial platform should particularly assist mainland pharmaceutical companies in opening up the "Belt and Road" markets, especially in regions like Southeast Asia and the Middle East. Hong Kong has a group

of politicians and businessmen who entered Southeast Asia earlier, whose local legal, cultural, and business experiences can positively influence the mainland business community. The trial platform can join forces with business and professional individuals with such backgrounds to share experiences and serve as a bridge for mainland pharmaceutical companies to enter overseas markets.

Focus resources on biopharmaceuticals (and Chinese medicine) intellectual property trading as a pilot demonstration.

10.5 Biopharmaceuticals are chosen as a pilot demonstration industry because their patents or intellectual property are relatively simpler, involving fewer patent numbers in drug formulas, making it easier to achieve output by buying and selling patents; regulatory and review systems are relatively mature, and patent transactions are relatively common in the mainland and overseas. Moreover, Hong Kong is already the largest biotechnology financing centre in Asia and the second largest in the world, which gives it inherent advantages in attracting biopharmaceutical companies.

10.6 The development of intellectual property rights for Chinese medicine in the mainland is rapid, but not many can truly "go global." As the "southern gateway" of the country, Hong Kong can play a role in attracting foreign investment to help Chinese medicine patents "go global" and assist in establishing modern standards, reorganizing technological solutions, and discovering technologies to add value to Chinese medicine formulas, creating competitive technological patents; combined with Hong Kong's financial advantages, diverse financial methods can be used for financing to promote research and development and transformation of results, forming a broader application of Chinese medicine technology patents.

Seek more beneficial tax incentives for the development of intellectual property trade from the government.

10.7 The government's role in promoting intellectual property trade is crucial, and guiding the development of intellectual property trade through tax incentives is an important part of this role. During the pilot phase, it is recommended that the government quickly explore and promote the

following tax incentive policies, including:

(i) Research and development expenditures generated by associated companies in the Shenzhen Park of the Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone should be considered as qualified R&D expenditures for the "Patent Box" tax incentives. The government should review whether to treat the expenditures generated by affiliated companies in recognized national science parks, especially those like the Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone, as qualified R&D expenditures for the "Patent Box" tax incentives.

(ii) Implement tax incentives for intellectual property brokerage businesses. Profits from intellectual property brokerage conducted in Hong Kong, managed and controlled centrally, should enjoy a 50% profits tax reduction (8.25% preferential tax rate) to promote the development of intellectual property brokerage businesses. Additionally, the government should also meet the latest international tax standards, setting substantial activity requirements such as employing a sufficient number of qualified full-time employees and incurring adequate operational expenses as deemed necessary by the tax authorities.

(iii) Increase efforts to reach and implement agreements to avoid double taxation with other economies. To promote intellectual property trade through Hong Kong and maximize the utility of the intellectual property trade centre globally, it is recommended to urge the special administrative region government to intensify efforts, actively reach and implement agreements to avoid double taxation with other economies, and align with neighboring economic entities.

Maximize synergistic effects and form a joint force with Hong Kong's policy direction.

10.8 Trial Platform in Accordance with the Policy Address

The trial platform will align with the "Patent Box" tax incentive arrangements mentioned in the Hong Kong Policy Address, as well as the development of a medical innovation hub. This includes the new "1+" drug approval mechanism implemented from November 1, 2023, and the

proposed future construction of a drug and medical device regulatory centre in Hong Kong, aiming to elevate from "second-tier approval" to "first-tier approval."

10.9 Promoting Clinical Trials and Biotechnology Development
With the Hong Kong Government's ongoing efforts to promote the development of clinical trials, plans are in place to establish the "Greater Bay Area International Clinical Trials Institute" in the Lok Ma Chau area. This positions Hong Kong to attract domestic and international biotechnology companies to relocate their R&D bases to the city, enhancing the efficient output of intellectual property in Hong Kong's biomedical industry.

Grasp market demand, conduct research, and prepare supporting services related to intellectual property trade.

10.10 While striving to facilitate pilot transactions of pharmaceutical patents between the mainland and overseas, the Hong Kong Chamber of Commerce can initially take on the role of certifying pharmaceutical patents. This includes the identification and certification of crucial information such as the validity of drug patents and evidence from clinical trial stages, particularly for cancer drug patents. This is especially aimed at making the certification services for non-local drugs in cross-border trade more convenient and authoritative, to facilitate clear transaction objectives for both parties involved in the patent transaction.

10.11 Additionally, the Chamber of Commerce also has the advantage of a diverse membership of institutions and professionals, which can be leveraged to encourage and coordinate the involvement of professionals from the pharmaceutical, legal, and financial sectors in the pilot projects. They can proactively engage with and understand the needs of both parties in intellectual property trade and grasp the demands for related supporting services. This effort will aid in preparing for the next phase of building support services for the intellectual property trading platform, especially by leveraging the advantages of Hong Kong as a financial centre to prioritize the development of pharmaceutical finance through early-stage research, preparation, and system design.

11. Recent Strategies (Five Strategic Recommendations)

Objective: To learn from pilot experiences and combine advantages from various sectors to build an intellectual property trade and comprehensive service alliance.

Construct an intellectual property trade and integrated service platform, and initially establish an intellectual property trade ecosystem.

11.1 Based on the experiences from established biopharmaceutical patent trade and service platforms, in collaboration with the Special Administrative Region Government, the innovation and technology sector, business sector, financial sector, legal sector, biopharmaceutical enterprises, and other professional sectors, an intellectual property trade and comprehensive service alliance will be formed, initially focusing on biomedicine.

11.2 The alliance will comprise stakeholders including banks and financial institutions, SMEs, startups, universities, legal, surveying and accounting professionals, and biopharmaceutical companies. The role of the service alliance will primarily be to connect the suppliers and demanders of intellectual property trade, including banks, universities, companies, and research teams, and gather legal and accounting talents to provide comprehensive support services. This helps manage negotiations, assessments, and legal services during transactions, integrating the needs of buyers, sellers, and intermediaries to establish a complete intellectual property trading chain.

Fully utilize the locational advantages and positioning of Hong Kong Science Park, Cyberport, and the developing Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone to establish physical institutions involved in the alliance.

11.3 The selection of sites for the Intellectual Property Trade and Comprehensive Services Alliance should consider the currently planned Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone, making it the main office, while expanding contact points to the Science Park and Cyberport. This integration connects major

innovation and technology industry bases in Hong Kong, seizing opportunities from various international conferences and local business collaborations. Leveraging the geographical advantage of bordering Shenzhen, the government values the opportunities for innovation and cooperation with the Greater Bay Area. In the long run, the alliance will enjoy the benefits of connectivity between Hong Kong and Shenzhen, facilitating two-way exchanges of talents from the mainland and Hong Kong, and creating a talent aggregation effect.

Leverage Hong Kong's advantages as a financial centre and in professional services industry to develop biopharmaceutical intellectual property pledge financing, valuation, insurance, and disposal services.

11.4 Currently, the local market in Hong Kong has not placed enough emphasis on intellectual property financing, and banks are reluctant to take risks in this area, also lacking experience. Therefore, the government is actively promoting development in this area. It is suggested that the Hong Kong Government could play a significant role in establishing recognized, reasonable standards with banks, insurance companies, and relevant stakeholders.

11.5 Regarding intellectual property pledge financing, it is advised to focus initially on the development of biopharmaceutical patent pledge financing, valuation, insurance, and disposal, and later on more comprehensive IP financing types (such as IP asset securitization). Using public resources effectively, reference models such as the "Qingdao model" for patent pledge insurance loans and South Korea's IP loan and financing models could be considered. Hong Kong should focus on developing biopharmaceutical patent pledge financing, valuation, insurance, and disposal in the short term, to advance IP financing.

11.6 Besides biopharmaceutical patent pledge financing, efforts should be made to guide and attract family offices settling in Hong Kong to invest in the biopharmaceutical industry. Family offices have a long-term investment perspective and focus on long-term returns, making them crucial investors for the development of the biopharmaceutical sector. The government and the "Intellectual Property Trade and Comprehensive Services Platform" should actively facilitate this engagement.

Leverage Hong Kong's legal advantages to develop IP trade-related arbitration and mediation, complementing and collaborating with national systems.

11.7 In the initial development phase, Hong Kong should utilize its legal advantages and robust intellectual property protection system to actively organize a team of legal professionals to support a range of IP trade-related arbitration and mediation tasks. This will enhance the predictability and deterrent power of IP transactions in Hong Kong, establishing a solid foundation for a robust and active IP trading platform. This report proposes four specific recommendations for developing IP legal services:

(i) Arbitration: In the short term, the alliance could gather Hong Kong legal professionals to contact guild organizations to form a specialized IP arbitration team, providing efficient, professional arbitration services funded by the government. The team would handle IP disputes, resolve conflicts, and provide binding arbitration decisions. Additionally, the government and alliance should actively promote Hong Kong's IP arbitration services on various platforms and international conferences to attract domestic and foreign enterprises and individuals to choose Hong Kong for IP arbitration.

(ii) Mediation: The alliance could establish a larger full-time or part-time IP mediation team to offer professional mediation services, helping parties reach agreements, reducing litigation costs and time, and protecting the legal rights of all parties.

(iii) Institutional improvement: In the early stages of forming the service alliance, Hong Kong could explore the possibility of establishing "unified patent litigation standards and compensation amounts" without violating common law principles, in collaboration with industry experts and government stakeholders, to enhance the predictability and deterrent power of litigation outcomes, promote the establishment of more patent courts, provide unified trial standards, and more efficient litigation procedures, improving its own development while providing references for the design of legal systems for the country.

(iv) Legal personnel training programs: Based on the establishment of an advisory group, design relevant training courses and seminars, and

collaborate with the academic sector, especially university law faculties and IP transfer departments, to cultivate professional IP lawyers and arbitration and mediation experts.

Set up intellectual property rights (IPR) trade-related courses to cultivate versatile talents needed for IPR trade.

11.8 In the recent phase, it is also recommended to facilitate cooperation between university Technology Transfer Offices (TTOs) and the government, trade development councils, and the business sector to co-organize courses. A comprehensive service alliance should consolidate information and skill demands from industry and academia, reducing communication costs. Moreover, Hong Kong can cooperate with mainland universities to jointly offer training courses in intellectual property management and operations, including but not limited to traditional legal knowledge related to intellectual property, such as intangible asset management operations. These courses could initially be piloted in Hong Kong universities' mainland branches, and then extended to other universities to jointly nurture talented individuals.

12 Medium to Long Term (Seven Strategic Suggestions)

Goal: To continue expanding the scope of trade and perfecting the IPR trade service ecosystem on a certain trade scale basis; actively integrate into the national development and become a leading international regional centre for intellectual property trade.

Expand the scope of transactions and improve service functions.

12.1 The sustainable development of IPR trade not only requires an efficient trading platform but also continual nurturing and strengthening of the entire IP ecosystem, allowing all participants in IP transactions to better connect, cooperate, and innovate. The IPR trade and comprehensive service alliance should, during its development phase, expand the transaction scope and improve service functions.

Develop IP trade categories beyond the biopharmaceutical industry.

12.2 The alliance could introduce intellectual properties in fields such as life and health technologies, artificial intelligence and data science, advanced manufacturing, and new energy technologies as priority options for expanding trade categories depending on the trade scale at the time. In the future, it could gradually include cultural and creative IPs and more diverse trading categories.

To further build full-chain services, cultivate patent pools, and develop mutual IP protection functions.

12.3 The alliance could consider cultivating and forming professional patent pools with regional influence as the IP trade ecosystem matures and carry out more types of transactions involving standard-essential patents, depending on industry trends and its own strengths.

12.4 Moreover, IP litigation is very common overseas. On the basis of transaction, legal, financial, and insurance services, the alliance could further explore the development of mutual IP protection functions (defensive NPEs), by either charging membership fees to purchase defensive patent portfolios and licensing to members or through cross-licensing among members, reducing the risk and costs of malicious litigation for member companies.
Use big data, cloud computing, blockchain, and artificial intelligence to continuously improve the technological advancement of the trading platform.

12.5 The intellectual property trading platform has high requirements for data collection and analysis. It is recommended to utilize technologies such as big data and cloud computing to gain a deep understanding of the market supply and demand, the value of intellectual property, and industry trends. Actively using blockchain technology will provide traceability and security for platform transactions. In terms of automated and personalized services, natural language processing, machine learning, and other artificial intelligence technologies can be employed to provide more accurate and efficient transaction services, thereby offering a better trading experience for both parties involved in the transaction.

Form synergy with the mainland to create a virtuous cycle of IP creation, protection, and trade.

12.6 After establishing industry scale, promote the integration of the alliance with major mainland IP platforms and science and innovation parks, establish permanent communication and cooperation channels, and develop IP financing, insurance, and trade in industries beyond biopharmaceuticals. Consider further expanding IP mutual protection functions in Hong Kong and the Greater Bay Area to enhance the alliance's capability to protect against malicious litigation.

12.7 It is suggested that Hong Kong should take the lead in cooperating with the mainland (especially the Greater Bay Area) in various aspects such as systems, laws, policies, and talent through the comprehensive service alliance, negotiate to refine legal policies, establish G2G official communication channels, clarify necessary policies and legal support, and promote regional resource circulation, effectively combining resources from Hong Kong and the mainland to promote overall national high-quality development.

12.8 Furthermore, Hong Kong could attract more mainland IP transaction operation companies, service institutions, and official agencies to expand and settle in Hong Kong, forming a synergy with the comprehensive service alliance, serving as a platform to attract mainland IP business. While leveraging Hong Kong's advantages, this would further drive the development of local IP transactions and also attract more participants from around the world, gathering more international resources.

Apply to the central government to establish a connectable pilot zone for the authorization and licensing of "dormant patents" from mainland intellectual property, state-owned enterprises, and universities in Hong Kong.

12.9 Once the intellectual property trade ecosystem in Hong Kong has matured, Hong Kong can apply to the central government to establish a "Licensing Permission Docking Pilot Zone." This zone would connect intellectual property from state-owned enterprises and mainland universities with overseas buyers to facilitate transactions. At this stage, it

is recommended to clarify the cross-border trade paths and market guidelines between state-owned enterprises, mainland universities, and Hong Kong, deepen the operational details in the trading process, and establish a green channel for mainland state-owned enterprises to expand their operations in Hong Kong.

12.10 For the mainland state-owned enterprises, universities, and researchers participating in the platform, an incentive system should be established, including providing research and development funding, government honors, opportunities for overseas exchange, and cooperative teaching positions to stimulate researchers' enthusiasm for the transformation of intellectual property achievements.

Coordinate and organize global high-tech and biopharmaceutical summits and expos.

12.11 With the expansion of the Intellectual Property Trade and Comprehensive Service Alliance and its establishment in locations such as Hong Kong Science Park, Cyberport, and the Lok Ma Chau Loop Hong Kong-Shenzhen Technology Innovation Cooperation Zone, actively utilize the alliance's liaison functions in each park to organize regular high-tech and biopharmaceutical summits and expos. Collaborate with the Hong Kong Science Park and Cyberport to promote Hong Kong's intellectual property trade opportunities and innovative research achievements.

12.12 In the long term, more overseas buyers, investors, and industry professionals could be invited to join the alliance in various membership forms. This would allow them to regularly receive information on Hong Kong's intellectual property transactions and research achievements, further expand the platform's international reputation and clustering effects, and promote Hong Kong as a leading international regional centre for intellectual property trade.

Chapter 1:

Background and Current Status of Hong Kong's Development as a Regional Intellectual Property Trade Centre

1.1 National "14th Five-Year Plan" clearly designates Hong Kong as a Regional Intellectual Property Trade Centre

With the rapid development of technology and economic globalization, intellectual property has become an indispensable part of the modern industrial chain. Patent licensing and transactions generated from intellectual property are crucial means to commercialize core scientific and technological research, maintain innovation, and promote technological advancement. The national vision, as outlined in the "Outline for Building a Powerful Intellectual Property Country (2021–2035)," aims to achieve significant results in IP development by 2025. The "14th Five-Year Plan" supports Hong Kong's development as a regional intellectual property trade centre. As early as 2019, the "Outline Development Plan for the Guangdong-Hong Kong-Macao Greater Bay Area" had already explicitly stated: "Strengthen intellectual property protection and utilization. Rely on the intellectual property cooperation mechanisms of Guangdong-Hong Kong, Guangdong-Macao, and the Pan-Pearl River Delta region to establish and perfect cross-border collaboration mechanisms for intellectual property cases, carry out intellectual property transactions, promote the rational and effective circulation of intellectual property, and establish a Greater Bay Area intellectual property information exchange mechanism and information sharing platform."

The country has high expectations for Hong Kong to establish itself as a regional intellectual property trade centre. In fact, the Hong Kong Intellectual Property Trading Working Group had already published the "Intellectual Property Trade Working Group Report" in 2015[1], which proposed recommendations for developing Hong Kong into a regional intellectual property trade centre and outlined a blueprint that set the direction for Hong Kong's intellectual property trade development. Subsequently, in December 2019, the Hong Kong Government introduced the Original Grant Patent (OGP) system, providing a direct pathway for patent applicants to seek up to 20 years of standard patent protection in Hong Kong without the need to first register outside Hong Kong, making the patent application process more convenient and faster, thereby help

[1] Hong Kong Intellectual Property Trade Working Group (2015). Report of the Intellectual Property Trade Working Group. Online search date: March 12, 2024. Website: https://www.legco.gov.hk/yr14-15/chinese/panels/ci/papers/cicb1-680-1-c.pdf

attracting more patents to establish in Hong Kong. In the first half of 2024, the Hong Kong Government also proposed amendments to the "Tax Ordinance" to the Legislative Council, to implement a "Patent Box" tax incentive, which would significantly reduce the profits tax rate on eligible intellectual property (primarily patents) to 5%, providing greater incentives for businesses to invest resources in innovative research and development and to commercialize their research findings into products or services with commercial potential, thereby facilitating more intellectual property commercialization transactions.

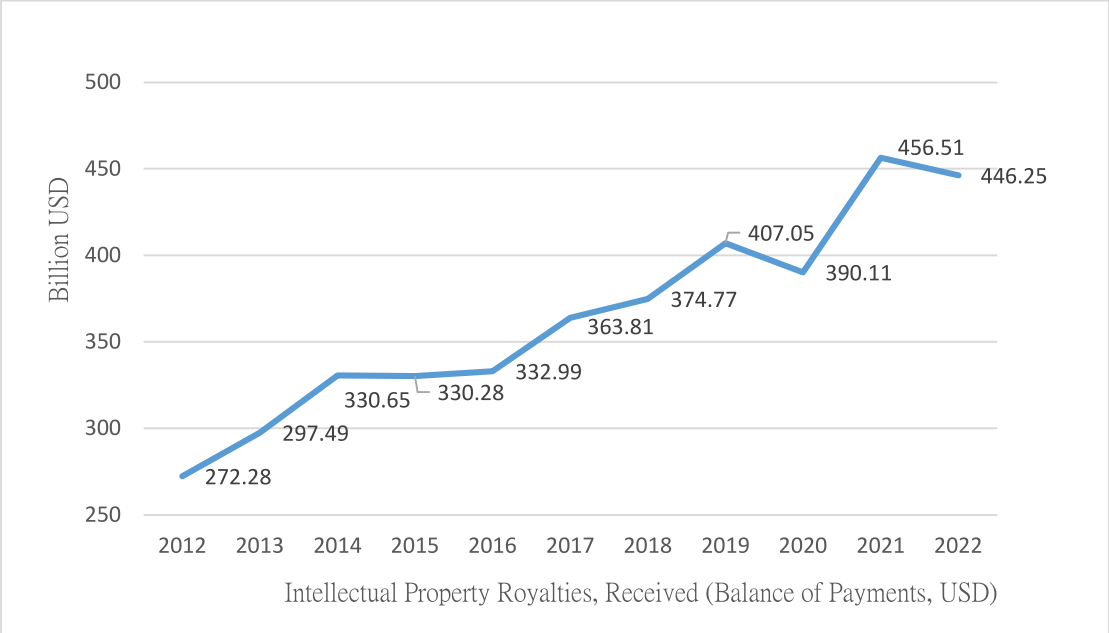
For many years, various sectors in Hong Kong have worked together to promote the development of intellectual property, leveraging Hong Kong's inherent advantages. These include a legal and financial system that integrates with international standards, making it the only unique jurisdiction in the country and globally to operate under a bilingual (Chinese and English) common law system. With its well-established arbitration system and excellent professional support services, it has achieved certain milestones. On April 30, the Hong Kong Government authorities briefed the Legislative Council Panel on Commerce and Industry, and Innovation and Technology about the measures and progress in developing Hong Kong as a regional intellectual property trade centre[2]. This study aims to further seek breakthroughs for promoting Hong Kong as a regional intellectual property trade centre and suggests using pharmaceutical patents as a pilot demonstration for building Hong Kong’s cross-border IP trade and service platform. It proposes a more focused and detailed development strategy recommendation to meet the national expectations, develop into a first-class regional intellectual property trade centre, and better promote the commercialization of national intellectual property, connecting the mainland and overseas IP markets, and acting as a 'super connector' between the mainland and the rest of the world.

[2] Legislative Council Document No. CB(1)506/2024(02), Progress in Building Hong Kong as a Regional Intellectual Property Trading Center, online search date: May 2, 2024. Website: https://www.legco.gov.hk/yr2024/chinese/panels/ci/papers/ci20240430cb1-506-2-c.pdf

1.2 International Intellectual Property Trade Development Trends

With the transformation of the global economy and the development of technology, the knowledge economy has become an important driving force of economic growth and innovation. In the era of a knowledge-based economy, the importance of intellectual property has been widely recognized worldwide. At the same time, as traditional goods trade gradually shifts towards trade based on knowledge and technology, global intellectual property trade has become more frequent. According to the World Bank, global intellectual property royalties grew from $278 billion in 2012 to $446.2 billion in 2022, showing an overall upward trend (see Figure 1).

Figure 1: Global Intellectual Property Royalties



Data source: World Bank[3], One Country Two Systems Research Institute.

The development of intellectual property (IP) trade is a result of the overall ecosystem development of intellectual property. By studying cases in the international intellectual property field, the report identifies the following four main development trends affecting IP trade:

[3] World Bank (2024). Total global intellectual property trade. Online search date: February 22, 2024. Website: https://data.worldbank.org.cn/indicator/BX.GSR.ROYL.CD

1.2.1 A robust intellectual property protection system is an important guarantee for IP trade

The development of IP trade is predicated on having a good legal system to protect intellectual property. Countries with more frequent IP transactions are continuously improving their property protection systems. For example, the United States is one of the countries that implemented an IP system earlier, with a well-established IP legal framework including Patent Law, Trademark Law, Copyright Law, etc., providing a solid institutional guarantee for subsequent IP trade. To protect its national IP, South Korea established a specialized Intellectual Property Court, not only enhancing the professionalism with which the country handles IP cases but also gaining more international recognition. European IP protection systems have always been among the world leaders, and their exploration of IP protection-related systems is evolving with time. As early as 2011, the European Union proposed a new IP protection strategy. In terms of patents, the European Commission proposed legislative recommendations to establish a unified patent system. This system has uniform effect within the EU member states, which, to some extent, better protects IP achievements and transactions of various countries within the EU, while also further encouraging innovation and R&D. Since 2012, the Singapore government has set up a specialized Intellectual Property Court and continued to issue guidelines for the IP court. Additionally, the Singapore government has been continuously improving IP protection-related regulations, such as the Copyright Act of 2021, etc., enabling Singaporean small and medium enterprises to better protect intellectual property and promote IP transactions.

1.2.2 Governments Play a Significant Role in Promoting the Development of Intellectual Property Trade

In the international community, many countries and regions have recognized the importance of intellectual property (IP) trade for national technological development and economic growth. Governments play a crucial role in supporting the development of IP trade, and as a result, numerous governments have formulated a series of policies to promote IP trade. In 2021, Singapore announced the "Singapore IP Strategy 2030" (SIPS 2030), a ten-year plan aimed at consolidating its position as a global and Asian hub for technology, innovation, and business. Additionally, the

Singapore government provided substantial financial support for the country's property trade. From 2014 to 2018, the Singapore government initiated an IP financing scheme worth a total of SGD 100 million, which involved the government and banks sharing related debt risks to help Singaporean businesses obtain bank loans using intellectual property.

Government agencies also play an important role in promoting IP trade. For example, in the United States, the Small Business Administration (SBA) plays a crucial role in promoting the development of small and medium enterprises (SMEs). The main functions of the SBA are to provide credit guarantees and credit enhancement for American SMEs, creating a good platform for communication and exchange between banks and businesses. The SBA primarily offers three services in the field of IP transactions in the US: providing loan guarantees for SMEs, authorizing Small Business Investment Companies to finance startups, and offering re-guarantee services for SME financing. These are examples of services provided by US government agencies to promote domestic IP trade.

Some governments have formulated tax incentives to promote local IP trade development. For instance, under Luxembourg's IP regime, the tax rate is 4.99%, eligible patents and software and the like will all enjoy this tax rate; Ireland has also introduced the "Knowledge Development Box," offering a tax rate of 6.25% for eligible patents in the country. Additionally, in terms of cross-border patent licensing transactions, Luxembourg does not require local withholding tax for foreign companies on patent licensing income originating from Luxembourg; Ireland allows for withholding tax exemptions under certain conditions for countries that have signed double taxation avoidance agreements. These policies attract local cross-border patent licensing transactions and the formation of patent pools in both countries.

1.2.3 The IP Pledge Financing Model is increasingly gaining attention

Although the current state of IP development and market economy maturity varies among countries, more and more countries are paying attention to IP pledge financing, a new financing method. In fact, IP pledge financing is an excellent way for technology-oriented small and micro enterprises to solve financing difficulties. Compared to equity financing, IP holders will

not dilute their IP ownership rights, and it also promotes further IP innovation in enterprises. For example, the South Korean government has established the Korea Technology Exchange Centre (KTTC) to provide a professional venue for IP pledge financing. Furthermore, KTTC implements a market access system, requiring related intermediary institutions such as guarantee institutions and technology institutions to obtain government permission to participate in IP pledge financing business. South Korea also has a professional value assessment system for property pledge financing, mainly conducted by institutions like the Korea Institute of Science and Technology, which assesses the IP goods provided by enterprises, allowing them to obtain loans from guarantee institutions.

The China National Intellectual Property Administration, the China Banking and Insurance Regulatory Commission, and the National Development and Reform Commission have also organized the collection of case studies on intellectual property pledge financing and insurance to serve as typical examples. According to the "Notice on Further Strengthening Intellectual Property Pledge Financing Work" and the "Action Plan for Intellectual Property Pledge Financing to Benefit Enterprises in Industrial Parks (2021—2023)", based on cases submitted by relevant local departments and financial institutions, the first batch of 20 typical cases was selected to promote IP financing business model and product innovation[4].

1.2.4 The Roles of the Government and the Market in Intellectual Property Trading Complement Each Other

Countries, in the process of engaging in intellectual property trading and related activities, utilize the roles of 'government' and 'market' to varying degrees. The United States primarily relies on market mechanisms in IP trade, building its own trading platforms where buyers and sellers strongly interact, and the U.S. government only participates to a certain extent while also refining laws to ensure a healthy and orderly market. However, the U.S. market is fraught with cases of malicious intellectual property litigation, which is not a model for future adoption by Hong Kong or mainland China.

[4] State Intellectual Property Office, Notice on the Release of the First Batch of Typical Cases of Intellectual Property Pledge Financing and Insurance, 2023, online search date: March 11, 2024. Website: https://www.cnipa.gov.cn/art/2023/1/20/art_550_181567.html

Countries like Singapore and South Korea, on the other hand, involve their governments more directly in building relevant departments or investments to vigorously promote the development of the intellectual property trading market. Generally, governments tend to play a guiding role in the early stages of market development, but the long-term sustainable development of intellectual property trade still needs to be driven further by market forces.

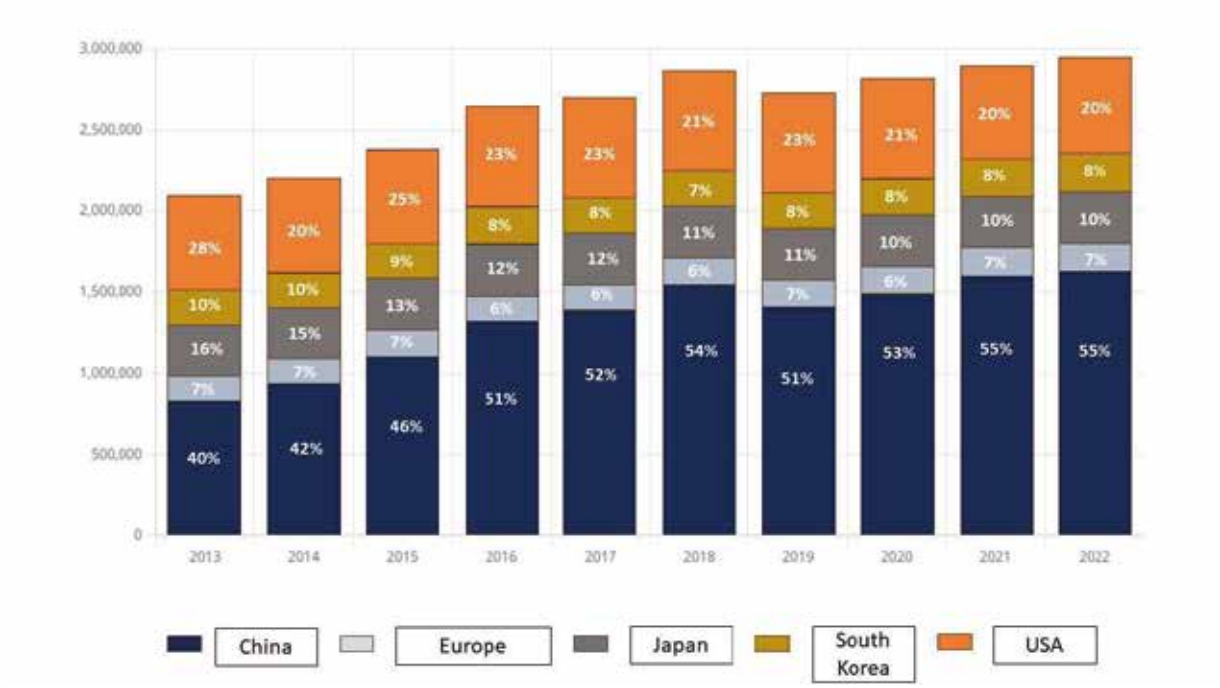
1.3 Development of Intellectual Property Trade in China

1.3.1 China is Number One in Global Patent Applications

In recent years, China has made significant progress in scientific research and domestic innovation. According to data, the number of patent applications in China increased from approximately 830,000 in 2013 to about 1.62 million in 2022, holding the top spot in global patent applications for four consecutive years[5]. Among the top five intellectual property offices worldwide, the China National Intellectual Property Administration has the highest share of applications, accounting for about 55%, followed by the United States at 20%. This trend indicates China's increasingly important role in the global intellectual property system.

[5] Ministry of Commerce of the People's Republic of China (2023). Chinese applicants have ranked first in the world in filing PCT international patent applications for four consecutive years. Online search date: February 23, 2024. URL: http://tradeinservices.mofcom.gov.cn/article/lingyu/jsmyi/202312/160075.html

Figure 2: Patent Application Numbers and Share by the Top Five Intellectual Property Offices (2013-2022)



Data source: WIPO Intellectual Property Statistics Data Center[6], One Country Two Systems Research Institute.

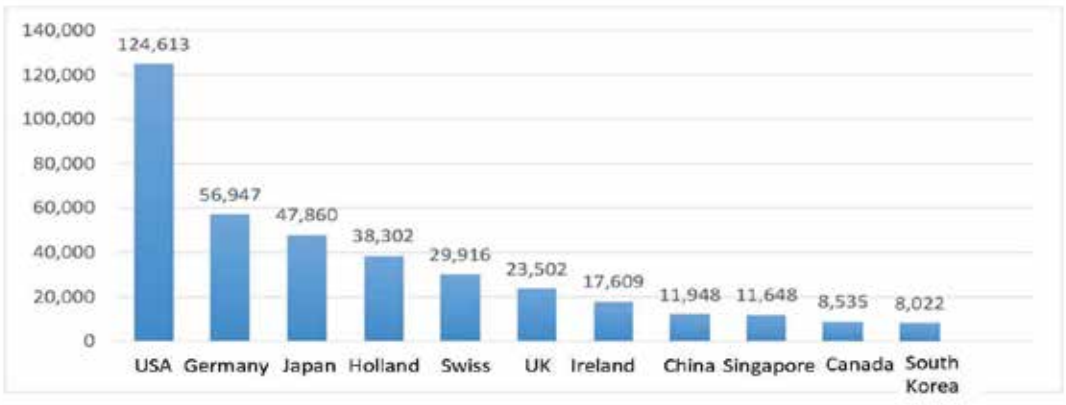
1.3.2 Rapid Growth in Intellectual Property Exports, but with Significant Potential

As China's industries move towards the higher end of the value chain, the demand for international innovation outcomes continues to grow, and patent technology exports have also increased significantly. From $3.2 billion in 2002 to $57.8 billion in 2022, with an average annual growth rate of 15.5%. However, China's intellectual property exports do not rank prominently globally. In contrast, although countries like the United States and Japan lag behind China in the number of patent applications, they perform excellently in international intellectual property trade. According to the latest global intellectual property export data released by the World Intellectual Property Organization, in 2021, the United States ranked first in intellectual property exports ($124.613 billion), while China's intellectual property exports ranked eighth globally ($11.948 billion), less than one-tenth of the United States (see Figure 3). This indicates that the

[6] World Bank (2024). Total global intellectual property trade. Online search date: February 22, 2024. Website: https://data.worldbank.org.cn/indicator/BX.GSR.ROYL.CD

overseas market for mainland intellectual property still needs to be explored and developed. In 2022, the intellectual property export amounts for the United States and China were $127.392 billion and $13.539 billion respectively, the disparity remains substantial.

Figure 3: Global Intellectual Property Exports in 2021 (in million USD)



Data source: Commercial services trade database of the World Trade Organization (WTO) and the United Nations Conference on Trade and Development7, One Country Two Systems Research Institute.

1.3.3 Expanding Scale of Overseas Licensing for Pharmaceutical Patents

In recent years, driven by policies and other factors, the pharmaceutical manufacturing industry has accelerated the transformation of R&D achievements, with more and more First-in-Class or Best-in-Class [8] innovative drugs emerging from domestic pharmaceutical companies. Since 2015, the number and amount of licensing-out transactions [9] by domestic pharmaceutical companies have been increasing annually. As

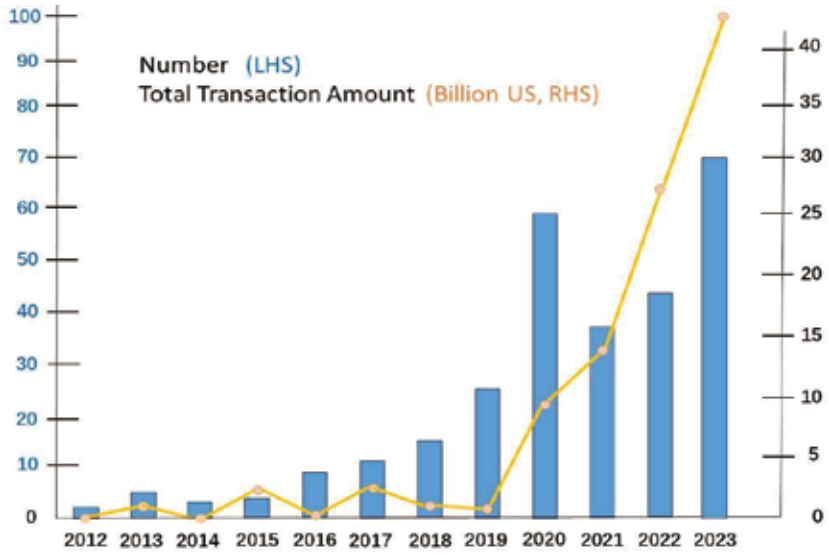
[7] World Trade Organization (WTO) and United Nations Conference on Trade and Development Business Services Trade Database (2023). Global Innovation Index. Online search date: February 23, 2024. Website: https://www.wipo.int/global_innovation_index/zh/news/2023/news_0012.html

[8] Note: First in Class means the first new drug, which is the first drug with a new mechanism that can treat a certain disease; while Best in Class means the best therapeutic performance among similar drugs and can solve clinical problems that cannot be solved by drugs with the same target. needs, and can bring optimal treatment options to patients in clinical applications.

[9] Note: License out means that the company conducts early research and development of drugs, and then authorizes the project to other pharmaceutical companies for later clinical research and development and marketing. Generally, the two parties sign a drug technology license agreement, and the product licensor transfers intellectual property rights, technical information, and research and development data to The license is granted to the licensee so that the company can receive a commission on subsequent and future sales, and the licensee can obtain commercialization rights for R&D, production and sales in its region or globally.

shown in Figure 4, by the end of 2022, the total number of licensing-out transactions for Chinese innovative drugs had exceeded 220.

Figure 4: Number of Overseas Licenses and Total Transaction Amount for Chinese Innovative Drugs



Data sources: China Pharmaceutical Innovation Promotion Association[10], NextPharma[11], and One Country Two Systems Research Institute.

According to the latest data, there were 70 licensing-out transactions for innovative drugs in 2023, an increase of 32% compared to 44 in the previous year. In terms of total transaction value, the disclosed total amount for licensing-out transactions in 2023 exceeded $46.5 billion. This indicates that the demand for licensing-out transactions of Chinese innovative drugs is substantial and growing. In the future, Southeast Asian countries, and other countries along the 'Belt and Road' initiative will also constitute a huge market demand for Chinese pharmaceuticals. The domestic pharmaceutical sector is relatively active in patent licensing-out and still has considerable development potential.

[10] China Pharmaceutical Innovation Promotion Association (2023). Analysis on the current situation of license out of China's innovative drugs. Online search date: February 29, 2024. Website: http://www.phrda.com/artilce_30341.html?cId=1

[11] NextPharma (2024). The big winner in China's innovative drug license out in 2023. Online search date: April 17, 2024. Website: https://xueqiu.com/8965749698/274770954

1.3.4 Maturation of the Intellectual Property Transaction Network in Mainland China

In recent years, Mainland China has seen rapid development in various property markets, including technology and intellectual property markets. The diversity of transactions has been expanding, and the volume of intellectual property transactions has significantly increased. These developments have played a crucial role in resource allocation through the market mechanism, promoting innovation and the transfer and transformation of intellectual property.

Currently, the major intellectual property trading platforms in Mainland China include the Beijing Intellectual Property Exchange, Shanghai Intellectual Property Exchange, Guangzhou Intellectual Property Exchange, and the Shenzhen Stock Exchange Science and Technology Achievement and Intellectual Property Exchange Centre. Besides these exchanges, there are also regional and industry-specific intellectual property trading platforms and centres. Many of these platforms have integrated key processes such as display, assessment, transaction, and investment financing, offering services like IP transfer and licensing nationwide. These trading centres actively promote national intellectual property transactions and cooperation within their respective regions and fields. However, there are some issues, such as insufficient marketization, etc. Many intellectual property transactions in the mainland are facilitated by government initiatives, and genuinely market-driven transactions remain relatively few and inactive, indicating potential for further development.

1.4 Current State of Intellectual Property Trade in Hong Kong

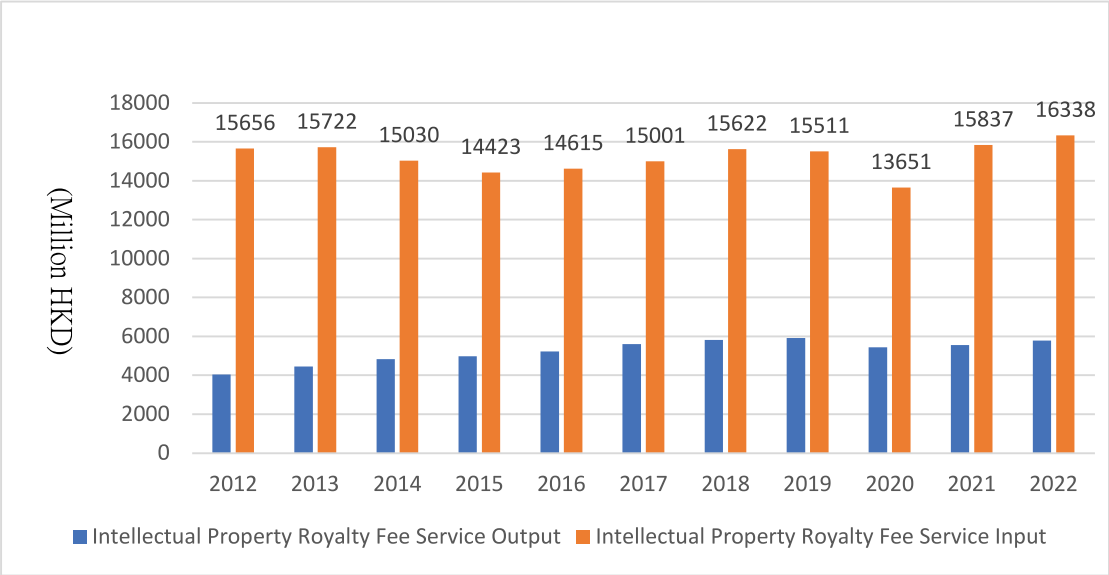
For many years, as a significant international financial centre, Hong Kong has faced the need for economic diversification and industrial transformation in response to the evolving era and global economic changes. Strengthening technological innovation and the development of new industries is essential for Hong Kong to maintain a competitive position in the global economy. Intellectual property, especially the transfer and transformation of technology patents, is one of the key avenues

to achieve this goal, enabling the circulation of technological resources and helping companies convert their intellectual property into valuable products. The national "14th Five-Year Plan" proposes that Hong Kong should develop into a regional intellectual property trading centre, an international innovation and technology hub, and an Asia-Pacific international legal and dispute resolution service centre, which would synergistically boost its development.

Currently, promoting intellectual property trade is precisely the new economic industry that Hong Kong requires, especially now that it can synergize with the new patent technologies emerging from Hong Kong's innovation and technology development. A vibrant intellectual property trade can enhance local research and development capabilities and promote technology transfer. It also complements Hong Kong's role as a hub for innovation and science, crucial for developing high-value-added industries and driving technological innovation. This is essential for Hong Kong's industrial transformation and upgrading, enhancing its status and influence in the global economy.

In recent years, Hong Kong has been committed to becoming a regional intellectual property trading centre, maintaining close cooperation with international intellectual property professionals and patent holders, continuously improving relevant laws, and promoting the development of intellectual property trade. According to the latest statistics, as of 2022, Hong Kong’s intellectual property service exports reached HK$5.78 billion, and service imports reached HK$16.34 billion, both showing an upward trend.

Figure 5: Intellectual Property Royalties in Hong Kong (2012-2022) (in million HKD)



Data source: Hong Kong Census and Statistics Department12, One Country Two Systems Research Institute.

The fees for the use of intellectual property services exported from Hong Kong currently account for only about 30% of the import fees. With Mainland China having the largest number of effective patents globally, Hong Kong can act as a bridge connecting the mainland and overseas markets, helping national patents reach international markets. Additionally, as Hong Kong's local innovation and technology ecosystem takes shape and more and more technological achievements emerge, there is a possibility that the usage fees for technology-based patent exports may increase further.

[12] Census and Statistics Department, Government of the Hong Kong Special Administrative Region. Service output and input by service components, service groups and service items. Online search date: March 1, 2024. Website: https://www.censtatd.gov.hk/tc/web_table.html?id=420-57001#

Chapter 2:

Opportunities and Challenges for Hong Kong in Developing a Regional Intellectual Property Trade Centre

2.1 Advantages of Hong Kong in Developing Intellectual Property Trade

The commercialization of intellectual property is crucial for the development of a knowledge-based economy. Hong Kong is leveraging its strengths to promote intellectual property trade as a new growth point to help revitalize the economy. Over the years, Hong Kong has utilized its advantages in finance, legal services, and professional services to attract international intellectual property trade and management activities. These strengths have made Hong Kong a more attractive business environment, ensuring that the legal rights of investors, businesses, and creators are protected.

2.1.1 Mature and Robust International Financial System

Hong Kong has long been renowned as an international financial centre, backed by the mainland and serving as a commercial, trade, and service hub for China and the entire region. Hong Kong has been rated as one of the world's freest economies and is recognized as a stable and mature business hub in the Asia-Pacific region. According to the latest Global Financial Centres Index of 2023, Hong Kong ranks fourth[13]. Over the years, Hong Kong's mature international financial system has attracted the free flow of domestic and foreign capital. Currently, Hong Kong is the world's largest offshore RMB centre, with a fund pool amounting to 891.7 billion RMB[14] (approximately 996.1 billion HKD) as of May 2023. That same year, the Hong Kong Exchange Fund achieved an investment income of 212.7 billion HKD[15], enabling Hong Kong to maintain a robust monetary and financial system and uphold its status as an international financial centre. Thus, Hong Kong's internationalized financial system plays a vital

[13] Hong Kong Government Press Release (2023). Hong Kong maintains its fourth place in the Global Financial Centers Index. Online search date: March 12, 2024. Website: https://www.info.gov.hk/gia/general/202303/23/P2023032300619.htm

[14] 21st Century Economic Report (2023). Secretary for the Treasury, Mr Hui Ching-yu, Hong Kong: Explore cooperation opportunities with financial institutions around the world through the "One Belt, One Road" initiative. Online search date: March 12, 2024. URL: https://m.21jingji.com/article/20230914/herald/689586881b1bcf6342438283af13655c.html

[15] Liaison Office of the Central People's Government in the Hong Kong Special Administrative Region (2023). Hong Kong's Exchange Fund investment income in 2023 will reach HK$212.7 billion. Online search date: March 12, 2024. Website: http://www.locpg.gov.cn/jsdt/2024-01/29/c_1212331811.htm#:~:text=Hong Kong Monetary Authority 1, other stock investment income, etc.

role in the global financial system through financial interconnectivity with the mainland and overseas.

2.1.2 Well-developed Legal System and Professional Arbitration Services

Hong Kong has a well-developed legal system, being the only jurisdiction globally that operates a bilingual common law system in both Chinese and English. It features a complete set of legislation, legal protection, and law enforcement systems familiar to international commercial transaction participants. Moreover, Hong Kong has specific laws related to patents, as stated in Articles 139 and 140 of the Basic Law, which mandate that Hong Kong must legally protect the results of scientific and technological research, patents, inventions, and the legal rights and interests derived from literary and artistic creation. Under this framework, Hong Kong has established a new Patent Ordinance (Hong Kong Law Chapter 514), which is aligned with major regional patent laws and international patent treaties, such as the European Patent Convention and its implementing regulations, the Patent Cooperation Treaty, and the Patent Law Treaty. Following the introduction of the revised "Patent System" under this ordinance, patent holders can obtain two types of patents: short-term[16] and standard patents[17]. The standard patent system in Hong Kong provides a quick and convenient route for innovators to apply directly for protection in Hong Kong, offering up to 20 years of standard patent protection. Thus, under the legal protection of the Patent Ordinance, Hong Kong has an independent patent system aiming to meet the highest international standards[18], ensuring that patent holders can conveniently and swiftly have their legal rights protected. Additionally, the Patent Ordinance has defined the nature of patent transactions in Hong Kong and established a comprehensive legal

[16] Note: Short-term patent (can be protected for up to eight years), application method: you can apply directly to the Registrar of Patents in Hong Kong without having to obtain a patent elsewhere. Therefore, short-term patents are obtained more quickly than standard patents. Short-term patents are most suitable for some short-term products. Companies can quickly obtain patents based on the characteristics of the patent and obtain sufficient patent protection in the short term.

[17] Note: Standard patents are divided into two types of application methods: 1) "Transcribed standard patent" means that an invention can be "re-registered" if it has been patented in one of the three designated patent offices (including China, the United Kingdom, and the European Patent Office) The form is patented in Hong Kong. 2) Under the "Original Grant Patent System", in addition to Hong Kong's original "re-registration" route 1, the Hong Kong government provides patent applicants with a way to directly apply for standard patent protection for up to 20 years in Hong Kong without the need for Go to the above-mentioned patent office to register other countries first.

[18] Note: The patent system means giving patent owners exclusive rights to prohibit others from making, using, selling or importing their patented inventions, in order to encourage the development of innovative technology.

framework to prevent infringement, allowing legal actions under the Hong Kong Patent Ordinance whether the infringement occurs in Hong Kong or if the parties agree to appoint Hong Kong as the jurisdiction for resolving intellectual property disputes.

Based on Hong Kong's comprehensive legal system, it has also been a hub for professional arbitration services for many years. Hong Kong is at the forefront of international arbitration for commercial disputes and is a leading dispute resolution centre in the Asia-Pacific region and a preferred venue globally for resolving commercial disputes. Hong Kong provides a wide range of professional support, offering a reliable platform for resolving intellectual property disputes. The Hong Kong International Arbitration Centre offers a variety of dispute resolution services, including mediation, arbitration, and adjudication. Hong Kong has been a leader in developing the Asia-Pacific region's international legal and dispute resolution services centre, handling foreign and cross-border disputes for mainland enterprises expanding internationally. With national support, the International Mediation Institute Preparatory Office was formally established in Hong Kong in 2023, allowing Hong Kong to play a connecting role with international organizations, deeply participate in international governance and cooperation, and provide professional and reliable services for foreign legal disputes involving mainland patents.

2.1.3 Strong R&D and Innovation Capabilities, especially in the Biomedical Field

Hong Kong has strong research and development capabilities, coupled with comprehensive support for startups in technology, demonstrating a world-class level of innovation capacity. According to the 2023 Global Innovation Index published by the World Intellectual Property Organization, Hong Kong ranks 17th globally in the innovation economy[19]. Additionally, the technology cluster formed by Shenzhen, Hong Kong, and Guangzhou is ranked as the second "Best Technology Cluster" worldwide, playing a key role in the innovation and technology sector within the Greater Bay Area. Hong Kong's robust R&D strength is primarily based on its world-leading research universities and local research institutions

[19] Hong Kong Government Press Release (2023). Hong Kong continues to rank at the top of the Global Innovation Index. Online search date: February 23, 2024. Website: https://www.info.gov.hk/gia/general/202309/27/P2023092700613.htm

equipped with the most advanced research facilities, allowing an increasing number of university research patent projects to be successfully commercialized and brought to the international stage.

Hong Kong's research strength is most prominent and widely recognized in the field of biomedicine. It has great potential and advantages in upstream technology R&D and midstream clinical trials within the industry chain, showing rapid growth in innovation in biotechnology and pharmaceutical fields. In the area of academic research, Hong Kong's universities are major innovators in biotechnology and pharmaceutical fields, currently publishing around 250 highly impactful biomedical research papers annually[20]. Many universities have research patents that have been licensed and authorized globally. From 2018 to 2020, the number of patent applications from Hong Kong in the biotechnology and pharmaceutical sectors recorded growth rates of 166.7% and 122.2%, respectively, under the PCT (Patent Cooperation Treaty)[21].

Hong Kong can leverage its own R&D capabilities to connect with the mainland's pharmaceutical manufacturing patents. By using the Hong Kong platform, it can facilitate the international transformation and commercialization of these patents, thereby increasing the global market share of mainland pharmaceutical patents. To facilitate the implementation of mainland pharmaceutical patents in Hong Kong, financing in biomedicine in Hong Kong is another key factor that drives more pharmaceutical patents to be commercialized in Hong Kong. Currently, Hong Kong has become the largest biotechnology financing centre in Asia and the second largest globally. From 2018 to April 2021, 92 medical health and biotechnology companies were listed in Hong Kong, raising nearly 250 billion Hong Kong dollars. Therefore, Hong Kong's strong R&D capabilities, especially in the biomedical field, occupy key links in the upstream and midstream segments of the industry chain, accelerating the international transformation of patent R&D outcomes between Hong Kong and the mainland, and helping to expand the international medical patent trade market.

[20] Hong Kong Trade Development Council (2023). Overview of Hong Kong's innovation and technology industry. Online search date: February 23, 2024. Website: https://research.hktdc.com/tc/article/MzEzOTIwMDIy

[21] Hong Kong China News Service (2023). Hong Kong's biotechnology and pharmaceutical patent invention applications are experiencing high growth. Online search date: February 23, 2024. Website: http://www.hkcna.hk/docDetail.jsp?id=100456717&channel=2813

2.1.4 Bi-directional Internationalized Network

Hong Kong is located in a strategically advantageous geographical position, backed by the motherland, with a well-established business environment that connects the mainland and overseas markets. This facilitates the promotion of intellectual property transactions, technology transfers, and cooperative relationships with various countries and regions. According to the latest 2023 World Economic Freedom Annual Report, Hong Kong's economic freedom is ranked second globally[22]. This is attributed to Hong Kong's simple tax regime and developed commercial service system, creating a favorable business environment and making it an ideal headquarters for many international financial institutions and multinational corporations. Additionally, under the "One Country, Two Systems" policy, Hong Kong has the potential to become a hub for domestic and international patents in the future. Given that China is the world's largest trading economy, it possesses abundant intellectual property resources and has also become the world's largest source of patents. Currently, Hong Kong has six national-level research institutes, and there are 16 state key laboratories established with the approval of China's Ministry of Science and Technology[23]. In view of the fact that Hong Kong is situated at the interface between the East and West, with access to the vast potential market of the mainland, as well as its advantages in trade and business support services, sound legal system, and professional services, it can develop into an ideal commercial platform that connects patents from the mainland and overseas through a bi-directional, internationalized network. As the gateway for the nation to the international market, Hong Kong can help mainland small and medium enterprises, as well as universities and colleges, to "go global" with their patents. By aggregating domestic, overseas, and local Hong Kong patents to form an international network, this can facilitate the internationalization of mainland patents and increase their global market share. Coupled with Hong Kong's intellectual property system and professional services that interface with the international market, this can accelerate cross-border patent trade cooperation between Hong Kong and the mainland, allowing idle mainland patents to be

[22] Hong Kong Government Press Release (2023). Hong Kong continues to rank high among the freest economies in the world. Online search date: March 12, 2024. Website: https://www.info.gov.hk/gia/general/202309/19/P2023091900694.htm

[23] Hong Kong Innovation and Technology Commission (2023), National Key Laboratory and National Engineering Research Center Hong Kong Branch, online search date: March 15, 2024. Website: https://www.itc.gov.hk/ch/collaboration/skl_and_hkbcnercs.html

internationally transformed and commercialized through Hong Kong's global intellectual property trading market.

2.2 Problems and Challenges Facing the Development of Intellectual Property Trade in Hong Kong

Hong Kong's development of intellectual property trade has its advantages and challenges. Although Hong Kong excels in copyright trade, licensing, franchising, and design services, the importance of patents as a system to protect innovation and promote technological progress is increasing. This is due to the economic significance of intangible assets driven by innovative technologies in the current and future economic landscape. Consequently, the trade of technological intellectual property, including patents and trade secrets, is garnering more attention and holds great potential for development within the intellectual property trade sector.

While actively seizing opportunities in intellectual property trade, particularly in patent trade, Hong Kong must also address potential challenges in this area, including: 1) the inherent specificity of patents as trade commodities; 2) the nascent stage of innovation and technology development in Hong Kong, coupled with a relatively small domestic market; and 3) existing barriers to cross-border patent trade with mainland China.

2.2.1 Patent Transactions Require High Professionalism

Like other types of intellectual property, patents are essentially private rights but often involve the transactions of trade secrets, making these transactions more confidential. Therefore, many patent transactions are over-the-counter (OTC), where it is challenging for buyers and sellers to find matches, and the transactions are costly and infrequent. Research on technology transfer offices in Hong Kong's higher education institutions has revealed that these offices typically represent research teams and rely on traditional case-by-case engagement models to approach external enterprises and buyers for commercial negotiations. There is no established ecosystem for patent conversion. Technology transfer offices and potential technology users in society know very little about each other, and it usually takes a long time for buyers and sellers to follow up and identify each other before a match can be made. Each successful transaction is unique and not

necessarily replicable, making it difficult to achieve a clustering effect similar to that seen in other types of patent trading.

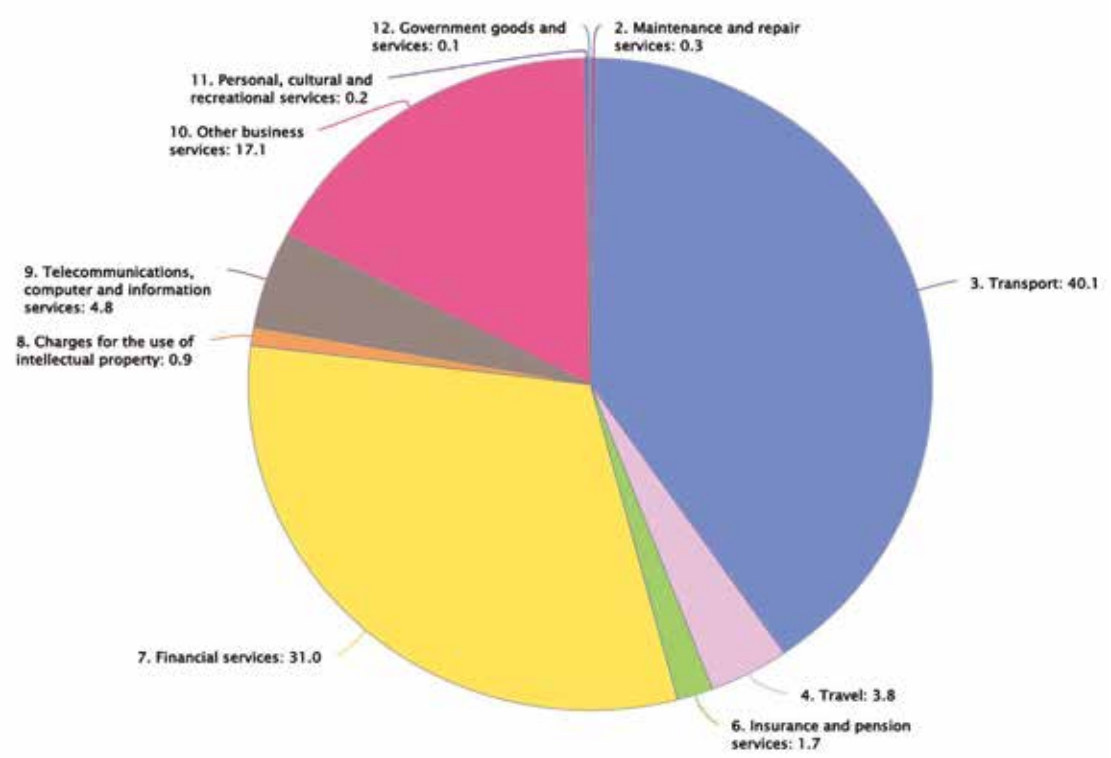
Furthermore, patent rights transactions are based on the technical value of intangible assets, and there is no universal standard for fair pricing of patent technology transactions. Even similar patents can differ significantly in price, influenced by the rapid development of the industry and the specific needs of the buyer. For example, the value of a patent for a respiratory drug can differ vastly between pharmaceutical companies with and without a franchise to produce such drugs. A patent's value can only be realized when paired with a pharmaceutical company that matches the patent's specifications. In fact, core valuation and pricing services for China's pharmaceutical industry are still lacking at the moment. Due to these factors, patent transactions require highly specialized personnel, and platform transactions place significant importance on the platform's capabilities in databases, law, finance, insurance, valuation, and value-added services.

Currently, Hong Kong lacks sufficient multi-disciplinary talent familiar with patent-related ownership information, value assessment, industry development, and market application prospects. There is a lack of platform that is highly active in transactions, information-rich, well-supported, and efficient in operations.

2.2.2 Hong Kong Market is Relatively Small, and High-Quality Local Patents are Relatively Scarce

Although the trade of intellectual property in Hong Kong remains stable and shows a slight growing trend, according to Hong Kong's trade in services statistics, exports of intellectual property trade services only account for 0.9% of the total service trade exports. Patent trade, as calculated and estimated by the industry, constitutes an even smaller proportion of the service trade, indicating substantial room for future development.

Figure 6: Percentage share of exports of services by service component, 2022

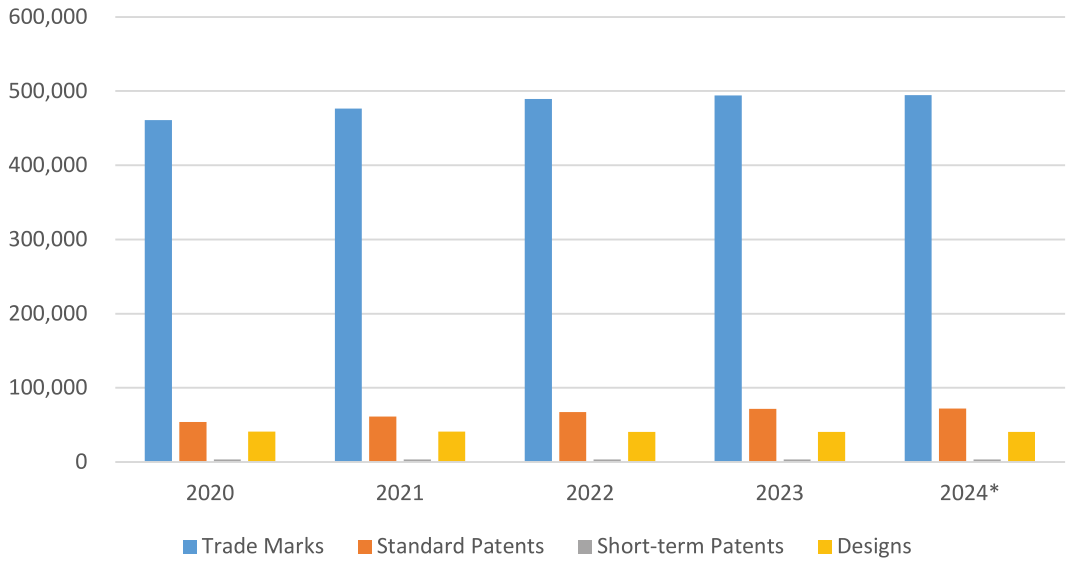


Source: Hong Kong Trade in Services Statistics[24]

Hong Kong's foundational research capabilities are relatively strong, but due to the limitations of a small-scale economy, high-quality local patents are relatively scarce. Looking at the number of local intellectual property registrations/approvals, thanks to Hong Kong's active entertainment industry and the high output of movies, songs, and TV shows, the number of trademark registrations/approvals is the highest. As of the end of January 2024, the cumulative number is approximately seven times that of standard patents(Figure 7). From 2020 to 2024, the number of approved standard patents in Hong Kong was about 10,000, with only 4% of these applications coming from local sources. Applications from the United States, Europe, and mainland China accounted for 90% of the published patent applications in Hong Kong(Figure 8). Additionally, the majority of standard patents in Hong Kong are re-registration patents, and the application and registration of original grants are still in the initial stages.

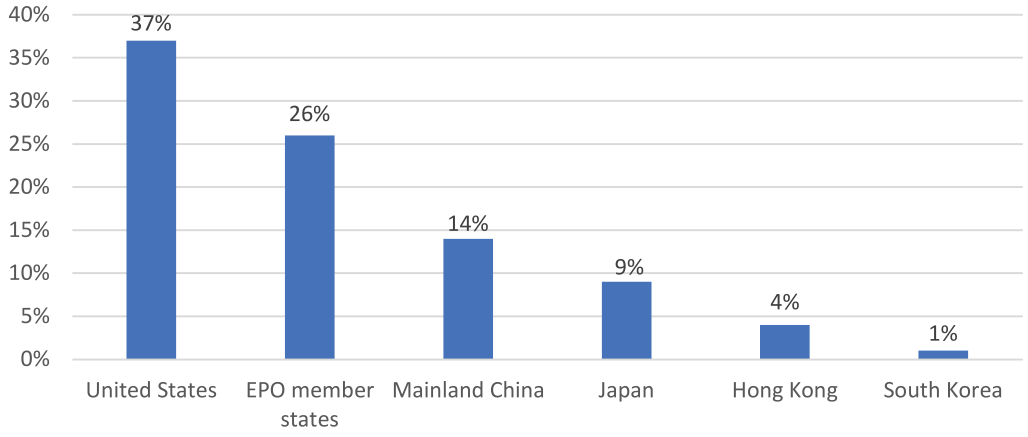
[24] Census and Statistics Department of Hong Kong Government, Hong Kong Trade in Services Statistics, 2024, online search date: February 28, 2024, website:https://www.censtatd.gov.hk/en/wbr.html?ecode=B10200112022AN22&scode=240

Figure 7: Cumulative Number of Valid Trademarks, Patents, and Designs Registered / Approved in Hong Kong



*As of January 31, 2024, Data source: Hong Kong Intellectual Property Department[25].

Figure 8: Geographic Origin of Published Patent Applications in Hong Kong



Source: FHKI "Hong Kong Patent Landscape Report" [26]

[25] Intellectual Property Department of Hong Kong SAR (2024). The cumulative number of valid trademarks, patents and designs registered/approved in Hong Kong. Online search date: February 28, 2024, URL: https://www.ipd.gov.hk/filemanager/ipd/common/tools-resources/ip-statistics/IPD_D1_D28-Statistics_eng.pdf
[26] Federation of Hong Kong Industries, "Hong Kong Patent Landscape Report", 2023, online search date: February 28, 2024, https://hkpatentreport.org/wp-content/uploads/2023/08/0817_Brochure-PDF-Folder-25.pdf

Figure 9: Number of Patent Applications and Registrations / Approvals in Hong Kong

Statistics of Patents		2020	2021	2022	2023	2024*
Standard Patents (R)	No. of applications	21,302	21686	20031	17614	1446
	No. of grants	7658	14655	11573	10815	550
Standard Patents (O)	No. of applications	254	257	133	170	15
	No. of grants	-	7	29	51	3
Short-term Patents	No. of applications	689	552	579	624	59
	No. of grants	729	684	535	516	59

*As of January 31, 2024, Data source: Hong Kong Intellectual Property Department[27].

Additionally, as major countries in technological innovation, the United States and China have each formed their own ecosystems and pathways for promoting patent trade: Represented by the United States, the overseas intellectual property markets are primarily driven by active and transparent high-efficiency intellectual property litigation cases. On one hand, the execution of litigation results involves a large amount of intellectual property transactions; on the other hand, to deal with litigations, companies proactively purchase intellectual property as 'ammunition' for counter-litigation. In mainland China, intellectual property transactions are partly driven by internal corporate transactions, such as state-owned parent companies granting licenses and transfers to their subsidiaries, which occur through open transactions on platform institutions, in order to demonstrate the price reasonableness as validated by a third party. Hong Kong is neither a litigation-driven hub for large volumes of intellectual property transactions, nor has it yet formed a sizable base of innovation and technology enterprises. Although it has strong fundamental research capabilities, the overall scale is relatively small, and the local commercialization costs are high. Therefore, Hong Kong requires stronger incentives to stimulate and facilitate intellectual property trade.

[27] Intellectual Property Department of the Hong Kong Special Administrative Region, online search date: February 28, 2024, URL: https://www.ipd.gov.hk/filemanager/ipd/common/tools-resources/ip-statistics/IPD_D1_D28-Statistics_eng.pdf

2.2.3 Obstacles in Cross-Border Intellectual Property Trade Between Hong Kong and Mainland China

Hong Kong's small market size, and its foundational and advantageous position in developing regional intellectual property trade under the "One Country, Two Systems" framework, allows Hong Kong to serve as a two-way connector between the mainland and international markets. Mainland China currently has the highest number of effective patents and there are increasingly fewer institutional barriers to using Hong Kong as a platform and bridge for international trade. However, there is no clear cross-border trade route and market guidance, and many operational details have not yet been implemented to eliminate uncertainties in cross-border transactions and encourage actual trading, indicating that obstacles still exist in the cross-border intellectual property trade between Hong Kong and mainland China.

- Differences in Legal Systems. Under the "One Country, Two Systems" arrangement, Hong Kong and mainland China are in different judicial jurisdictions and have different legal systems. Hong Kong's intellectual property system largely follows the British intellectual property laws and is part of the common law system; whereas mainland China's civil and commercial legal system is part of the civil law system. Under these two legal systems, patent disputes and conflict resolution are extremely challenging, and cross-border transactions can introduce uncertainties and risks for patent holders under their respective legal systems, thus becoming a hidden concern for patents to "go global."
- Difficulties in Certifying Transaction Subjects. Patent technology is often complex, requiring professionals to identify and certify the relevant information and parameters. Especially in an era where AI technology can easily perform deep fakes, determining the authenticity of transaction subject information is particularly challenging in cross-border trade. This is because the patents involved in the transaction may not be issued by the patent authority of the transaction location, leading to asymmetry of information and a lack of recognition, making it difficult for trading counterparts to discern and certify patent details, such as the clinical phase of drug patents, whether they are First-in-Class or Best-in-Class drugs, or even simply identifying the actual

owners of the patents. These challenges in certifying transaction subjects also pose obstacles to the cross-border trade of patents.

- The Issue of Additional Transaction Costs. Intellectual property financing is an important part of developing the intellectual property trade ecosystem, but mainland patents undergoing commercial insurance-involved pledge financing and other commercial banking and insurance operations in Hong Kong may need to bear higher transaction costs than local companies holding patents. According to Hong Kong's insurance industry regulations, it is easier for Hong Kong-registered companies to obtain insurance, meaning that mainland patent holders must register a company in Hong Kong to meet insurance preferences and then engage in commercial insurance-backed pledge financing operations.

Hong Kong needs to proactively construct entities for connecting intellectual property trade with mainland and overseas, reduce uncertainties caused by legal differences between the two places, streamline cross-border trade paths, reduce cross-border transaction costs, and provide value-added services related to intellectual property trade.

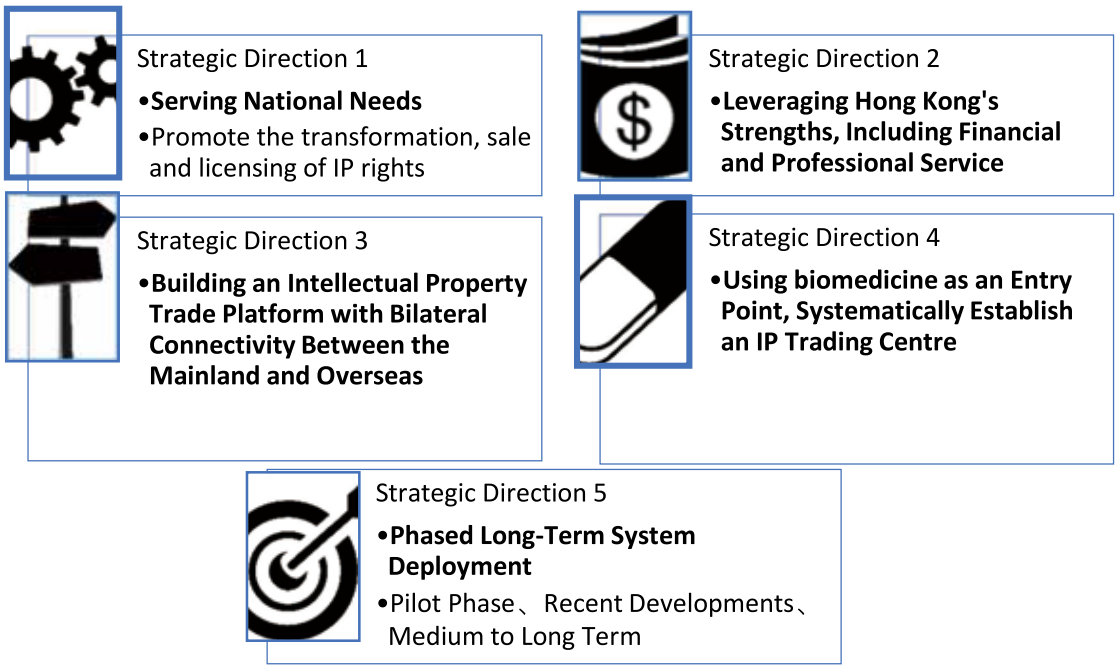
Chapter 3:

Strategies to Promote the Development of Intellectual Property Trade in Hong Kong

3.1 Strategic Directions

Developing Hong Kong into a regional intellectual property trade centre requires consideration of various factors, including national strategy, required time, aggregation of talent and resources, and industry ecosystem. By leveraging Hong Kong's existing strengths and focusing on the "pilot period" to promote intellectual property trade related to specific industries, and subsequently extending to other areas, the trade system can be gradually perfected. It is essential to strategize before acting in the planning stage. For this purpose, this study has identified the following five major development strategic directions.

Figure 10: Five Strategic Directions for Developing Hong Kong as a Regional Intellectual Property Trade Centre



3.1.1 Serving National Needs

On November 30, 2020, General Secretary Xi Jinping emphasized during a study session of the Politburo that intellectual property protection is related to the modernization of the national governance system and governance capability, high-quality development, the happiness of people's lives, the overall situation of opening up to the outside world, and national security.

The report of the 20th National Congress of the Communist Party of China pointed out that our country can only continuously strengthen its economic power, scientific and technological strength, and comprehensive national strength by adhering to high-quality development as the theme, prioritizing quality and efficiency, and promoting quality change, efficiency change, and dynamic change in economic development, thereby comprehensively building a strong modern socialist country.

The "Outline for Building a Powerful Intellectual Property Country 2020-2035" stipulates that by 2025, China's annual import and export total of intellectual property usage fees will reach 350 billion yuan, and by 2035, China's comprehensive competitiveness in intellectual property will be among the top in the world.

The 2023 National Intellectual Property Directors' Conference emphasized the need to improve the transformation efficiency of scientific and technological innovation results. It is necessary to carry out special actions for patent transformation and application, promote the deep integration of the patent chain with the innovation chain, industry chain, capital chain, and talent chain; comprehensively advance the application and transformation of intellectual property rights, aim for the industrialization of patents, revitalize existing patents, promote precise matching and accelerated transformation of high-value patents with enterprises, and effectively solve issues such as unsmooth patent transformation channels and insufficient motivation.

On March 29, 2024, the National Intellectual Property Administration officially issued the "Guidelines for Promoting High-Quality Development of Intellectual Property (2024)"[28], proposing several effective measures for the transformation and application of intellectual property, including promoting the connection and transformation of high-value patents from universities and research institutes with enterprises, exploring the construction and operation of key industry patent pools, optimizing patent navigation services, exploring intellectual property financial support, and fully implementing an open patent licensing system, aimed at further

[28] Guozhi Fayunzi [2024] No. 7, the National Intellectual Property Office's notice on the issuance of the "Annual Work Guidelines for Promoting High-Quality Development of Intellectual Property (2024)", online search date: May 2, 2024. URL: https://www.gov.cn/zhengce/zhengceku/202404/content_6945105.htm

promoting the deep integration of intellectual property with economic and social development.

According to a report by the World Bank, China is the world's largest trade deficit country in global intellectual property import and export trade. Since 2009, China's trade deficit in international intellectual property import and export trade has been increasing. According to data from the World Trade Organization, in 2022, the U.S. exported $127.392 billion in intellectual property, accounting for about 30% of the global intellectual property transaction amount, while China's intellectual property trade export amount was $13.539 billion, less than 11% of the U.S. export amount[29].

In terms of intellectual property import amounts, the United States imported $53.241 billion in 2022, while China imported $44.426 billion. Looking at the total import and export amounts, the U.S. had an intellectual property trade surplus of about $74.2 billion; meanwhile, China had a trade deficit of about $30.9 billion. From a national strategic perspective, to achieve high-quality national development, it is essential to continuously introduce and develop high-tech, thereby maintaining a steady amount of intellectual property imports; however, it is also crucial to increase the amount of intellectual property export trade, reduce the trade deficit, and improve the conversion rate of scientific and technological achievements and the amount of intellectual property transactions.

The main reasons for China's persistently high intellectual property trade deficit include the following aspects: First, China's position in the global value chain is relatively low; second, the quality and quantity of China's intellectual property overseas layouts are weak; third, the conversion rate of intellectual property operations in China is not high, with many patents remaining unutilized in databases and not transformed into productivity; fourth, China lacks an influential and credible intellectual property trade centre, and the existing intellectual property transaction institutions have low professional service capabilities and financial support capabilities; fifth, a large number of foreign-invested enterprises conduct 'internalized' transactions and tax avoidance, which magnifies the deficit, and China

[29] World Trade Organization (2023), World Trade Statistical Review 2022, online retrieval date: May 2, 2024. URL: https://www.wto.org/english/res_e/booksp_e/wtsr_2023_e.pdf

lacks appropriate tax adjustment policies to attract international institutions for intellectual property transactions.

Given Hong Kong's advantages in technological innovation, legal system alignment with Europe and America, international financial services, international trade, the establishment of international trading platforms, and innovative tax systems, the national "14th Five-Year Plan" explicitly identifies Hong Kong as a regional intellectual property trade centre. It is expected that Hong Kong will offer innovative suggestions and measures related to the institutional design, organization construction, human resource allocation, and financial security of the intellectual property international trade centre, thereby increasing China's total intellectual property import and export trade and reducing the trade deficit.

Therefore, the Chief Executive of Hong Kong also announced in the 2022 Policy Address that the government will implement a series of measures in the short, medium, and long term to strengthen intellectual property protection, enhance human resources, and promote externally. Hong Kong itself needs to develop a diverse economic industry, align with national needs, and help the country trade its vast intellectual property, including transformation, sales, and licensing, through Hong Kong's robust and Western-aligned legal system, promoting domestic and foreign transactions, and playing the role of a "super connector."

3.1.2 Leveraging Hong Kong's Strengths, Including Financial and Professional Service Advantages

Developing intellectual property trade often involves cooperation among banks, insurance companies, and governments, and requires professionals/institutions to perform valuation on intellectual property value and collateral. Common models of intellectual property trade, in addition to licensing and transfer, include intellectual property-backed financing and intellectual property securitization, both of which are highly linked with the financial system.

The nation currently has a demand to continue improving intellectual property pledge financing and securitization. Currently, the volume of intellectual property financing business on the mainland is still relatively small, facing problems such as difficult valuation and low liquidity. Hong

Kong's financial system is relatively well-developed, boasting a large number of intermediary talents in law, accounting, and finance, with a high degree of internationalization, allowing it to leverage unique advantages in intellectual property financing. Hong Kong is highly outward-oriented and its open economic system with no foreign exchange controls is capable of providing US dollar liquidity to mainland Chinese companies expanding overseas. Hong Kong has always been an important platform for overseas investors to enter the mainland and is the largest offshore RMB business centre in the world. Two-thirds of the country's inward and outward direct investments and a large amount of financial investments are conducted through Hong Kong. Hong Kong and the mainland are also constantly developing new financial investment channels to enhance interconnectivity, such as the Qualified Foreign Institutional Investor program (QFII), the RMB Qualified Foreign Institutional Investor program (RQFII), mutual fund recognition arrangements, Shanghai-Hong Kong Stock Connect, Shenzhen-Hong Kong Stock Connect, and Bond Connect.

Financial Advantages of Hong Kong (Source: Hong Kong Monetary Authority website[30]):

- **Largest Offshore RMB Fund Pool**: Hong Kong holds the largest offshore RMB fund pool outside mainland China, with a size exceeding 600 billion RMB, supporting a thriving offshore RMB business.
- **Most Important Offshore RMB Clearing Centre**: According to SWIFT statistics, over 70% of global RMB payments are cleared through Hong Kong. Our real-time RMB payment settlement system facilitates RMB payments by banks around the world and plays a key role in RMB cross-border payments.
- **Main RMB Foreign Exchange Centre**: Hong Kong's RMB foreign exchange and derivatives trading volume ranks first in the global offshore market. (According to the triennial survey released by the Bank for International Settlements in 2019)
- **Largest Offshore RMB Bond Market**: Hong Kong is an important RMB financing centre, with the largest offshore RMB bond market in the world. Bond issuers include the Ministry of Finance, as well as financial institutions and corporations from around the world.

[30] Hong Kong Monetary Authority (2024). A major hub for business in China. Online search date: April 23, 2024. Website: https://www.hkma.gov.hk/eng/key-functions/international-financial-centre/hong-kong-as-an-international-financial-centre/dominant-gateway-to-china/

- **Unique Channels into Mainland Markets**: Hong Kong has unique channels to the mainland capital markets, including Shanghai-Hong Kong Stock Connect, Shenzhen-Hong Kong Stock Connect, Bond Connect, and mutual recognition of funds arrangements with the mainland. These channels allow overseas investors to access the mainland capital markets through connections between the mainland and Hong Kong markets.

In addition, local investment banks and commercial banks generally offer higher loan quotas than mainland banks. These favorable factors can all play a role in developing a platform for intellectual property trade. Therefore, leveraging Hong Kong's financial advantages is one of the main focuses of the following strategic suggestions and is one of the core elements for the successful development of intellectual property trade in Hong Kong. Besides financial advantages, Hong Kong also has a good foundation in legal, arbitration, and other professional services, as well as scientific research strengths, which are beneficial for developing a regional intellectual property trade centre (see 2.1 on the advantages of developing intellectual property trade in Hong Kong).

3.1.3 Building an Intellectual Property Trade Platform with Bilateral Connectivity Between the Mainland and Overseas

Hong Kong's intellectual property trade centre needs to rely on national strategies to attract large demand-side participation. Using Hong Kong as a platform, the centre facilitates transactions between domestic intellectual property producers and overseas buyers, leveraging the platform's effects to introduce more overseas intellectual properties into Hong Kong, serving the nation and incorporating foreign new technologies. To achieve this, a specialized cooperative platform for intellectual property trade and comprehensive services alliance can be established, led by social organizations familiar with both Hong Kong and Mainland situations, in collaboration with chambers of commerce, making good use of domestic and international resource networks to connect markets in both areas and promote intellectual property trade through pilot platforms.

Figure 11: Strategy 2: The Platform's Role in Bilateral Connectivity



The main role of the platform is to launch pilot services through specialized cooperation, built on the existing commercial platforms of the chambers of commerce, and connect the pharmaceutical patent trade markets between the mainland and overseas. Building on the pilot's foundation, a more comprehensive and extensive service alliance is further developed, with main functions including:(i) Gathering experts from the Special Administrative Region Government, banking and finance, business, legal, biopharmaceutical, and innovative technology sectors to form an interactive network;(ii) Connecting the supply and demand sides of intellectual property trade, facilitating information sharing and communication channels;(iii) Providing comprehensive support services (including negotiation assistance, assessments, and various legal services) for all stakeholders and trade parties.

Through the platform's functions, it benefits the national intellectual property's "going out" and the "bringing in" of overseas intellectual property, promotes intellectual property trade, and significantly reduces the transaction costs incurred by both supply and demand sides during the trade process.

3.1.4 Using biomedicine as an Entry Point, Systematically Establish an IP Trading Centre

To develop intellectual property trading, Hong Kong needs to address technical issues related to patent technology pricing and valuation. This also relies on the collaboration and value-added services of professionals in law, finance, accounting, insurance, and other fields. As previously

mentioned, the current number of professionals in Hong Kong's intellectual property industry, especially those familiar with ownership information and value assessment, is still insufficient. Intellectual property patent trading also accounts for a very small portion of the service trade volume, making it difficult to develop multi-disciplinary industries (especially those involving multiple technical patents) at the initial stage. It is only suitable to focus on developing areas that are easier to value, have simple patent structures, clear ownership information, and are areas in which Hong Kong excels.

The biopharmaceutical industry aligns well with the creation of an "Intellectual Property Trade and Comprehensive Services Alliance." The nature of the biopharmaceutical industry is that the patents involved in pharmaceutical products are relatively simple, focusing on formulations, which facilitates transactions. The mainland's biopharmaceutical review system is mature, and mainland pharmaceutical companies have a demand for researching and marketing biopharmaceuticals to overseas markets, with a clear trend towards external licensing (see 1.3.3 Expanding Scale of Overseas Licensing of Pharmaceutical Patents). Intellectual property is crucial to biopharmaceuticals; pharmaceutical products are carriers of technology and science, and intellectual property plays a key role in innovation, research, and cooperation in medicine. However, the mainland currently lacks mechanisms for intellectual property exchanges, dispute resolution, and cooperation. In the context of global market development, modern pharmaceutical R&D is no longer just a local or regional issue; international intellectual property exchanges and integration are critical for future medical innovations. In this regard, it is urgently needed for Hong Kong to play the role of linking the dual circulation between China and the world. During the pilot phase, more commonly used medications for conditions such as cancer treatment can be selected as initial demonstrations. At the same time, China has a leading position in traditional Chinese medicine and needs to use Hong Kong as a platform to bring traditional Chinese medicine products to the global market.

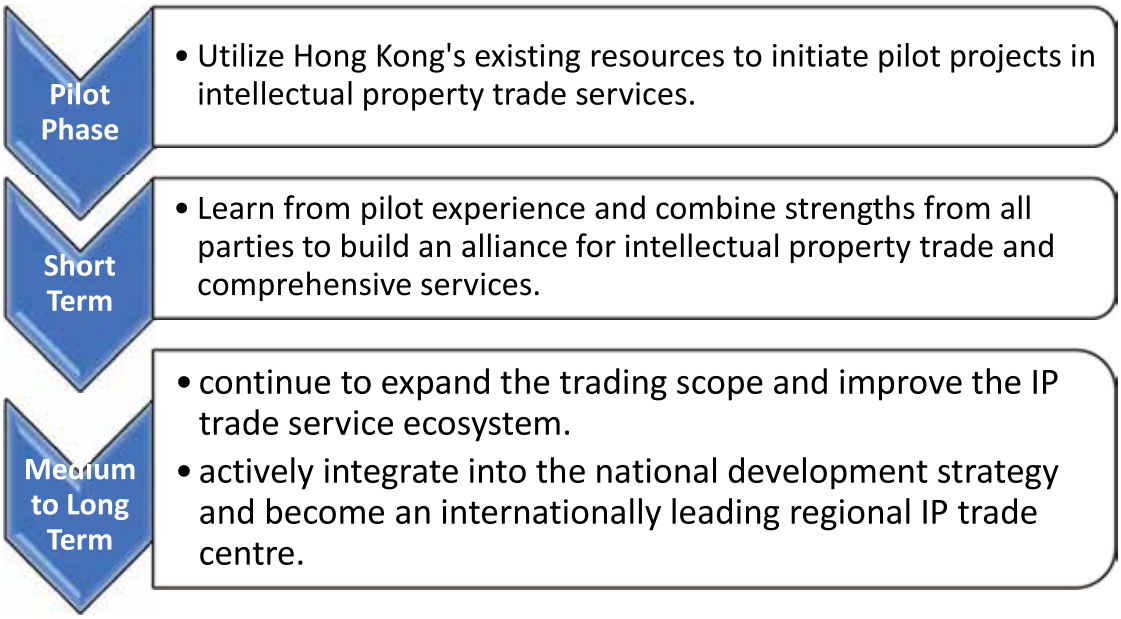
Based on the industrial characteristics, national needs, and Hong Kong's strengths, the biopharmaceutical industry can serve as a pilot for developing a regional intellectual property centre. The following strategic recommendations will start with the biopharmaceutical industry to

gradually build a trade platform and promote operations, initially establishing an intellectual property trade ecosystem to lay the foundation for future expansion into other intellectual property trade domains. Starting from biomedicine and innovative technology, we will gradually expand to include other technology-related intellectual property closely linked to intellectual property protection. In the future, this can also encompass fields such as culture and the arts, as well as the creative industry, aligning with the positioning of Hong Kong as "International Innovation and Technology Centre" and "East-meets-West Centre for International Cultural Exchange" as outlined in the 14th Five-Year Plan. This will facilitate the orderly establishment of a comprehensive regional intellectual property trade centre.

3.1.5 Phased Long-Term System Deployment

To achieve the grand vision of building an "Intellectual Property Trade Centre," it is necessary to progress in stages and not to expect immediate success. The plan should follow the principle of "from individual industries to other industries" and "from small-scale transactions to large-scale transactions," outlining the pilot phase and short, medium to long term goals for developing Hong Kong's "Intellectual Property Trade Platform."

Figure 12: Phased Long-Term Systematic Layout



3.2 Strategic Recommendations

In line with the five strategic directions outlined in Section 3.1, this section systematically proposes strategic recommendations for the pilot phase of constructing Hong Kong's "Intellectual Property Trade Platform". It suggests six main strategies for the short-term development phase, and seven main strategies for the medium to long-term development phase.

3.2.1 Pilot Phase

Objective: Utilize Hong Kong's existing resources to initiate pilot projects in intellectual property trade services.

- Begin with pilot programs to explore and prepare for promoting intellectual property trade work.

Developing an intellectual property trade centre in Hong Kong is a grand plan that meets national expectations and seeks diversified economic development. As the "14th Five-Year Plan" nears its end, the urgency of the work necessitates solid foundational work and long-term planning. The strategy of starting with pilot initiatives will steadily advance, testing the waters for future large-scale development.

- Establish a specialized cooperation pilot platform to connect the intellectual property trade markets in Mainland China and overseas.

During the pilot phase, it is recommended that Hong Kong social organizations familiar with both Hong Kong and the mainland take the lead. They should collaborate with Hong Kong chambers of commerce in a specialized manner to carry out pilot work for intellectual property trade services. Based on the existing commercial platforms of the chambers, a platform for biopharmaceutical patent trade and services will be established, initially focusing on cancer drugs, a common category of medication (including Chinese and Western medicines). At the same time, the chambers' networks with Mainland China and overseas can be utilized to connect the relevant pharmaceutical patent trade markets in both regions. Through the pilot platform, Mainland Chinese R&D companies can transfer or license patents domestically or to foreign investors; similarly,

foreign R&D companies can bring overseas-developed patents to the Chinese market.

The pilot platform should particularly assist Mainland pharmaceutical companies in accessing markets along the "Belt and Road" initiative, especially in Southeast Asia and the Middle East. Although these companies are interested in licensing out their pharmaceutical intellectual property or engaging in other forms of IP trade in these markets, they face challenges due to a lack of understanding of the legal and business environments and lack of market network channels, thereby hindering progress. Hong Kong has broad economic and cultural ties with Southeast Asia and the Middle East. In trade, Southeast Asia is a major trading partner for Hong Kong, while the Middle East uses Hong Kong as a major hub for their import and export activities with Asia. As an international financial centre, Hong Kong draws significant investment from Southeast Asia and the Middle East and has long been an important site for finance and tourism for these regions. Hong Kong has a group of business and political figures who entered Southeast Asia early and their knowledge of local laws, culture, and business practices can significantly benefit Mainland business communities. The pilot platform can unite professionals with relevant backgrounds to share experiences with Mainland pharmaceutical companies and serve as a bridge for these companies to reach overseas markets.

- Focus resources on demonstrating biopharmaceutical (and Chinese medicine) intellectual property trading.

Biopharmaceuticals are chosen as the initial demonstration industry primarily because patents/intellectual property related to biopharmaceuticals tend to be simpler compared to other industries' product patents. Medication formulas involve fewer patents, making the buying and selling of patents and the realization of output relatively easier. Secondly, the R&D and production cycles in biopharmaceuticals are strictly regulated, the mainland’s clinical and market drug evaluation and approval system is relatively mature. Patent transactions related to pharmaceuticals are common both domestically and internationally, making it easier for investors to understand the associated risks and returns. Regarding Chinese medicine, Mainland China leads global development and has a significant need to promote its products in the Asian region and

globally through Hong Kong's international platform. Thirdly, Hong Kong is already the largest in Asia and the second largest biotechnology financing centre in the world, holding existing advantages in attracting biopharmaceutical patents for trade in the region.

The development of intellectual property rights in traditional Chinese medicine (TCM) in Mainland China is progressing rapidly, but not many TCM products have successfully "gone global." According to experts, only about 10 traditional Chinese medicines have made it abroad, mainly to Russia, the United Kingdom, the Netherlands, and Southeast Asian countries. Exporting to the United States is more challenging; there are cases where 7 TCM products were supported by national subsidies to apply for U.S. FDA approval, but after 27 years, only one has passed Phase III trials and still has not received approval. In terms of market share and profit margins, TCM is not as optimistic compared to Western medicine, being in a squeezed position. TCM inherently relies on traditional practices, primarily using plant and herbal materials as opposed to the synthetic compounds used in Western medicine. The patents in TCM usually stem from combination formulas. Various factors make it relatively difficult to manage technology through formula patents and to persuade buyers to purchase related formula patents.

Hong Kong, as the country's "southern gateway," can play a crucial role in attracting foreign investments and facilitating the globalization of TCM patents. Hong Kong can utilize its high-quality university resources to establish modern standards, reorganize technical schemes, unearth new techniques, and enhance the value of TCM formulas by integrating them with modern technology. This can lead to the creation of competitive technical patents; combined with Hong Kong's financial advantages, various financial instruments can be used for financing, promoting research and development, and transforming outcomes into broader applicable TCM technical patent achievements.

- Advocating for more favorable government tax incentives for intellectual property trade development.

The government's role in promoting intellectual property trade is vital (see Section 1.2.2), and guiding the development of intellectual property trade through tax incentives is an essential part of this. During the pilot phase, it

is recommended that the government quickly explore and promote the following tax incentive policies, providing a clear development signal for the intellectual property trade development in Hong Kong:

(i) Research and development expenses generated by affiliated companies in the Shenzhen Park of the Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone, located on both sides of the Shenzhen River, should be considered eligible R&D expenses for 'Patent Box' tax incentives.

The Shenzhen-Hong Kong Science and Technology Innovation Cooperation Zone is built on the concept of "one river, two banks" and "one zone, two parks," serving as a forefront site for policy coordination and integration into the Greater Bay Area and national development. Currently, the Hong Kong side of the park is still under construction, while the Shenzhen side has already hosted numerous intellectual property R&D institutions and bases. The 'Patent Box' tax incentive requires that a favorable portion of the assessable profits derived from eligible intellectual property income must be determined based on the ratio of eligible R&D expenses to total R&D expenses. However, under the current legislation, R&D expenses incurred by affiliated companies outside Hong Kong are not considered eligible R&D expenses, thus reducing the amount of profits that can enjoy the preferential tax rate.

Given this, the government should consider whether to treat the R&D expenses incurred by affiliated companies in recognized national technology parks, especially in national-level policy cooperation platforms like the Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone, as eligible R&D expenses for the 'Patent Box' tax incentives. This would not only meet industry needs but also enhance the attractiveness of Hong Kong's 'Patent Box' tax incentives, consolidating its position as a regional intellectual property trade centre.

(ii) Implement tax incentives for intellectual property brokerage services. To encourage intellectual property brokers to set up business in Hong Kong, the government could consider adopting a preferential tax rate of 8.25%, similar to that currently designed for specific insurance brokerage businesses, for specific intellectual property brokerage services, thereby promoting the development of intellectual property brokerage services.

It is suggested that intellectual property brokerage profits from business conducted by centrally managed and controlled intellectual property brokers in Hong Kong could enjoy a 50% profits tax reduction (8.25% preferential tax rate). The government should also comply with the latest international tax standards by setting substantial activity requirements, such as employing a sufficient number of qualified full-time employees and incurring adequate operational expenses as deemed by the Commissioner of Taxation.

(iii) Intensify efforts to reach and implement agreements to avoid double taxation with other economies.

As of March 2024, Hong Kong has signed comprehensive agreements to avoid double taxation with 49 tax jurisdictions and is in negotiations with 16 other tax jurisdictions[31]. To promote global connectivity through Hong Kong in intellectual property trade and maximize the utility of the intellectual property trade centre, it is recommended that the Special Administrative Region Government intensify efforts to actively reach and implement agreements to avoid double taxation with other economies, aligning with neighbouring economies such as Singapore, which has signed double taxation agreements with about 100 tax jurisdictions[32]. Signing more double taxation agreements with tax jurisdictions would not only attract more intellectual property operations to Hong Kong but would also make Hong Kong a transit hub for intellectual property trade, strengthening its role as a super-connector.

- Leverage synergistic effects and align with the Hong Kong's policy direction.

The experimental platform will align with the relevant "patent box" tax incentive arrangements mentioned in Hong Kong's Policy Address and the development of a medical innovation hub. This includes the new drug approval mechanism "1+" that began implementation on November 1, 2023, as well as the future planned construction of a drug and medical

[31] Financial Services and the Treasury Bureau, Government of the Hong Kong SAR (2024), Comprehensive Avoidance of Double Taxation Agreement, online search date: May 13, 2024. Website: https://www.fstb.gov.hk/en/treasury/general/comprehensive-avoidance-of-double-taxation-agreement.htm
[32] Inland Revenue Authority of Singapore (2024), List of DTAs, Limited DTAs and EOI Arrangements, online search date: May 13, 2024. Website: https://www.iras.gov.sg/taxes/international-tax/list-of-dtas-limited-dtas-and-eoi-arrangements?pg=1&indexcategories=All

device regulatory centre in Hong Kong, transitioning from "second-tier approval" to "first-tier approval.

Additionally, mainland pharmaceutical companies have a significant demand for conducting clinical trials in Hong Kong. Currently, pharmaceutical companies aiming for overseas listings choose to conduct clinical research in places like Australia to save on the high costs of clinical trials in the United States. However, Hong Kong, being geographically closer and with higher medical standards, is actually a better choice. But currently, the scale of Hong Kong's clinical resources limits the ability to conduct large-scale clinical trials. As the Hong Kong Government continues to promote the development of clinical trials and plans to establish the "Greater Bay Area International Clinical Trials Institute" in the Lok Ma Chau Loop Shenzhen-Hong Kong Innovation and Technology Cooperation Zone, Hong Kong will have the opportunity to attract domestic and international biotech companies to relocate their R&D bases to Hong Kong, thereby efficiently promoting intellectual property output in the biopharmaceutical industry in Hong Kong.

- Understand market demand, conduct research, and preparation for related intellectual property trade support services.

While working to facilitate the pilot project of bi-directional trade of patented drugs between the mainland and overseas, the Hong Kong Chamber of Commerce could initially take on the function of drug patent certification, especially for important information related to cancer drug patents such as drug patent validity and proof of drug clinical trial stages. This would facilitate and authenticate non-local drugs in cross-border trade, making the certification service convenient and authoritative, thereby helping both parties in patent transactions clearly identify the transaction targets. Additionally, with its diverse institutional and professional members, the Chamber can encourage and coordinate professionals from the pharmaceutical, legal, and financial sectors to participate in the pilot project, proactively engage with and understand the needs of both parties in intellectual property trade, and grasp the demands for related supporting services. This preparation will aid in developing the next phase of the intellectual property trading platform and its supporting services, especially leveraging Hong Kong's strengths as a financial centre to

prioritize the development of pharmaceutical finance through initial research, preparation, and system design.

3.2.2 Short Term

Objective: Learn from pilot experience and combine strengths from all parties to build an alliance for intellectual property trade and comprehensive services.

Following the pilot phase, preliminary plans and experimental cooperation platforms have already provided some initial experiences and captured market needs to further promote intellectual property trade. Consequently, in the recent phase, there is a need for a platform alliance that can more effectively integrate resources from various sectors, meet diverse needs efficiently, and comprehensively cover all types of intellectual property trade and required services, in order to facilitate future tasks.

- **Build a platform for intellectual property trade and comprehensive services, and initially establish an ecosystem for intellectual property trade.**

Based on the experiences from the pilot, and using the existing biopharmaceutical patent trade and service platform as a foundation, an alliance for intellectual property trade and comprehensive services will be formed. This alliance will involve stakeholders from the Special Administrative Government, the innovation sector, commerce, finance, law, biopharmaceutical enterprises, and other professional sectors, focusing initially on biopharmaceuticals. Specifically, the stakeholders in the alliance will include professionals from the following areas, each bringing unique skills and characteristics to fulfill diverse functions:

(i) **Banking and Finance Industry**: Banks play a crucial role as major financing providers in the development of the intellectual property comprehensive service platform. During this recent phase, professionals from banking, financial and insurance sectors will explore and guide biopharmaceutical intellectual property financing and compensation schemes. Through research, consultancy, and negotiations, they aim to establish clear rules for various compensation, financing schemes, and default risk control measures, defining financial risks and recognized terms

for handling them in intellectual property trade, and solving issues related to financing guarantees and compensation principles that hinder the development of intellectual property transactions.

(ii) **Small and Medium Enterprises (SMEs) and Start-ups**: As the primary demanders of financing, start-up companies often lack professional business development talent and funding to expand their operations and continue their potential R&D work. SMEs and start-ups in the mainland also struggle to directly find suitable overseas investors and international buyers, hindering their sustainable growth. Establishing the service alliance can integrate these creative entities, holding patents but needing funds and opportunities, into the network, bridging supply and demand, reducing communication costs, and providing adequate services and business guidance.

(iii) **Universities**: Universities in Hong Kong typically have their own intellectual property transfer departments, which help connect professors and commercial entities to meet transformation needs. Talents in these departments have accumulated various experiences related to intellectual property trade and are familiar with related operations, making them essential resources when forming the service alliance.

(iv) **Legal, Surveying, and Accounting Professionals**: Currently, there are no clear valuation mechanisms in intellectual property financing, licensing, or transfers, with most transactions being handled directly through contact and negotiation between buyers and sellers, generating substantial transaction costs. Hong Kong's ample reserve of legal, surveying, and accounting talents can, through the alliance's pooling effect, help formulate legally effective valuation schemes or reference values (e.g., guidelines on intellectual property valuation issued by the Royal Institution of Chartered Surveyors in the UK), increasing the transparency, security, and stability of intellectual property transactions, facilitating both trading and financing parties, and promoting research and trade activities.

(v) **Biopharmaceutical Enterprises**: The initial focus on developing biopharmaceuticals is one of the key points of the overall strategic direction. Given that pharmaceutical patents are relatively clear and straightforward, and the mainland has comprehensive protections in R&D and production, the platform can, based on successful pilot projects, further incorporate

more influential and promising biopharmaceutical companies. This will promote business cooperation and exchanges, gather talent, and further improve the biopharmaceutical intellectual property trade ecosystem.

The role of the service alliance is primarily to connect suppliers and demanders in intellectual property trade, including banks, universities, enterprises, and research teams, and to pool legal and accounting talents to provide comprehensive support services. This helps handle negotiations, evaluations, and legal services during transactions, integrating the needs of buyers, sellers, and intermediaries to establish a complete intellectual property transaction chain.

- Fully utilize the locational advantages of Hong Kong Science Park, Cyberport, and the developing Lok Ma Chau Loop Hong Kong-Shenzhen Science and Technology Innovation Cooperation Zone, to establish physical institutions involved in the alliance.

Hong Kong Science Park and Cyberport are home to a multitude of startups and technology companies in Hong Kong, and regularly host conferences, exhibitions, and seminars that attract tech companies and professionals from both domestically and internationally. The location for the Intellectual Property Trade and Comprehensive Services Alliance could consider the currently planned Lok Ma Chau Loop Hong Kong-Shenzhen Science and Technology Innovation Cooperation Zone. Leveraging its proximity to Shenzhen, this area benefits from the government's focus on innovation and collaboration in the Greater Bay Area, offering long-term advantages of connectivity between Hong Kong and Shenzhen. This facilitates two-way talent exchanges and creates a talent aggregation effect.

The alliance could establish its main office in Lok Ma Chau, and expand its contact points to the Science Park and Cyberport, connecting major bases of the innovation industry in Hong Kong, and seizing opportunities from various international conferences and local business collaborations.

- Leverage Hong Kong's advantages as a financial centre and in professional services to develop intellectual property biopharmaceutical pledge financing, valuation, insurance, and disposal.

In recent years, the number of international collaborations involving China's new drugs has significantly increased, as has the R&D strength of China's pharmaceutical sector, creating a potential demand for intellectual property financing.

Hong Kong's financial system is mature, with a thriving development in finance, insurance, and related professional services that have been aligned with international market rules for many years. These advantages can be integrated to develop an intellectual property pledge financing platform. Currently, the local market in Hong Kong does not place sufficient emphasis on intellectual property financing, and banks have a low willingness to undertake the risks associated with it and also lack experience in this area. Therefore, the government is playing an active role in promoting this development as a priority. The Hong Kong Government can play a significant role in discussing and establishing various recognized and reasonable standards with banks, insurance companies, and relevant stakeholders. In the short term, the focus can be on biopharmaceutical pledge financing, valuation, insurance, and disposal, attracting mainland pharmaceutical companies with patent transaction needs, and later developing more comprehensive intellectual property financing projects (such as intellectual property asset securitization).

Case Study

When constructing the financing platform, various local, mainland, and overseas experiences can be referenced, provided that public resources are utilized effectively.

A) "Qingdao Model" of patent right pledge insurance loans: Small and micro enterprises face challenges such as "difficult valuation," "difficult risk control," and "difficult disposal" when obtaining loans. The Qingdao Municipal Market Supervision Administration has introduced a patent right pledge insurance loan model that operates on a market basis, changing the bank's assumption of 100% loan risk to a shared risk between insurance, guarantee, and the bank in a 6:2:2 ratio. The government subsidizes the loan and insurance fees for the enterprises, reducing their financing costs, which has proved to be effective.

B) South Korean Intellectual Property Loan and Financing Model: The officially approved valuation agency for intellectual property loans (KIPA) provides banks with patent valuation reports and offers financial support for the intellectual property valuation of small and medium-sized enterprises (SMEs). The government has established the Recovery Support Fund to prevent situations where, if a borrower goes bankrupt, the bank must repay the loan by selling the intellectual property pledged as collateral, avoiding scenarios where the resale of the collateralized intellectual property fetches a price lower than the loan amount. This helps intellectual property holders share the risks and costs of intellectual property disputes and covers up to 70% of intellectual property insurance costs, thereby enhancing the financing value of intellectual property assets.

Figure 13: South Korea's Intellectual Property Secured Loan Process Flow Chart

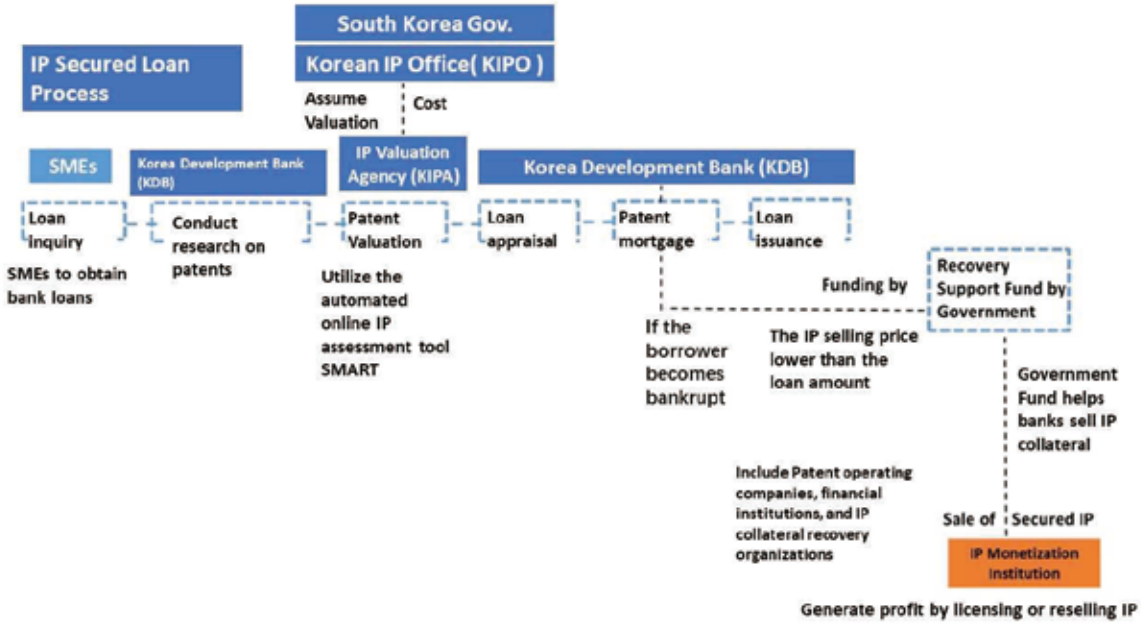


Image source: Drawn by One Country Two Systems Research Institute.

The intellectual property financing methods for SMEs in South Korea are diverse, primarily involving three models:

1. SMEs allow venture capital or financial companies to purchase their shares, and these companies profit by investing in and owning shares of patent-holding companies.

2. SMEs allow patent operating companies or financial institutions to purchase or lease their patents for a limited time, providing the required patent purchase or leasing fees.
3. SMEs temporarily sell the ownership of their intellectual property to funds operated by patent operating companies or financial institutions to raise funds, and profit from patent usage licenses obtained from the buyers of the intellectual property. This method allows SMEs to use their machinery, equipment, land, or buildings through lease agreements. At the end of the lease period, the company has the right to repurchase the asset. This enables companies to raise funds and ensure liquidity.

Asset management companies obtain funds from investors to operate projects through sales and licensing leases, and must not divert the funds for other uses. The project investors are financial institutions such as banks that manage funds, or government and public institutions that manage special funds. Asset management companies sign profit-sharing contracts with investors regarding investment management matters, and distribute profits accordingly.

Asset management companies can also sign patent sale and licensing contracts with other companies. The main terms of the contract include the sales price between the asset management company and the company, the licensing period (fund management period), costs, the price for repurchasing the patent, and licensing to other companies. After the lease period, Company A has the right to repurchase the asset. This enables the company to raise funds and ensure liquidity.

Referencing the models of South Korea and Qingdao, Hong Kong can focus on developing biopharmaceutical pledge financing, valuation, insurance, and disposal in the short term to advance intellectual property financing.

(i) Insurance companies: After a third-party institution evaluates biopharmaceutical products, insurance companies are responsible for underwriting biopharmaceutical companies and insuring part of the bank loans.

(ii) Special Administrative Region Government: Under the premise of reasonable use of public funds, the government can play a stabilizing role

in the market, launching corresponding measures to assist the industry's development, such as conducting due diligence on insurance companies to ensure they can fulfill the related risks.

(iii) Banks: As providers of financing, they bear part of the risk themselves.

Since Hong Kong's intellectual property financing market is not yet fully developed, it requires the government to lead in many areas. Based on the above collaborative schemes, the government can optimize and establish a due diligence mechanism for insurance companies, such as launching a "name and shame" list for institutions that deliberately avoid claims; establish recognized reasonable standard terms together with banks and insurance companies to reduce the likelihood of lawsuits and communication costs, and strive for a risk-sharing mechanism acceptable to all parties; effectively use and expand the government's own credit guarantee commitment for small and medium-sized enterprises to develop the intellectual property trade industry.

In addition to biopharmaceutical pledge financing, in the short-term measures to develop Hong Kong as a regional intellectual property trading centre, the government should actively guide and attract family offices settled in Hong Kong to invest in the biopharmaceutical industry, providing equity investment support. According to government data, as of the end of 2023, about 2,700 single-family offices operate in Hong Kong, nearly 900 of which have assets exceeding one hundred million U.S. dollars, not including joint family offices[33]. This data reflects Hong Kong's attractiveness as an international financial centre for family offices to handle various wealth management businesses. Biopharmaceutical companies need substantial funds for research and development and clinical trials in the early stages, with a long return period. Before the successful development of products and regulatory approval, and before the time of their initial public offering (IPO), biopharmaceutical companies need and struggle to obtain financial support the most. Conversely, family offices have a longer-term investment perspective, focusing on long-term returns, making them crucial investors to attract for developing biopharmaceuticals, requiring the government and the "Intellectual

[33] Government News Network (2024). Promote family offices to settle in Hong Kong. Online search date: March 15, 2024. Website: https://www.news.gov.hk/chi/2024/03/20240324/20240324_103302_003.html

Property Trade and Integrated Service Platform" to actively facilitate connections.

- Leverage Hong Kong's legal advantages to develop arbitration and mediation related to intellectual property trade, complementing and synergizing with the nation.

The National Intellectual Property Administration mentioned in the "Recent Statistics and Trend Analysis of Global Patent Transactions" (2015) that an active patent trading centre must at least possess: 1) sufficient patent reserves in the country; 2) for the goods or services that the patent is meant to protect, that country is a very important and highly competitive market; 3) patents having predictable deterrent power in the country. The nation has sufficient conditions in terms of patent reserves and market importance, yet there is still great potential in terms of deterrent power. Meanwhile, the nation's patent judicial system is still evolving, with new rules continuously being established, patent litigation compensation is low, litigation outcomes are difficult to predict, and the standards and criteria vary across different courts, posing certain obstacles to the legal protection of intellectual property patent trade[34].

Hong Kong's legal system is well-developed, and its intellectual property legal framework meets international expectations, ensuring that the legal rights of investors, enterprises, and creators are protected. Hong Kong's common law system is used and familiar to many international trading partners, and Hong Kong possesses a wealth of experienced legal professionals in intellectual property protection; moreover, in the legal procedures of intellectual property in the Hong Kong Special Administrative Region, all parties can freely choose to conduct the proceedings in English.

In the current development stage, it is advisable to actively organize legal professionals in Hong Kong to form a service support team responsible for handling a series of arbitration and mediation related to intellectual property trade, to compensate for the shortcomings of intellectual property litigation on the mainland, and to rely on their own experience to promote

[34] State Intellectual Property Office (2015). Statistics and trend analysis of global patent transactions in recent years. Online search date: March 12, 2024. Website: https://www.cnipa.gov.cn/art/2015/7/23/art_1415_133101.html

the nation in accelerating the construction and improvement of the relevant judicial system. Utilizing Hong Kong's legal advantages, in terms of talent and institutional design, can increase the predictability of litigation outcomes and litigation deterrent power in Hong Kong's intellectual property transactions, laying a solid foundation for creating a robust and active intellectual property trading platform. Here are specific recommendations for developing intellectual property law-related businesses:

(i) Arbitration: As one of the international arbitration centres, Hong Kong has a rich array of arbitration institutions and professionals. The arbitration process is similar to court litigation procedures in several aspects: arbitrators will be appointed (as arbitrators, not judges), all parties may summon witnesses and present evidence, and all parties may be represented by legal professionals[35]. In the recent phase, the service alliance can organize legal professionals in Hong Kong, contact guild organizations, and form a specialized intellectual property arbitration team to provide efficient and professional arbitration services, with government funding corresponding service fees. The team is responsible for handling intellectual property disputes, resolving disputes between parties, and providing binding arbitration decisions. At the same time, the government and the alliance can also actively promote Hong Kong's intellectual property arbitration services on various platforms and international conferences, attracting domestic and foreign enterprises and individuals to choose Hong Kong for intellectual property arbitration.

(ii) Mediation: In addition to arbitration, mediation is another effective way to resolve intellectual property disputes. Mediators are appointed by all parties to help negotiate a resolution acceptable to all involved. During the mediation process, there is no need to appoint arbitrators or submit evidence, and legal representatives may or may not be present. In summary, the mediator is responsible for assisting the parties in seeking a solution to the dispute[36]. Besides legal professionals, the alliance can form a larger team of full-time or part-time intellectual property mediators (considering

[35] Government of the Hong Kong Special Administrative Region (2023). Enforcing Intellectual Property Rights: Mechanisms for Litigated Dispute Resolution. Online search date: March 12, 2024. Website: https://www.ip.gov.hk/en/enforcing-ip/dispute/index.html

[36] Government of the Hong Kong Special Administrative Region (2023). Enforcing Intellectual Property Rights: Mechanisms for Litigated Dispute Resolution. Online search date: March 13, 2024. Website: https://www.ip.gov.hk/en/enforcing-ip/dispute/index.html

many mediators work part-time), to provide professional mediation services, help parties reach agreements, reduce litigation costs and time, and protect the legal rights of all parties.

(iii) Assisting the country in improving systems: Although the country currently has policy support for intellectual property financing, the legal infrastructure is not yet robust, lacking a unified specialized law, and practices involving integrated circuit layouts as collateral are still being explored (in contrast, Hong Kong already has clear legal protections for this area). There are no clear regulations on intellectual property securitization, leasing, and financing, which makes valuation difficult and standards inconsistent, adding challenges to the development of the industry. In the early stages of forming a service alliance in Hong Kong, using its complete legal system and without violating the principles of common law, it could explore with industry experts and government stakeholders the possibility of establishing "unified patent litigation standards and compensation amounts" to eventually enhance the predictability and deterrent power of litigation outcomes, promote the establishment of more patent courts, provide unified trial standards, and more efficient litigation procedures. By improving its own development, this could also serve as a reference example for the national legal system design, drawing on strengths and addressing shortcomings.

(iv) Legal talent training program: To train professional intellectual property lawyers and arbitration and mediation experts, based on the establishment of a consultant group, design relevant training courses and seminars, and cooperate with the academic community, especially university law schools and intellectual property transfer departments, to promote the research and development of intellectual property law.

- Set up courses related to intellectual property trade to cultivate the complex talents needed for intellectual property trade.

If Hong Kong aims to develop into an "Intellectual Property Trading Centre" in the long term, as the volume of transactions expands and demand increases, there will be a need for dedicated intellectual property valuation and intermediary service talents. Currently, Hong Kong's intellectual property trading market is not yet mature and lacks talent, necessitating the introduction of relevant talents from abroad in the short

term. From the current stage, it is necessary to set up courses related to intellectual property trade or establish assessment mechanisms, and plan early to build a pool of intellectual property trade talent, taking precautions. In terms of implementation mechanisms, universities' Technology Transfer Offices (TTOs) can cooperate with the government, trade promotion authorities, and the business community to jointly offer courses, with the comprehensive service alliance coordinating industry-academic-research information and skill needs to reduce communication costs.

Additionally, through cooperation with mainland universities, training programs can be conducted to cultivate complex talents in intellectual property trade and protection. Mainland universities have launched various higher education courses in intellectual property, such as the master's program offered by the International Intellectual Property Institute of Tongji University, which has cooperation agreements with the University of Munich, the University of Tokyo, and others, employing professors, scholars, and experts from top universities, research institutions, and Fortune 500 companies worldwide, admitting undergraduates with backgrounds in economics, management, and science and engineering. The curriculum includes not only traditional legal knowledge related to intellectual property but also content on the management and operation of intangible assets, providing comprehensive training for talents well-suited for overall management, operation, and trade of intellectual property. Hong Kong can seize the opportunity of accelerated collaboration in the Greater Bay Area and the construction of a Greater Bay Area university by the mainland, cooperating with mainland universities to offer training courses in intellectual property management and operations, initially implementing these at its mainland branches of Hong Kong universities as pilot projects and later extending them to other universities, jointly nurturing talents.

3.2.3 Medium to Long Term

Objective: On the basis of a certain trade scale, continue to expand the trading scope and improve the intellectual property trade service ecosystem; actively integrate into the national development strategy and become an internationally leading regional intellectual property trade centre.

- **Expand the trading scope and enhance service functions.**

The sustainable development of intellectual property trade not only requires an efficient trading platform but also needs continual nurturing and strengthening of the entire intellectual property ecosystem. This enables participants in intellectual property transactions to better connect, cooperate, and innovate. To achieve this goal, the Intellectual Property Trade and Comprehensive Service Alliance should, in the medium term, both expand the trading scope and enhance service functions.

- **Initiate intellectual property trade beyond the biopharmaceutical industry.**

Depending on the trade scale at the time, the Intellectual Property Trade and Comprehensive Service Alliance could, while discussing international technology and industry development trends and national industrial development directions, align with the local economic development needs of Hong Kong. Launch intellectual property from areas proposed in the "Hong Kong Innovation and Technology Development Blueprint," including life health technology, artificial intelligence and data science, advanced manufacturing, and new energy technology industries as priority options for expanding the categories of trade objects. In the future, intellectual property related to cultural creativity and more diverse trading categories could gradually be included.

- **Further build full-chain services, cultivate patent pools, and develop mutual protection functions for intellectual property.**

Patent pools are a product of global integration and the increasingly strong backdrop of technological development and technical standards. A standard or technology may involve many patents, and the patents essential for implementing the standard, i.e., standard-essential patents, will eventually enter the patent pool. Patent pools usually adopt a unified standard licensing agreement and fee standard, which allows licensed companies to avoid lengthy individual patent licensing negotiations with each member of the patent pool, significantly reducing transaction costs in patent licensing and thereby eliminating licensing barriers in patent implementation. Since the pharmaceutical industry generally does not involve standard-essential patents, the more common scenario for

intellectual property transactions is currently one-on-one. Therefore, the alliance could consider cultivating and forming professional and regionally influential patent pools similar to Sisvel[37] and Avanci[38], when the intellectual property trade ecosystem is more mature and more transactions involving standard-essential patents are conducted, based on industry trends and its own advantages.

Additionally, overseas intellectual property litigation is very common, and there are even some organizations that specialize in maliciously acquiring intellectual property and then using aggressive, speculative IP litigation strategies to entangle and profit from actual companies. This has caused certain troubles for mainland enterprises that want to expand overseas. The alliance could further explore the development of IP mutual defence functions (defensive NPEs) on the basis of trading, legal, financial, and insurance services, by collecting membership fees to then purchase defensive patent portfolios and license them to members, or by means of cross-licensing among members, to reduce the risk and cost of malicious litigation for member companies.

Non-Practicing Entities (NPE), categorized by their operational intentions, can be divided into offensive and defensive types. Offensive NPEs typically adopt aggressive intellectual property litigation strategies, entangling and even harassing practicing companies in an attempt to profit opportunistically. This approach runs counter to the original intent of intellectual property laws, which are to foster and encourage innovation. Such companies are often referred to as "patent trolls." In contrast, defensive NPEs play a positive role in patent brokerage by reasonably managing intellectual property to obtain objective economic returns, thus invigorating the transaction market and enabling their members to effectively resist the disruptions caused by offensive NPEs.

[37] Sisvel was founded in 1982 and was initially responsible for managing an important television patent portfolio spun off from the Italian company Indesit. After years of development, it has become an influential patent pool for technologies such as wireless communications, digital video, audio and video coding, and has extensive experience in successfully managing patent portfolios.

[38] Founded in 2016, Avanci is currently the most influential patent pool in the international automotive industry. It is headquartered in the United States and includes founding members Ericsson, Qualcomm, KLM and ZTE.

- **Utilize innovative technologies such as big data, cloud computing, blockchain, and artificial intelligence to continuously enhance the technological advancement of the trade platform.**

The intellectual property trade platform has high requirements for data collection and analysis, and should utilize technologies like big data and cloud computing to deeply grasp market supply and demand situations, intellectual property values, and industry trends; additionally, actively using blockchain technology will also provide traceability and security for platform transactions; in terms of automation and personalized services, technologies like natural language processing and machine learning can be used to provide more accurate and efficient transaction services, and provide a better trading experience for both parties.

- **Form a synergistic relationship with the mainland to create a virtuous cycle of intellectual property creation, protection, and trade.**

After establishing industry scale, promote the integration of the alliance with major intellectual property platforms and science and innovation parks on the mainland, establish permanent communication and cooperation channels, and develop intellectual property financing, insurance, and trade for industries other than biomedicine, and consider further expanding the mutual IP protection functions in Hong Kong and the Greater Bay Area to enhance the alliance's ability to protect against malicious litigation and expand its protective scope.

Mainland China currently has a wide variety of intellectual property platforms, some of which, including research institutions, are established by the government:

(i) The Shanghai Government emphasizes top-level design and encourages ecological environment, including setting policy KPIs for banks, where loan amounts are related to intellectual property each year; corresponding KPIs are also set for companies and enterprises, requiring specified R&D development annually. Small and medium-sized enterprises involved in related transactions can enjoy benefits such as tax rebates.

(ii) Guangzhou has established an Intellectual Property Research Institute,

which in 2020 formed an IP Financing Professional Committee, mainly conducting work related to the pledge, financing, insurance, and licensing of intellectual property, as well as assisting the government and provincial and municipal departments in carrying out intellectual property financial tasks.

(iii) The Shenzhen Government has established the Futian District Government Frontier Technology Law Research Institute.

(iv) There are also private intellectual property management organizations that provide full-chain, one-stop intellectual property solutions, assisting clients in global application layout, analysis consulting management, high-value patent transaction operations, licensing negotiation support, and litigation dispute resolution.

The mainland is currently revising its trademark laws to address various malicious registration practices related to intellectual property. At the same time, there is a high degree of homogenization among mainland intellectual property platforms. By leveraging the Hong Kong Intellectual Property Trade and Comprehensive Services Alliance to connect with mainland platforms, we can integrate similar functions from different platforms and synergistically develop with Hong Kong's unique legal system and trade experience.

Hong Kong should take the lead in collaborating with the mainland (especially the Greater Bay Area) through the Intellectual Property Trade and Comprehensive Services Alliance in areas such as systems, laws, policies, and talent. This includes negotiating to refine legal policies, establishing official G2G communication channels, clarifying necessary policy and legal support, and promoting the circulation of regional resources. By efficiently integrating resources from Hong Kong and the mainland, we can facilitate the country's overall high-quality development.

In addition, Hong Kong can attract more mainland intellectual property transaction operation service companies, service institutions, and official agencies to expand and settle in Hong Kong, forming a synergy with the Comprehensive Services Alliance, serving as a platform for attracting mainland intellectual property business. While leveraging Hong Kong's

advantages, this can further drive the development of local intellectual property transactions and also attract more participants from around the world, gathering more international resources.

- **Apply to the central government to establish a pilot zone in Hong Kong for the authorization and licensing of Mainland intellectual property, as well as "dormant patents" from state-owned enterprises, and universities.**

In recent years, the country has seen rapid and significant growth in university scientific research output, technological resources, and talent. Given the current international strategic situation and the needs of internal economic transformation and development, it is increasingly necessary for universities to create real value, promote the transformation of achievements, and form new productive forces. The utilization of massive university research results requires market development, risk-bearing capital operators, and investment willingness. The Ministry of Finance of China is open to the transfer, licensing, and investment of university scientific and technological achievements, except for matters involving state secrets, security, and critical core technologies, universities have a high degree of freedom in transactions. Universities pursue academic excellence and invest heavily in initial research. However, the academic community generally lacks the willingness to invest in later-stage commercialization, which involves higher risk, higher investment, and unstable returns. When mainland enterprises carry out commercial insurance-backed intellectual property patent pledge financing business in Hong Kong, they must first register a company in Hong Kong, indirectly increasing the time and financial costs of operating in Hong Kong; the Ministry of Science and Technology of China is promoting the transformation of results, showing the country's urgent need for university knowledge transfer. When the Hong Kong intellectual property trade ecosystem matures, Hong Kong can apply to the central government to build a "licensing and connection trial zone" to connect state-owned enterprises and mainland universities' intellectual property with overseas buyers and facilitate transactions.

At this stage, it is recommended to clarify the cross-border trade paths and market guidelines between state-owned enterprises and mainland

universities with Hong Kong, deepen the various operational details in the transaction process, and establish a green channel for mainland state-owned enterprises to conduct business in Hong Kong.

The incentive system for mainland state-owned enterprises, universities, and researchers participating in the platform includes providing research and development funding support, government awards, opportunities for overseas exchanges, and cooperation in teaching positions to stimulate the enthusiasm of researchers in participating in the transformation of intellectual property results.

The construction plan and details for the "Authorization and Licensing Pilot Zone" include:

(i) Establishing cross-border trade pathways and market guidelines: clearly define the transaction procedures and requirements between mainland universities and the Hong Kong platform, providing guidance and support for transactions. Clarify the legal and compliance requirements related to transactions, seek support from national ministries, and establish standards and procedures for cross-border intellectual property transactions.

(ii) Addressing operational details: propose solutions for potential past issues and obstacles to ensure smooth transactions, including simplifying procedures and document requirements, addressing various stakeholders' opinions on transaction prices, such as the distribution of profits during the transformation process, and various regulations during the publicity period, reducing bureaucratic obstacles, and providing corresponding market service support and transaction guidance for researchers and university professors.

(iii) Substantive exemption clauses: for state-owned enterprises in Hong Kong to carry out patent pledge financing businesses insured by commercial insurance, establish a green channel: state-owned enterprises conducting patent pledge financing business in Hong Kong do not need to register a company there, saving time and financial costs.

(iv) Reward system: Currently, after mainland universities achieve results, it is generally the professors who propose the transformation of results. Reward measures can be provided for mainland state-owned enterprises, universities, and researchers participating in the

platform to stimulate their participation in the transformation of intellectual property results, provided by the service alliance and government, including research funding support, government awards, overseas exchange opportunities, and cooperation in teaching positions.

(v) Pilot zone management mechanism: establish an effective management mechanism responsible for the operation and supervision of the pilot zone. Through the talent pool gathered by the service alliance, establish corresponding institutions or committees responsible for evaluating and approving transactions, supervising the use of funds, and the operation of the pilot zone.

(vi) Providing training and support: offer relevant training and support to all parties participating in the pilot zone to enhance their professional skills and awareness in the field of intellectual property transactions, including organizing training courses, providing guidance documents and resources, and establishing a network of expert consultants.

(vii) Establishing an intellectual property assessment mechanism: set up an independent intellectual property assessment mechanism to evaluate the patent value of scientific research results from mainland universities and state-owned enterprises, helping to determine the commercial potential of intellectual property and attract investors' interest. This mechanism can be composed of professional institutions or experts who will assess the research results, including technological advancement, market demand, competitive environment, etc. Of course, it is difficult to objectively measure such intangible assets as technological achievements, which only gain real value when they produce social benefits. This measurement will require a value assessment team consisting of mainland experts familiar with the international market and Hong Kong experts to achieve a fairer assessment. A comprehensive assessment mechanism will provide more reliable information for investors and help universities better understand the value and application prospects of their intellectual property.

The construction of this pilot zone requires the support and approval of the central government, involving cooperation and efforts from various parties. By establishing a pilot zone with official support and concentrated

elements, it promotes the transformation of scientific research achievements of mainland state-owned enterprises and universities, attracting more capital and investors to participate in intellectual property transactions, and driving innovation and economic development.

- Coordinate the arrangement of global high-tech and biopharmaceutical summits and expositions to attract top scientists and R&D companies to showcase their achievements to global investors (including those from the mainland), leveraging Hong Kong's role as a professional intermediary to achieve a win-win-win situation.

Based on the expansion of the Intellectual Property Trade and Comprehensive Services Alliance and its establishment in Hong Kong Science Park, Cyberport, and the Shenzhen-Hong Kong Innovation and Technology Cooperation Zone, we will actively utilize the alliance's networking capabilities in these areas to organize regular high-tech and biomedicine summit forums and expos. This will promote Hong Kong's intellectual property trade opportunities and innovative research outcomes in collaboration with companies in Hong Kong Science Park and Cyberport.

In the long term, more overseas buyers, investors, and industry professionals can be invited to join the alliance in various membership forms. They will regularly receive information on intellectual property transactions and research results in Hong Kong, further enhancing the platform's international reputation and clustering effect, and propelling Hong Kong toward becoming a leading regional intellectual property trade centre.

Summary

Through the phased and systematic planning and deployment of the development of a regional intellectual property trade platform in Hong Kong, there is an opportunity for Hong Kong to expand its existing advantages. With biopharmaceutical intellectual property transactions as a breakthrough, Hong Kong can continuously expand the scope of transactions and improve the intellectual property trade service ecosystem. This will strengthen Hong Kong's competitiveness as a regional intellectual property trade centre and advance it toward becoming a leading international intellectual property trade hub.

At the same time, by connecting mainland and overseas intellectual property trade markets, Hong Kong can seize the vast business opportunities brought by intellectual property to promote the development of a high-quality innovative economy. Additionally, in the national context of fully developing "New quality productive forces," intellectual property trade serves as an important vehicle for the flow and circulation of new technologies, new elements, and new industries, effectively integrating into the national development strategy.

(End)

Acknowledgement

We would like to express our gratitude to the following experts, scholars, government departments and organizations for their support on this report:

Government Departments:
China National Intellectual Property Administration
Legal and Regulation Department of the National Financial Regulatory Administration
Property Rights Bureau of the State-owned Assets Supervision and Administration Commission of the State Council
Center For Drug Evaluation, NMPA
Department of Science, Technology and Informatization, Ministry of Education
Hong Kong Commerce and Economic Development Bureau
Hong Kong Innovation, Technology and Industry Bureau
Hong Kong Intellectual Property Department
Hong Kong Inland Revenue Department

Chamber of Commerce:
The Federation of Hong Kong Industries (Advisory Body)
The Chinese Manufacturers' Association of Hong Kong (Advisory Body)
The Chinese General Chamber of Commerce, Hong Kong (Advisory Body)
The Hong Kong General Chamber of Commerce (Advisory Body)

Enterprises：

Shanghai Zhangjiang (Group) Limited
Shanghai Yingli Pharmaceutical Limited
Sino Biopharmaceutical Limited
Zhengda Pharmacy Group
Ernst & Young Tax Services Limited
Hutchison MediPharma (Shanghai) Limited

Laikai Medical Science and Technology (Shanghai) Limited
InSilico Medicine Cayman Top Company
Qianhai International IP Integrated Operation Services Centre
Hong Kong Cyberport Management Company Limited (Advisory Body)
Shenzhen Beipeng Frontier Scitech Law Institute
Purplevine IP Group
Shandong Boan Biotechnology Company Limited

Academia：

University of Hong Kong
WONG PUI SZE, Chairman of the HKU Council
WONG YUE CHIM, Provost and Deputy Vice-Chancellor (Administration and Finance)
FU HUA LING, Dean (Faculty of Law)
LI XUE CHEN, Associate Dean (Faculty of Science in Research and Postgraduate Affairs)
TANG HEI WAI, Vice Dean (Faculty of Business and Economics); Professor in Economics (Victor and William Fung Foundation)
SHEN HAI PENG, Professor (Business School)
WANG PENG, Director of the Techno-Entrepreneurship Core

School of International Innovation and Transformation, Shandong University
QIAO YUE, Associate Dean
XING JIAN PING, Professor (School of Control Science and Engineering)
ZHANG LI WEI, Associate Professor
LIU YI, Associate Professor

Shanghai International College of Intellectual Property, Tongji University
TAN WEN ZHONG, Secretary of Party Committee
JIANG NAN, Vice President
SONG XIAO TING, Professor
CAO LI RONG, Associate Professor
JIANG LI, Associate Professor

Other University Institutions

LU WEI, Distinguished Chair Professor, Zhejiang University
XU XUAN, Dean (Intellectual Property Research Institute), Jinan University
ZHU XIE QUN, Professor (Faculty of Law), Shenzhen University
YI ZAI CHENG, Professor (Faculty of Law), Macau University of Science and Technology

Other Experts and Scholars

HO LOK SANG, Managing Director of the Nomura International (Hong Kong) Limited
LI XUE JUN, Deputy Director of the IP Litigation and Antitrust Disputes, Huawei (China Region)
LI CHIANG LING, Partner of the Tiang & Partners Limited
XIAO SHENG GAO, Dean of the Shenzhen Beipeng Frontier Scitech Law Institute
LIN YU QING, Lawyer of the CNPAT Lungtin IP Value Inc. (Shenzhen)
GAO CHEN HAO, Executive Director of Intellectual Property, SenseTime Group Inc.
KWOK ZEE FUNG, Partner of the JunHe Law Offices (Hong Kong)
LEUNG WING YU, Managing Partner of the Qiming Venture Partners
ZHANG LI JUAN, Senior Research Director of the Intellectual Property, Shenzhen Neptunus Pharmaceutical Research Institute
YANG CHEN CHEN, Research Supervisor of the National Innovation Center for Advanced Medical Devices
DENG FENG GUI, Executive Director and General Manager of the EIFQ Group
LIU BO WEN, Manager of the Intellectual Property Legal Affairs Department, Foxconn Technology Group, IPEBG
KUNG WING DAK, National Committee of the Chinese People's Political Consultative Conference; Member of the expert group of the Hong Kong Chief Executive's Policy Group

Individual Members of the Advisory Group:

WEN MING, Vice President of the PurpleVine IP Group
LI FEI, President of the Qianhai International IP Integrated Operation Services Centre
WU DONG XING, President of the National Base For Copyright Trace (Yuexiu)
ZHOU ZHONG QI, Former President of the China Licensing Executives Society
ZHOU LIN, Senior Researcher of the Shenzhen Beipeng Frontier Scitech Law Institute
GUO QING CUN, Distinguished Professor of the Shanghai International Intellectual Property College
CHAN HING CHUNG, Deputy Director (Technology Transfer Office), Hong Kong University
LEUNG KA LAI, Former Director of the Intellectual Property Department of Hong Kong
ZHANG YA LIAN, Secretary General of the Guangdong IP Protection Association
CUI GUO BIN, Professor (Faculty of Law), Tsinghua University
HUANG PING, Executive Vice President of the Chinese Institute of Hong Kong
ZHAO JUN, Vice President (Intellectual Property Division), Qizhidao Technology Co., Limited
FAN ZHI YONG, Vice President of the Huawei; Director of Legal Policy and Intellectual Property Strategy Department

Members of the Research Team :

TAM WAI CHU, Deputy Secretary General of the Hong Kong Coalition
SO KAM LEUNG, Former Secretary for Commerce and Economic Development of Hong Kong; Leader of Research Team
LI YA HONG, Associate Professor of the Faculty of Law, University of Hong Kong
ZHANG PING, Executive Dean of the Intellectual Property Development Research Institute of Peking University in the Guangdong-Hong Kong-Macao Greater Bay Area
KO TING KWOK, Ex-officio Advisor of the Hong Kong Young Industrialists Council
WONG KWONG LAM, Director of China Global Solutions, Aon Hong Kong Limited
LU DI, Lawyer of the P. C. Woo & Co.
FANG ZHOU, Research Director of the One Country Two Systems Research Institute
WONG BING FAN, General Officer of the Hong Kong Coalition
FONG HIU CHUNG, Officer of the Hong Kong Coalition
ZHU YAN, Senior Research Officer of the One Country Two Systems Research Institute
CHEUNG KWAN WA, Assistant Research Officer of the One Country Two Systems Research Institute
FAN RUI, Assistant Research Officer of the One Country Two Systems Research Institute
LEUNG PUI HING, Assistant Research Officer of the One Country Two Systems Research Institute

香港再出發

HONG KONG COALITION

OFFICIAL WEIXIN

OFFICIAL WEBSITE