Sovereign Patent Funds (SPFs): Next-generation trade defence?

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1. INTRODUCTION: THE NEXUS OF INNOVATION, NATIONAL INTERESTS AND PROTECTIONISM

Intellectual property rights, and patents in particular, are increasingly one of the most commercially critical assets in global competition. Innovation has become a necessity for the information and communications technology (ICT) industry, which is characterised by fiercely contested market shares and ever-shorter product cycles, in which patents – not manufacturing capacities or prices – have become the main focus of policymakers and business. This is exemplified by the rising number of patent litigations in the technology industry. Court cases related to patent infringements have been filed in all of the major consumer markets in the so-called Smartphone Wars, in which companies are using patents as munitions. All market players have sued each other for patent infringements in Australia, Japan, Korea, the United States, and six European jurisdictions – to a degree that it has been reported that companies like Google must spend more on legal fees than on actual R&D research to fend off irksome lawsuits.¹

As the fabrication of products becomes less and less relevant and increasingly outsourced, innovation and design play an ever growing role in the value chain. Several companies have evolved into innovation licensors rather than outright manufacturing businesses – given the market power of patents, while the number of non-practicing entities (NPEs) has also increased significantly. These can be everything between...
respectable R&D centres and academic institutions – to outright ‘patent trolls’ that seek license payments against threats of vexatious lawsuits.

Whereas these developments present new challenges for industrial policy and patent law (and possibly also competition policy), it is not necessarily a problem per se for the trading system. However, there is a genuine and legitimate worry in the debt-ridden and growth hungry Europe about the slow transition towards higher value-added, while the emerging economies are catching up rapidly. This has led to a new form of mercantilism on high end products aimed at maximising market access in foreign markets while maintaining a defensive stance on imports. Recent antidumping investigations launched against Chinese solar panels and telecom network equipment, or the resistance against free trade agreements (FTAs) with Asia over car imports are examples of such developments.

In this politically charged environment, technology is once again a national strategic interest. Similar to the strategic sectors of previous eras (e.g. aerospace, energy, semiconductors, just to name a few examples), the ICT sector has become the subject of a new wave of state-activism, where governments are less shy about becoming market actors as well as regulators. The role of state-owned enterprises (SOEs) is often discussed in the context of emerging economies, most notably due to their prominence in China’s supply chains and processing trade.

The ever-shorter product cycles, yet ever-longer or wider terms of protection of IPRs suggests that free trade agreements with their norm-setting effects, that also govern both technology trade and IP protection can be constructed in either a pro or anti-competitive manner. This policy brief looks at the potential culmination of these policy developments, namely the nexus between innovation, state-led IP policy and international trade. While there is an increasing demand for a discipline in the next generation free trade agreements (FTAs) that restricts the perceived unfair advantages of these SOEs in international trade, there is less debate on the proliferation of sovereign patent funds (SPFs) which are state-owned patent pools and NPEs that are actively acquiring and exercising patent rights. These SPFs could have different objectives – in some cases, they could be to promote commercialisation or act as intermediaries in marketing of the patents to possible licensees, sometimes as pools – packaged deals containing several different patents with different owners. However, governments are increasingly using intellectual property to engage in discriminatory industrial policy in an attempt to augment the competitiveness of ailing national champions against foreign competition.

2. INDUSTRIAL POLICY AND IP

Whether through funding of base research, academic institutions or through public projects the traditional role of governments in R&D promotion and its spillover effects are well-established. In the wake of the economic crisis, governments in Asia, Europe and the US continue to use stimulus packages to encourage further R&D – for example, the EU’s Framework Programme for Research and Technological Development (FP8) is renewed until 2020 with 80 bn Eur over 7 years, a 58% increase over the previous period; the US funding of basic research through universities and federal government amounts to circa 16% or 90 bn USD; while similar numbers for China are difficult to acquire, it is understood that China’s total spending (including the private sector) is soon to converge with the US, the world’s innovation leader, although the role of public funding in China is assumed to be significantly larger.

Such traditional state-involvement in R&D is not necessarily discriminatory against foreign-invested firms – the EU encourages or even stipulates intra-EU co-operation as a condition for funding. However, Chinese IP policies have maintained a bias toward facilitating assimilation of technology from abroad, rather than adequate IP enforcement or incentivising real innovation. The patent framework is tailored to accommodate the needs of SOEs who seek primarily to minimise their licensing costs, and seek protection against foreign competition. There is also a discriminatory selection for funding in favour of ineffective SOEs, rather than foreign-invested firms or domestic private firms, such as Lenovo and Huawei with real
market and export potential. This inefficiency will lead to a comparative disadvantage for Chinese exports in the long run and inevitably to welfare losses. According to OECD, sales by SOEs account for 26% of China’s gross national income. As these firms are major exporters, but less exposed to domestic competition and thereby less productive, the high welfare losses are also spilling over to China’s trading partners.  

Furthermore, China made a much-criticised strategic shift towards promoting so-called “indigenous innovation”. Discouraged by the low value-added nature of Chinese exports and concerned about China’s technological and economic dependence on western technology, Chinese leaders saw achieving large-scale innovation as the next milestone in their developmental policies.

Although China’s innovation strategy has been subject to some retuning, the underlying policy document, Guidelines for the Implementation of the National Medium and Long-Term Program for Science and Technology Development 2006-2020, remains the comprehensive blueprint of policies aimed at spurring domestic innovation. The plan calls for “enhancing original innovation through co-innovation and re-innovation based on the assimilation of imported technologies” and warns against importing foreign technology unless it is “transformed” into Chinese technology, in order to allow China to create its own intellectual property – which overseas businesses consider to be a policy of large-scale technology theft.

The plan also identified subsidising R&D in strategic emerging industries and affording priority to domestic enterprises with local IP when making public procurement decisions – the Multi-Level Protection Scheme (MLPS) mandates that core ICT used by government and infrastructure companies (banks and telecoms) must either be provided by Chinese providers or surrender used patents and source codes for security reasons. However, the most controversial element in the policy, a patent law reform designed to let foreign-invested firms to transfer their patents to Chinese national champions, was withdrawn after years of international pressure.

Import substitution and anti-competitive measures against foreign patents and products is often not in the country’s best interest, but supports a security state-controlled industrial base. While China’s recent large-scale efforts to grow its SOEs into national champions borrow many features from post-War policies in the Asian tiger economies, none of the countries embarked on an industry policy that is so strongly interlinked to patents, or implemented such defensive strategy on a scope never before seen in history. China is also taking new avenues to shore up its defence against foreign patent litigations, including merger control. One of China’s competition authorities, Ministry of Commerce (Mofcom) who plays a triple role of trade negotiator, competition authority and industrial planner, has demanded unprecedented concessions in return for clearing recent acquisitions: It barred both vendor and seller of the Nokia assets to use patent litigations against any Chinese firm, and similar concessions were taken out against Motorola’s patent assets in its acquisition by Google.

China has clear intentions to shore its defences, or even become an active player, in the patent wars. Local governments in China (who are often in charge of R&D and industrial policy) have established patent pools – the Zhong Guan Cun Science Park in Haidian District in Beijing, has, along with the local government, pooled funds to defend domestic companies.

In conclusion, there is no doubt that China has both financial and political resources (or perhaps more importantly, the determination) to countervail and retaliate against any action taken against its ICT sector – and to date, not a single legal injunction has been taken out by the major ICT players in Chinese courts. Meanwhile the economies of mid-sized economies like France, Korea or Taiwan are relatively shrinking, making mercantilist tactics futile that would only legitimise same treatment against them by bigger economies.

3. GOVERNMENT PATENT POOLS: FROM ACADEMIC COMMERCIALISATION TO FRANCE BREVETS

While outright discrimination of R&D funding and patent protection to promote SOEs is a phenomenon relatively isolated to a very few economies, the use of patent pools is a far more disseminated strategy. The
governments of France, Japan, Korea, Taiwan, China and India have all created patent pools with patents acquired from home or abroad.

The early incarnations of government involvement in IP were often justified as governments setting up public/private partnerships (PPIs) for sales and commercialisation of academic research—a practice that is still commonplace and exists in many countries. In some cases, governments distributed the high R&D costs amongst a cluster of companies, or licensed expensive foreign technologies on behalf of an entire country for sub-licensing to all local manufacturers as a national collective bargain. For example, Taiwan negotiated key patent licenses for transistor development in 1970s, which helped to overcome the high market entry costs for its budding ICT sector.

The recent evolution of SPFs operates however on an entirely different basis. First, they acquire patents originating from other countries than they set out to promote—for example, France Brevets, a patent fund created by the French government holds patents from several key jurisdictions, including the US, China, Japan, Korea, and several EU member states; its scope is also relatively wide, and include near field communications (NFC) devices, such as smartphones, feature phones, tablets, laptops, PCs, TVs, and smart meters. Similarly, Intellectual Discovery in Korea has acquired 3,800 domestic and foreign patents with a balance sheet of $250 million, with a particular focus on smartphone related technologies, e.g. mobile networks, cloud computing, light emitting diodes, batteries and NFCs. China’s IP Bank is a PPI between Israeli private equity and China Development Bank that was set up solely to acquire patents from Israel’s technology sector. In 2013, IP Bank was managing $700 million, dwarfing both private and public patent funds.

Second, they tend to have a political objective that goes well beyond the traditional government role of creating incentives for promoting or facilitating innovation. Patents are often acquired to be used as political instruments, rather than for commercial purposes. Some SPFs, like the aforementioned France Brevets or Intellectual Discovery admit to being retaliatory or discriminatory instruments against foreign actors regardless of whether the original claim is legitimate or not. As an example, France Brevets has filed suits against two Asian mobile technology firms (LG of Korea and HTC of Taiwan) for infringement of near-field communications (NFC) patents it has licensed from a French firm, filing their complaints at litigation-friendly courts in Germany and the U.S. that tend to favour the plaintiffs and grant injunctions.

One of the alleged objectives of the patent bank under Taiwan’s Industrial Technology Research Institute (ITRI), a government agency, was to collect useful patents for its defensive actions in case a Taiwanese firm should “face a patent-infringement lawsuit filed by its competitor or a patent troll”, and provided assistance to Taiwanese firms against Korean competitors in the LCD displays.

There is no shortage of criticism against the vast majority of private PAEs that use patents as a means to open or threaten litigation for patent infringements, sometimes by using design patents whose validity could be disputed. Many who are accused of infringements by PAEs will settle rather than enter into litigation, as patent litigations are costly in most jurisdictions. However, these actions by state-controlled PAEs are of special relevance when the trading system is entering into a new cycle of mercantilism and confrontational approaches. Europe’s traditional form of protectionism is trade defence instruments such as antidumping and countervailing (‘corrective’) duties against subsidies, where producers can file a complaint against foreign (i.e. Chinese) competitors, effectively binding the authorities to open up an investigation that is biased towards an outcome that illegal dumping or subsidies exists. If its results find dumping, i.e. predatory pricing below production prices, as well as an injury made on local producers, a special duty is then levied on these products.

4. CONSEQUENCE OF GOVERNMENT LITIGATIONS

The use of antidumping and countervailing duties are however becoming increasingly politicised. As witnessed in the recent trade disputes over solar panels and telecom equipment between the EU and China, the use of trade defence often becomes associated with national prestige, and gets entangled in a circle of retaliations. Also, they are near impossible to deploy against competitors from
developed countries (say United States or South Korea) that have been granted market economy status, as proving injury, or the dumping margin, is based on using a methodology that puts non-market economies in a disadvantaged position. The lion's share of trade defence cases are raised against China, who after 2016 is guaranteed to receive market economy treatment from all WTO members. More, entire countries, not single companies, are generally targeted in trade defence measures.

Therefore, patent litigations by SPFs offer a flexibility that is currently not provided in other trade defence instruments. In the EU, the actual decision whether a dumping duty is introduced or not is not investigated or decided by the national governments, but by the European Commission. As a result, the decision is collateralised with other trade and foreign policy aspects, and thereby more complicated to employ. Patent litigations by state-owned PAEs could be the outlet for decade-old protectionist inclinations in Europe, by giving some degree of freedom back to a member state who has delegated its trade policy powers to the EU. Indeed, some commentators claim that they have already derisively labelled these entities as state-sponsored patent trolls and a new form of protectionism.

For followers of the international trading system, such logic (or illogic) is not new – the confrontational approaches of SPFs have the same limitations as trade wars using antidumping measures: They lead to retaliatory behaviour, which may lead to mutually assured destruction – as both sides are able to prove patent infringement of some kind, given the broadness and general nature of some patents.

Litigations and injunctions by SPFs are potentially a new trade defence instrument with wider applicability than antidumping and countervailing duties. Every government would need to fund a SPF to protect itself against discriminatory litigations, leading to an arms race. However, once SPFs are established, there would be few incentives for any party to unilaterally dismantle them. Such trends would potentially reverse existing liberalisation in the ICT sector, where WTO agreements like the ITA have effectively cut all tariffs on all technology trade. Moreover, France and others are merely providing incentives and justification for China and other emerging economies to invest in their own SPFs, with significantly larger funds and much more pronounced nationalist and mercantilist objectives. Just to take an example, Chinese SOEs file approximately 23,000 patent applications annually, and an entirely different magnitude than any SPF mentioned. Given the political economy, small/mid-sized, export-led economies like Taiwan, France and Korea cannot come out as winners from a proliferation of state-owned PAEs.

The obvious lose-lose scenario raises a serious question of state involvement in technology patents. Disputes involving SPFs bring geopolitics into the equation, causing further fragmentation of the patent system thus deepening its flaws. It is self-evident that the current issues in the patent system – the litigations or the use of ‘junk’, design or utility patents – can only be solved by comprehensive patent reforms, and not through the governments engaging in same practices. State involvement in the patent system via SPFs is worsening the innovation climate and risks making the current problems in the patent system permanent.

5. SOE DISCIPLINES IN NEW TRADE AGREEMENTS

Ironically, the core concept of competitive neutrality between SOEs and private sectors was championed by the EU primarily through case law as early as in the 1970s. Since then, business and civil society groups have in the past expressed a desire to include provisions in trade agreements that guarantee that SOEs do not become trade barriers as governments may provide them with subsidies or de facto or de jure monopoly, thereby discriminating foreign competition. Current sets of trade rules, e.g. WTO disciplines on subsidies, are based on SOEs operating on commercial terms and under competitive neutrality, receiving no competitive advantages beyond those enjoyed by private sector companies. In short, SOE disciplines in next-generation FTAs are based on a rationale ‘to promote efficient competition between public and private businesses’, specifically ‘to ensure that government businesses do not enjoy competitive advantages over their private sector competitors simply...
by virtue of their public sector ownership”, as it is described by the Australian Productivity Commission, ultimately endorsing the original European idea.

The current debate on SOEs has been focused on their role in production and manufacturing exports, particular in regards to non-market economy countries like China, or Vietnam. Domestic interest groups often accuse their SOEs of being driven by non-market objectives, such as keeping unemployment rates down. This debate on SOEs distorting world trade is one-dimensional, and would make little sense in the ICT sector where suppliers (SOEs and private companies alike) are deeply integrated into the global value chains of collaborative production.

In this context, FTAs are primarily soft law instruments that are designed to incentivise liberalisation and reform, and are increasingly important to enforce disciplines. Understandably, the new major trade agreements, such as the Transatlantic Trade and Investment Partnership (TTIP) and Trans-Pacific Partnership (TPP) will contain provisions on SOEs, given they are designed to create new standards on trade rules for multilateralisation in one form or the other. However, SOE disciplines are not always a product of free trade rationale, but rather designed as a disguised trade barrier against products made with parts and inputs produced by SOEs, or an imposition of social standards from one party to another.

On the issue of intellectual property, recent FTAs are limited to providing standards for protection (e.g. on terms of protection or enforcement), often through making the parties signatories to WIPO treaties. Furthermore, trade agreements also include disciplines on competition policy, in particular state aid, such as R&D funding; China and other economies impose provisions that forbid the signatories to undertake trade defence measures against each other. None of these provisions bind the parties to refrain from using IP controlled by SOEs or SPFs for political purposes.

If the core principles of free trade – such as national treatment between foreign and domestic products (as originally expressed by GATT Article III), or the rules disciplines under the WTO – are to stay relevant and to be upheld in the modern age, the scope of SOE disciplines needs to be widened beyond the current focus on manufactures exported by state-owned factories. The abuse of intellectual property rights for political purposes by SPFs may or may not be covered by old definitions of government and authorities, or “internal taxes and other internal charges, and laws, regulations and requirements” as envisaged by existing trade law. Hence this calls for different priorities on SOE disciplines in next-generation FTAs such as TTIP or TPP. In fact, it makes little sense to argue over SOE exports while refraining from counter-acting the potentially more disrupting and systemic effects of SPFs that also spill over on innovation as well as the global trading system.

6. CONCLUSION

The ICT industry used to be the most free trade oriented of all industries. In 1996, the industry was successful in lobbying for a total tariff removal in over 90% of the products across developed and developing countries. In the current political cycle, trade policy is increasingly turning towards geopolitical considerations and looking for new avenues for protectionist measures. Setting up SPFs is another example of these tendencies. State involvement in the patent system is gradually worsening the innovation climate where the problems are already acute. Further politicisation is not a remedy, but is turning the current problems in the patent system from political to geopolitical, and making its flaws permanent.

Regulatory and soft protectionism have a tendency to become a permanent feature of the trading system, and rapidly disseminated into other countries and sectors. Given the massive size of China’s patent arsenal and the political economy of international trade, mid-sized and export-led economies like Taiwan, France and Korea cannot emerge as winners from a proliferation of SPFs. Their home markets are simply far too small to sustain a global industry like ICT, even in the short run. Therefore, the case against setting off an arms race is obvious for a mid-sized market economy such as France, Korea and Taiwan. Moreover, less product variety lead to consumer welfare losses and lower productivity in downstream industries that use ICT technology. In the past decade, France and other EU member states have (unlike their
Asian counterparts) championed several trade strategies that have set off retaliatory or reciprocal behaviour. In various areas – most notably antidumping, state subsidies, public procurement and market access for national champions – France and its likeminded countries have thrown the first stone. The result is almost without exception a net loss for the EU with marginal improvements of market shares at home, in exchange for the loss much bigger or faster growing markets abroad.

Upcoming FTAs (TTIP and TPP) could be seen as addressing the problem via disciplines on SOEs, competition, trade defence and IP – this would entail a broader interpretation of competitive neutrality, which would also define how SOEs manage their assets, such as IPRs – not only an industrial perspective of input and output prices of their production. Curbing SPFs from becoming the new trade defence instrument against politically motivated targets could be a worthwhile effort in case SOE disciplines are being contemplated in FTAs.

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