China's Indigenous Innovation Policies Under the TRIPS and GPA Agreements and Alternatives for Promoting Economic Growth

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Abstract

China's intricate web of Indigenous Innovation policies affords preferences in government procurement to certain high-technology products whose intellectual property is owned or registered in China. While the policies were intended to strengthen China's national economy, they have been heavily criticized, notably by the US and the EU, as a strategic attempt to commercialize non-Chinese proprietary ideas in China and as a trade barrier that harms all stakeholders in the world marketplace. Although China's State Council recently committed the country to repealing several key Indigenous Innovation measures, the extent to which Indigenous Innovation preferences will be implemented by the local Chinese governments, which have significant autonomy in administering national policy measures, remains elusive. This Comment analyzes the legal status of Indigenous Innovation policies under the TRIPS and the GPA Agreements, examines the economic and policy goals underlying the policies, and concludes by considering alternative and mutually preferable solutions that would allow both China and its foreign competitors to achieve their technological and economic growth objectives.

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I. INTRODUCTION

China has recently escalated its efforts to transition from a manufacturing-based economy fueled by an abundance of cheap labor to an innovation-based economy driven by expanding its foundation of domestically owned intellectual property (IP).¹ Many commentators consider this strategy essential to bolstering China’s long-term economic growth in the twenty-first century.² One of China’s controversial growth tactics has been to develop a web of Indigenous Innovation Policies, which institute preferences in government procurement for certain high-technology (high-tech) products whose IP is owned or registered in China.³ These policies have been heavily criticized, most notably by the US and the EU, both as a strategic attempt to commercialize non-Chinese proprietary ideas in China and as a trade barrier that is harmful to all players in the world.

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² See id.
³ Broadly speaking, Indigenous Innovation Policies refer to a host of interrelated People’s Republic of China government policies aimed at fostering innovation within China, which utilize a range of strategies. The focus of this Comment, however, is specifically the 2006 policies implementing government procurement preferences. See Section III.
marketplace. The policies also potentially contravene several of China’s WTO obligations and commitments, including certain provisions of the Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS) and the Agreement on Government Procurement (GPA).

Indigenous Innovation has received substantially greater attention from media across the globe and Western leaders in the last year as the international community continues to pressure China into abandoning its controversial growth tactics. In response, China’s chief governing authority, the State Council, recently committed to repealing several key measures of the Indigenous Innovation Policies. These actions may represent significant progress toward an amicable resolution of the tension surrounding the policies. However, it is still unclear whether and to what extent Indigenous Innovation preferences will be implemented by the local Chinese governments, which have significant autonomy in administering national policy measures. It is also unclear whether China’s commitment represents political posturing, stalling, or a genuine effort on China’s part to come into WTO compliance.

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4 See Section III.B.
This Comment analyzes the legal status of the Indigenous Innovation Policies under TRIPS and briefly examines conflicts that would arise under the GPA if China eventually ratifies the GPA. This Comment begins by examining the economic rationale behind China’s desire to institute its Indigenous Innovation Policies. It then outlines the content of the important provisions of the Policies. Next it conducts a legal analysis under the TRIPS and the GPA Agreements. This Comment concludes by examining the economics and policy goals underlying the Indigenous Innovation Policies and considering alternative, mutually preferable solutions that would allow both China and its foreign competitors to achieve their technological and economic growth objectives.

II. BACKGROUND: THE DESIRE FOR INDIGENOUS INNOVATION

A. China’s Evolving Role in the World Marketplace

Known for decades as “the world’s factory,” China has capitalized upon its abundance of low-cost labor to manufacture the staples of daily life at prices that significantly undercut those produced by its Western competitors. Over the last thirty years, China’s manufacturing capabilities have evolved to include the production of a wide range of high-tech devices and consumer electronics, thanks to a host of foreign direct investors (FDIs) from the US and EU that have infused enormous capital into the development of China’s industrial base. These large companies continue to innovate in their countries of origin while manufacturing their products in China much more cheaply than would be possible in most other regions.

Although China has enjoyed significant industrial development in the last several decades, it continues to be confined largely to a manufacturing role. This low-value-added model causes China’s attendant profits to pale in comparison


China committed to ratifying the GPA when it joined the WTO in 2001, although its first two proposals in 2007 and 2010 were rejected. See Section IV.


Cong Cao, Challenges for Technological Development in China’s Industry, 54 China Perspectives 2, 3 ¶ 9 (2004) (China Perspectives).
with those typically reaped by the owners of the core technologies. Thus, China experiences large trade deficits in most high-tech sectors, including electronics and computer-integrated manufacturing. Moreover, in recent years key government officials have expressed heightened fear that dependence on foreign innovations compromises China’s economic and security interests. For example, China has long objected to US export control laws, particularly as applied to dual-use technologies, because it believes they limit its domestic companies’ access to essential foreign technology.

Because of this asymmetry, China now places the development of local technological and innovative capability among its highest priorities. The country’s goal is to play a leadership role in the technological revolution of the twenty-first century by turning itself into an innovation powerhouse. Successfully employing this strategy is key for China in its efforts to reposition itself strategically in the global marketplace and to witness sustainable future economic growth.

B. Hurdles on the Road to Innovation

Despite these lofty goals, China remains trapped in an innovation rut for a variety of reasons. Most significantly, Chinese firms are not generally as sophisticated as their Western counterparts, and they lack the capacity to


17 The one exception is biotechnology, where there is a small trade surplus. See China Perspectives at 5 ¶ 16 (cited in note 15).


19 See id. US export control laws regarding dual-use technologies apply to many products that are important to US national security but may also have uses that are not related to national security. See Cong Cao, Richard P. Suttmeier, and Denis Fred Simon, *China’s 15-Year Science and Technology Plan*, Physics Today 38, 39 (Dec 2006).


21 See id.
understand fully and improve upon many Western innovations. 22 As a result, Chinese firms often find it necessary to import foreign technology as a means of upgrading production capacity to continue to compete effectively, thereby leaving less revenue to invest in research and development (R&D). 23 By then foreign firms have often gained an advantage in developing the next stage of newer and better technologies. The result is a vicious cycle of “importing and lagging behind” with little ownership of independent IP rights in core technologies. 24

A second major hurdle to innovation is that China faces one of the worst “brain drains” in the world. A recent study indicated that seven out of ten Chinese students who enroll in a degree program in an overseas university never return to China. 25 China has made efforts to combat this trend, such as the Thousand Talents program launched in 2009, which provides generous incentives for top-level researchers and entrepreneurs to return home. 26 Despite such efforts, China has been unable to mitigate the problem appreciably. 27 A variety of complex social factors contribute to this growing problem, including a lower standard of living than those of many countries to which native Chinese migrate, less appealing healthcare and educational opportunities, and the country’s “only one child” policy. 28

Finally, China has not been able to integrate research institutions effectively into innovation infrastructures to nearly the degree of countries such as the


23 According to one study, large- and medium-sized firms have spent an average of 0.5 to 0.8 percent on research and development (R&D). National Bureau of Statistics and Ministry of Science and Technology, ed, China Statistical Yearbook on Science and Technology 2003 94, 94–95 (China Statistics 2003). Cao argues that a reasonable guess as to why many Chinese firms have not spent more on R&D is that they do not have the resources to do so. China Perspectives at 8 ¶ 24 (cited in note 15).

24 Id.


27 See id.

US. A cultural conflict between the operational methods of industry and academia in China may account for this rift. Since faculty in Chinese universities typically do not innovate for commercial purposes to nearly the extent that their US counterparts do, Chinese institutions usually tend to develop abstract ideas that are not patentable and that any company could, in theory, exploit. To help remedy this problem, the Tsinghua Science Park in Beijing provides a forum for businesses and academia to develop closer relationships with the ultimate goal of commercializing university ideas through developing spin-off companies.

C. Previous Attempts at Advancement

One way that Chinese firms historically have gained an edge over their foreign counterparts is by direct infringement of foreign patents. Because China is notoriously lax in IP enforcement, it is quite easy—and often profitable—for Chinese companies simply to free ride off of foreign innovations. This lax enforcement policy has recently sparked heightened controversy. For example, Philips, Sony, and Pioneer initiated litigation in Europe to pressure Chinese DVD player manufacturers to pay royalties for the technologies they infringed, resulting in a settlement of US$5 per DVD machine sold. Such infringements are typical in China, especially in the personal computer and telecommunications industries.

Finally, the Chinese government has made concerted efforts to force domestic firms to innovate. In the late 1990s, China implemented policies requiring technology companies to devote at least 5 percent of annual revenues to R&D and adopted incentives that would allow R&D to be expensed as

29 See China Perspectives at 8–9 ¶ 27 (cited in note 15).
30 Id.
33 See China Perspectives at 2–4 (cited in note 15).
35 See China Perspectives at 3 ¶ 8 (cited in note 15).
36 See id.
costs. Additionally, it implemented a technology standard and patent-focused strategy in enterprise innovation endeavors. China’s participation in worldwide 3G wireless communications standard setting is one such example.

III. IMPLEMENTING INDIGENOUS INNOVATION

A. A New Policy Framework

In response to these growing concerns, the central Chinese government formally commenced a policymaking process in 2003 involving over 2,000 Chinese scientists, engineers, and corporate executives with the goal of transforming China into an “innovation-oriented society” and a global leader in science and technology. In 2006, this effort culminated in the release of the Medium- to Long-Term Plan for the Development of Science and Technology (MLP), the central document typically associated with Indigenous Innovation Policies. The MLP contained several essential goals: (1) to establish a system to qualify Indigenous Innovation products, (2) to establish a procedure for using government funds to purchase Indigenous Innovation products, and (3) to devise a plan for treating Indigenous Innovation products preferentially in the government procurement process.

In November 2006, the Ministry of Science and Technology (MOST), the Ministry of Finance (MOF), and the National Development and Reform Commission (NDRC) published “Trial Measures for the Administration of the

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37 See id at 12.
38 See id at 10–11 ¶ 35.
39 See China Perspectives at 11 ¶ 37 (cited in note 15).
40 Cao, Suttmeier, and Simon, China’s 15-Year Science and Technology Plan at 38 (cited in note 19).
42 See USCBC Issue Brief at 2–3 (cited in note 41).
Accreditation of National Indigenous Innovation Products,\footnote{See id.} which developed criteria for determining the product models that would receive Indigenous Innovation status. To qualify, a product must be produced either by (1) an enterprise that both created and registered its IP in China, or (2) a Chinese enterprise that obtained the relevant Chinese IP rights or licenses. Additionally, it must embody a “high degree of creativity and innovation” and offer a “high degree of reliability and dependable quality” with certification from the China National Certification Administration (CNCA) or its provincial departmental branches.\footnote{Id.} In 2009, the Chinese government issued the National Indigenous Innovation Products Accreditation program, otherwise known as Notice 618, which implemented the government procurement scheme by providing a forum for Chinese firms to apply for accreditation and for their approved products to be published in a catalogue of preferential purchases.\footnote{See id at 7, citing PRC Notice Regarding the Launch of the National Indigenous Innovation Product Accreditation Work for 2010 (Draft for Public Comment) (US-China Business Council 2010) (unofficial translation), online at http://www.uschina.org/public/documents/2010/04/ii_accreditation_translation.pdf (visited Oct 27, 2011).}

Another key policy document, “Selected Supporting Policies for the 2006–20 Medium and Long-Term Science and Technology Development Plan (2006),” confers additional advantages to Indigenous Innovation products in price-based bidding.\footnote{See USCBC Issue Brief at 3 (cited in note 41).} If an Indigenous Innovation product is priced higher than a foreign competitive product, the government must give the local company a chance to lower its price. If the second offered price matches the best offer, the Indigenous Innovation product must be selected.\footnote{See id.} No equivalent opportunity for price readjustment is afforded to the foreign bidder.

Finally, the 2007 Evaluation Measures on Indigenous Innovation Products for Government Procurement (2007 Evaluation Measures) provide explicit price and technical evaluation preferences to Indigenous Innovation products.\footnote{See id.} Their stated purpose was to encourage commercialization of accredited Indigenous Innovation products by utilizing the government procurement process.\footnote{See id.} First, Indigenous Innovation products are afforded preference at a margin of 5 to 10 percent in the event that price is the sole determining factor.\footnote{See id.} Second,
Indigenous Innovation products may enjoy an additional 4 to 9 percent boost in their technical and price evaluations if “comprehensive evaluation methods” (in other words, methods that take into account technical merit and price to produce an overall score) are used. Finally, the 2007 Evaluation Measures establish an explicit government system for initial purchasing and ordering in order to commercialize Indigenous Innovation products when they are thought to have market-wide potential in the future.

China instituted these policies against a backdrop of many other pre-existing policies that are loosely related to fostering Indigenous Innovation. In fact, the Indigenous Innovation effort is part of a web of interrelated regulations, including China’s technical standards, competition policy under the antimonopoly law, taxation policy, and IP protection and enforcement rights. The complexity and significant overlap in these policies frequently make it difficult to understand how the different laws are intended to interact with one another. This Comment, however, will focus primarily on the MLP government procurement preferences that are outlined above.

B. Concerns of Foreign Companies

The Chinese government estimated that government procurement contracts surpassed US$100 billion in 2009 (totaling 2 percent of Chinese GDP and almost 10 percent of Chinese government expenditures). As such, many foreign companies are concerned that the new Indigenous Innovation Policies will effectively shut them out of China—the world’s largest and fastest-growing market—because they developed or originally registered their IP abroad.

Several US industry representatives have publicly stated that they see Indigenous Innovation Policies as an even greater threat to business in China than IP infringement and China’s currency exchange rate. In international trade attorney Terence P. Stewart’s testimony before the US–China Economic and Security Review Commission, he called China’s Indigenous Innovation Policies...
“a clear example of China’s attempts to promote industrial policies that favor Chinese industries while at the same time limiting market access for foreign-origin goods and service providers.”

The growing unrest over the new Chinese Indigenous Innovation Policies has expanded beyond US firms. One survey of five hundred European businesses doing significant business in China found that 36 percent believed Chinese government policies had become less fair in the past two years, pointing to selective law enforcement, poor IP protection, and the lack of market access for foreign companies. In addition, the president of the European Chamber of Commerce accused China of a “growing willingness and tendency to exclude foreign businesses from the Chinese market.” A strongly worded opinion paper of the European Parliament expresses the full breadth of discontent churning in the EU over the controversial policies.

C. Recent Developments: A Rapidly Evolving Policy Framework

China’s Indigenous Innovation Policies continue to garner strong protests in the US, the EU, and among international business groups. The Obama Administration has escalated its criticism of the Policies, elevating the issue to one of the top priorities for the economic track of the US–China Strategic and Economic Dialogue (S&ED). On May 24 and 25, 2010, the US and China met in Beijing for the Second Round meetings of the SE&D. According to the

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60 See Section V.B.3 for a detailed discussion.


Joint Fact Sheet, issued after the discussions, they committed to “reaffirm[ing] that their innovation policies w[ould] be consistent with the following principles: non-discrimination; support for market competition and open international trade and investment; strong enforcement of intellectual property rights; and, consistent with WTO rules, leaving the terms and conditions of technology transfer . . . to agreement between individual enterprises.”

On December 14 and 15, 2010, at the twenty-first session of the US–China Joint Commission on Commerce and Trade (JCCT), China and the US agreed to adopt policies that would not discriminate against products or processes developed under the protection of the IP law of each country. In particular, China made the following concessions: (1) the location of the ownership or development of an IP right will not result in a preference in procurement for products or services based upon those rights; (2) local telecommunications operators will be allowed to select products freely that will provide upgrades or advanced services to China’s existing 3G technology; and (3) a “Special Campaign” against counterfeiting and piracy, including internet piracy, will be launched.

Despite the official press release of the Joint Commission on December 15, 2010, subsequent developments have demonstrated the depth of the disagreement that remains. Just one week later, on December 22, 2010, the US sought the intervention of the WTO with respect to China’s application of its Indigenous Innovation Policies to the domestic wind power industry. The US complaint derived from a petition filed under Section 301 of the Trade Act of

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63 USTR Joint Commission (cited in note 62).

64 See id.


1974 by the United Steelworkers Union (USW). USW contended that China was subsidizing development of its domestic industry by requiring domestically manufactured components at the expense of imports. China has since agreed to abandon the subsidies, demonstrating its willingness to make progress toward an amicable solution.

On June 28, 2011, the MOF posted on its website a statement that China had at its highest level of government officially repealed three key Indigenous Innovation measures. Most significantly, it abandoned the Evaluation Measures on Indigenous Innovative Products for Government Procurement, which provides price and technical evaluation preferences. It also canceled the Administrative Measures on Budgeting for Government Procurement of Indigenous Innovation Products, which details rules and procedures for government entities that use state funds to procure accredited Indigenous Innovation products, and the Administrative Measures on Government Procurement Contracts for Indigenous Innovation Products, which encourages government entities to use state procurement contracts to promote Indigenous Innovation.

While it is clear that the Indigenous Innovation Policies have recently entered a rapid state of flux at the highest level of government, it is unclear whether the policy changes have translated into action at the local government level—where the ultimate responsibility for administering the changes lies. If the policies have been truly abandoned, the action represents significant progress toward an amicable resolution, although many of the other Indigenous Innovation measures would remain in effect. US-China Business Council (USCBC) President John Frisbie commented in a June 29, 2011, statement:

Though the measures represent only a portion of the full list of regulations that tie indigenous innovation and government procurement, the elimination of those measures is an important step toward fulfilling pledges


69 See id.


72 See id.

IV. LEGALITY UNDER TRIPS AND GPA

In their current form, the Indigenous Innovation Policies still potentially clash with a host of China's WTO commitments and obligations, including its transparency, subsidies, and proper administration obligations. This Comment focuses on potential conflicts with two particularly important treaties. First, it explores potential issues arising under Articles 3, 20, and 27 of TRIPS, to which China is a signatory. Second, the Comment explains why the Indigenous Innovation Policies are almost assuredly impermissible under the GPA, which China committed to ratifying when it joined the WTO in 2001. Importantly, China has not yet ratified the GPA, since the first two membership proposals it submitted in 2007 and 2010 were rejected. Nevertheless, if its commitment to join is to be taken seriously, an analysis of potential conflicts with the GPA remains an important undertaking. The requirements of these treaties and the legal status of the Indigenous Innovation Policies under each are analyzed below.

A. Potential Conflicts of Indigenous Innovation Policies under TRIPS


The first provision of TRIPS that may be implicated is Article 3, which pertains to national treatment. Article 3 reads in relevant part:

1. Each Member shall accord to the nationals of other Members treatment no less favourable than that it accords to its own nationals with regard to the protection of intellectual property, subject to the exceptions already provided. . . .

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74 For a discussion of these potential conflicts, see generally Siyuan An and Brian Peck, China's Indigenous Innovation Policy in the Context of Its WTO Obligations and Commitments, 42 Georgetown J Intl L 375 (2011).

75 For a brief outline of issues potentially arising under these Articles, see Scott Otteman, China Defends Innovation Policy, But U.S. Industry Wants Overhaul (Inside US Trade Mar 3, 2010), online at http://wtonewsstand.com/index.php?option=com_ppvuser&view=login&return=aHR0cDovL3d0b25ld3NzdGFuZ3Jlcy8vY29tcG9uZW50L29wdGlvdW50b3J5b21fcHB2L0lOZW1pZCwiMTUvaWQsMjMzNjAxMC8= (visited Oct 30, 2011).

2. Members may avail themselves of the exceptions permitted under paragraph 1 . . . only where such exceptions are necessary to secure compliance with laws and regulations which are not inconsistent with the provisions of this Agreement and where such practices are not applied in a manner which would constitute a disguised restriction on trade.\(^7\)

Because case law interpreting Article 3 is extremely sparse, it is difficult to predict how the WTO Arbitration Panel (the Panel) will rule in a given instance. In the closest case on point, Indonesia-Autos, the Panel examined a US complaint against Indonesia regarding its National Car Program, which required participating vehicles to bear a unique, domestically owned Indonesian trademark.\(^7\) The US claimed that the Indonesian law discriminated against nationals of other WTO member nations with respect to the “acquisition” and “maintenance” of trademark rights as specified in footnote 3 to Article 3, which defines the type of “protection” contemplated by TRIPS “[to] include matters affecting the availability, acquisition, scope, maintenance and enforcement of intellectual property rights as well as those matters affecting the use of intellectual property rights specifically addressed in this Agreement.”\(^7\)

The Panel rejected both claims.\(^8\) With respect to the acquisition of trademarks, the Panel reasoned that the Program merely stipulated that only certain signs could be used as trademarks, and there was no evidence that rights to marks excluded from the Program could not be obtained in a non-discriminatory manner under Indonesian law.\(^8\) The same logic arguably applies in the case of Indigenous Innovation Policies. Within the national process of registering trademarks, the Policies do not discriminate against non-Chinese entities, even though they heavily incentivize companies to undertake costly foreign registration activities that could otherwise be saved. Under the Panel’s reasoning, Article 3 presents no more of a conflict in the case of Indigenous Innovation than in Indonesia-Autos.

The maintenance of trademarks was also an issue in Indonesia-Autos. The US claimed that potentially successful partners in the National Car Program would be unlikely to use their global marks in Indonesia for fear of creating confusion, and consequently it would be more likely that the global mark would be subject to cancellation for non-use in Indonesia.\(^8\) The Panel explained that

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\(^7\) TRIPS, Art 3 (cited in note 5).


\(^9\) TRIPS, Art 3 n 3 (cited in note 5) (emphasis added).


\(^11\) See id at ¶ 14.268.

\(^12\) See id at ¶ 14.270.
foreign companies would enter into such arrangements willingly—fully aware of any consequent implications for their ability to maintain pre-existing trademark rights.83

Under this logic, a similar outcome would likely be dictated with respect to Indigenous Innovation Policies. If a company desires to make its products eligible for Indigenous Innovation preferences in China, any implications regarding its ability to maintain its trademarks are clear from the beginning, and the choice to proceed is entirely voluntary.

Importantly, the Panel suggested that the Program might give rise to questions regarding the scope of the use of trademarks owned by US companies on cars under the National Car Program.84 Since a “scope” claim was not actually brought, the Panel did not provide further guidance on the requirements that would need to be fulfilled in order for a violation to be found. There is a strong argument, however, that the identical provision is implicated to the same extent in the instant case. Both sets of laws impose problematic institutional barriers against foreign competition. In both situations, foreign corporations are clearly treated less favorably than domestic companies. The question is whether these preferences implicate the scope of trademark rights in a strict textual sense, which is permissible under the Panel’s interpretive framework, or whether they are more indirectly implicated, and therefore lie outside the intended reach of TRIPS.

“Scope” is not further defined in TRIPS. In other WTO proceedings, the Appellate Body has ascertained the ordinary meanings of relevant terms using standard dictionary definitions.85 The American Heritage Dictionary defines “scope” as “the range of . . . actions” or “breadth or opportunity to function.”86 The IP right at issue with regard to scope is essentially the right to exclude. The “scope” of the right to exclude is subject to at least two conflicting interpretations. On the one hand, market pressure that tends to make purchasers of technology prefer a different product may be interpreted as necessarily limiting the IP holders’ right to exclude, since they cannot meaningfully exclude people who have been incentivized not to purchase their products. On the other hand, the market demand for a product is arguably separate from the legal right to exclude potential purchasers of the product, and the exclusionary right cannot ever operate meaningfully beyond the confines of the product’s existing market.

83 See id at ¶ 14.271.
Under that interpretation, the laws affect simply the market for the product, leaving the right to exclude conferred by trademarks or patents intact.

In deciding which interpretation to pursue, the Indonesia–Autos Panel suggests that TRIPS provisions should be interpreted using a textualist approach. For example, the Panel rejected an argument that holders of foreign trademarks are at a *de facto* disadvantage because the tariff, internal tax, and other benefits to which the Indonesian company was entitled gave it a competitive advantage. Rather, TRIPS provisions need to be interpreted narrowly so as not to read in obligations that extend beyond a literal interpretation of the text. Under the Panel’s interpretation, there is no inherent unfairness in requiring a company either in Indonesia or China to register its IP domestically because such a system necessarily subjects foreign competitors to exactly the same provisions as it does its own firms.

There is, however, a compelling argument that even though these arguments only indirectly implicate the “acquisition” and “maintenance” of trademarks, they directly affect the “scope” of potential use. Genuine “National Treatment” would permit every company to pursue IP protection in its own home country, rather than require companies based in other countries essentially to establish Chinese brands, to transfer their R&D to China, and to prosecute their patents and trademarks in China. The inconvenience and expense involved with such a process, combined with the inherent risks of the Chinese IP system, are significant. Moreover, it would be impossible to maintain a world marketplace in which every country required that every company wanting to do business within its borders originally register its IP in that country. It would be entirely reasonable for the Panel to rule that the “scope” of trademark rights is diminished under these circumstances. Indeed, such a requirement for IP registration is unprecedented and out of alignment with international best practices.

It should be noted that Article 3 does provide a safe harbor for the few exceptions listed above. Although they do not apply in the current situation, the instructions listed in determining when to apply them provide useful policy

88 See id at ¶ 14.272.
89 See id at ¶ 14.273.
91 See id; The Business Software Alliance, Letter to Secretary Clinton, Secretary Geithner, Attorney General Holder, Secretary Locke and Ambassador Kirk (Jan 26, 2010), online at http://www.bsa.org/~media/Files/Policy/China/lt_enprocurement.ashx (visited Oct 27, 2011).
guidance on how to construe Article 3 more generally. An exception may be used only where (1) it is necessary to secure compliance with laws and regulations not inconsistent with TRIPS, and (2) it is not applied so as to effect a disguised trade restriction. At least one industry lobbyist has accused China of doing just that, saying that it “has thoroughly examined all the [loop]holes in the WTO system and it is working to drive trucks through those holes.” It is arguable that such a practice is not only a disguised restriction on trade but materially affects the scope of IP protection afforded by Article 3. Under this interpretation, an Article 3 claim may be viable.

2. Article 20: Other requirements.

The second TRIPS provision potentially implicated is Article 20, which pertains to other requirements. It reads, in part:

The use of a trademark in the course of trade shall not be unjustifiably encumbered by special requirements, such as use with another trademark, use in a special form or use in a manner detrimental to its capability to distinguish the goods or services of one undertaking from those of other undertakings.

Under this Article, the relevant question is whether the Indigenous Innovation accreditation lists’ requirement that a qualifying product’s trademark be initially registered in China constitutes a “special requirement” that unjustifiably encumbers the use of a foreign company’s trademarks.

The Panel in *Indonesia-Autos* considered this issue in the context of the National Car Program in conjunction with its Article 3 discussion. In that case, the US made two Article 20 arguments using much of the same logic as in its Article 3 claims. First, it argued that the requirements of the National Car Program would encumber a foreign company from using the trademark it used elsewhere in the Program. The Panel rejected this claim. It reasoned:

If a foreign company enters into an arrangement with a Pioneer company it does so voluntarily and in the knowledge of any consequent implications for its ability to use any pre-existing trademark. In these circumstances, we do not consider the provisions of the National Car Programme as they relate to trademarks can be construed as “requirements”, in the sense of Article 20.

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92 TRIPS, Art 3(2) (cited in note 5).
93 See id.
95 TRIPS, Art 20 (cited in note 5). The rest of the Article reads: “This will not preclude a requirement prescribing the use of the trademark identifying the undertaking producing the goods or services along with, but without linking it to, the trademark distinguishing the specific goods or services in question of that undertaking.” Id.
Under this interpretation, the Panel construed the term “requirement” to be a constraint on the foreign company’s business behavior rather than on the requirements of the program into which it may choose to enter. There is room to argue that this logic is erroneous and should be reconsidered when applied to the current facts. Of course, any foreign company may choose to participate or not to participate in the National Car Program. It is the use of the trademark that is not allowed to be encumbered by special requirements, not a company’s business decision to participate or not. It is difficult to imagine a scenario that more starkly violates the requirement that the use of a trademark not be “in a special form or ... a manner detrimental to its capability to distinguish the goods or services of one undertaking from those of other undertakings” than the facts in Indonesia–Autos, or what sort of scenarios the Panel would imagine fall within the ambit of Article 20 at all. Regardless, it seems the only realistic opportunity to win on this claim would be to urge the Panel to reconsider its prior ruling.

The Panel also rejected the US “competitive disadvantage” argument (also advanced with respect to Article 3 violations) because any disadvantages flowing from the Program’s provisions cannot be construed as “requirements” under Article 20. In the case of Indigenous Innovation, the “competitive disadvantage” line of reasoning is potentially the strongest line of argument against the policies that exist. Indeed, the primary reason for exploring a legal claim is the competitive advantage produced by the policies. It is difficult to see how any other claim could be brought more successfully.

3. Article 27: Patentable subject matter.

Finally, Indigenous Innovation Policies potentially implicate Article 27 of TRIPS, which pertains to patentable subject matter. Article 27 reads:

1. Subject to the provisions of paragraphs 2 and 3, patents shall be available for any inventions, whether products or processes, in all fields of technology, provided that they are new, involve an inventive step and are capable of industrial application. Subject to paragraph 4 of Article 65, paragraph 8 of Article 70 and paragraph 3 of this Article, patents shall be available and patent rights enjoyable without discrimination as to the place of invention, the field of technology and whether products are imported or locally produced.97

In Canada–Pharmaceutical Patents, the Panel explained that the term “discrimination” potentially encompasses a broad array of meanings.98 It

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97 TRIPS, Art 27 (cited in note 5) (emphasis added).
cautioned against defining the term prematurely. Instead, it advised that "discrimination" be construed in a case-by-case manner within the precise context of the issue at hand.99

There is no precedent advising how to interpret the phrase "whether products are imported or locally produced,"100 which is the most relevant consideration to the facts at hand. Nevertheless, the Panel provided the following policy guidance:

It is quite plausible, as the EC argued, that the TRIPS Agreement would want to require governments to apply exceptions in a non-discriminatory manner, in order to ensure that governments do not succumb to domestic pressures to limit exceptions to areas where right holders tend to be foreign producers.101

It is plausible that the Indigenous Innovation Policies do exactly that, but a significant ambiguity in this provision makes it questionable whether they cut into the ability of foreign rights holders to enjoy the benefits of the IP. On the one hand, the provision could be interpreted to impose a duty on individual countries not to deny patents on the basis of the field of technology or the location of the developing company. Under this interpretation, the Indigenous Innovation Policies pose no problem—any company is welcome to patent its technology in China if it possesses the usual requirements for patentability.

On the other hand, this language could be interpreted to confer to individual inventors the right to patent their products in whatever jurisdiction they please, without being unduly restrained by requirements involving the place of invention, the field of technology, and whether products are imported or locally produced. Under this interpretation, if an inventor in the EU wishes to patent in the EU, out of concerns of convenience or otherwise, but is required to patent in China if he or she wishes to do any business with China or Chinese firms, then the inventor’s right to do so is curtailed by the Indigenous Innovation restriction. This reading seems more in line with the policy goals of TRIPS and suggests a violation by China.

This second interpretation assumes that the practical restraint local IP registration imposes on foreign inventors makes patent rights not “enjoyable” but merely “possible”—even if impractical or far less than desirable. To a large degree, the correct statutory interpretation depends on how “enjoyable” is defined. Once again, there is no case law to guide this inquiry. Though the correct answer remains elusive, it does not seem plausible that a treaty whose purpose is to impose minimum protections to promote free trade among

99 Id at 170–71 ¶ 7.92.
100 Id.
101 Id.
member nations was intended to allow one nation to impose such a lopsided and restrictive requirement. Whether China has successfully passed through a loophole with regard to this provision remains an open question.

B. China’s Broader Legal Obligations: Potential Conflicts under the GPA

The GPA is the core agreement regulating government procurement regulations of member countries. Its purpose is to ensure that foreign products and services are treated no less favorably in government procurement than domestic ones.102 It does, however, have five annexes limiting signatories’ obligations, and each signatory may include exceptions in their General Notes.103 In particular, there is significant latitude for policies that spur local innovation. For example, the US excludes from the agreement (1) small businesses, which policy enables smaller contracts to be directed to innovative small businesses; and (2) R&D activities, which allows the most innovative awards to be directed to local enterprises.104 Because accession to the GPA is voluntary, it is not a WTO violation to engage in discriminatory government procurement preferences under the GPA until it is ratified.

China agreed to join the GPA as soon as possible when it became a member of the WTO in December 2001.105 But the current signatories rejected China’s initial proposal for accession, which it submitted in 2007. Most significantly, China failed to commit sub-central government agencies, exempted state-owned enterprises, contained high thresholds, and included a fifteen-year grace period during which China would not have to implement any GPA obligations.106 A revised proposal submitted in 2010 was likewise rejected because many of the original shortcomings remained unaddressed. Most

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102 GPA Article V does, however, contain several options for special treatment of developing countries. See GPA, Art V (cited in note 6).

103 For the annexes in their entirety, see World Trade Organization, Appendices and Annexes to the GPA (2011), online at http://www.wto.org/english/tratop_e/gproc_e/appendices_e.htm (visited Oct 27, 2011).


106 See Updated Chinese Procurement Accession Expected at WTO This Week (Inside US–China Trade July 7, 2010), online at http://wtonewsstand.com/index.php?option=com_ppvuser&view=login&return=aHR0cDovL3d0b25ld3NzdGFluZCJ5jb20vY29tCGRuZW50L29wdGlvbixjb21fcHB2L0l0ZWl0pZCw3MTUvaWQsMjMzNjYzNi8= (visited Oct 27, 2011).
importantly, it did not address the provisions concerning provincial and local government agencies, or state-owned enterprises, both of which continue to be major issues.\textsuperscript{107} Negotiations on proper terms of acceptance continue as of this Comment’s publication.

If China does eventually accede to the GPA, the current Indigenous Innovation Policies would contravene Article III, on National Treatment and Non-Discrimination, which requires that government procurement treat foreign products no less favorably than domestic ones.\textsuperscript{108} Article V, on Special and Differential Treatment for Developing Countries, does allow developing countries to negotiate special terms with the current signatories that apply only to them.\textsuperscript{109} So far, these terms, too, have been heavily disputed in the two proposed accession offers. Once terms are agreed upon, they will be mutually binding on all signatories.

V. INDIGENOUS INNOVATION ECONOMICS AND LEGAL SOLUTIONS FOR FUTURE GROWTH

A. Indigenous Innovation Policies May Be Neither Strategically Nor Economically Sound

The Chinese government believes the strategy of affording Chinese firms preferential treatment in government procurement is essential to furthering the country’s technological development.\textsuperscript{110} The idea potentially derives from China’s experience with low-end manufacturing. China believes that domestic companies will grow and flourish when they are given time to innovate and capture enough market share to scale up their production.\textsuperscript{111}

However, there is significant reason to doubt that this solution holds the same promise for higher-end production. In fact, there is considerable evidence to suggest that protecting a market actually destroys innovation because it diminishes individual companies’ incentives to compete.\textsuperscript{112} A National Bureau of Economic Research (NBER) study of Japan’s choices with respect to high-tech


\textsuperscript{108} See GPA, Art III (cited in note 6).

\textsuperscript{109} See id at Art V.


\textsuperscript{111} See id at *13.

\textsuperscript{112} See Dieter Ernst, Global Production Networks and the Changing Geography of Innovation Systems: Implications for Developing Countries, 9 Econ Ser 1, 26 (2000). See also Carnegie Paper at *6 (cited in note 104).
innovation and trade policy in the 1980s supports such a conclusion. The study demonstrates that a country that introduces high-tech production subsidies “will see its competitiveness in high-technology products grow, but its long-run rate of indigenous innovation decline.” In fact, it found that by “implicitly subsidizing” the production of high-tech products via government procurement practices, Japan “reduce[d] the rate of innovation in the policy active country, increased the rate of innovation in the trade partner country, and slowed the global rate of technological progress.”

In short, firms seem to invest in productivity-enhancing innovation only if competition forces them to do so. World trade and global innovation flourish because the pool of ideas off of which to build becomes greater and more diverse, and because the brainpower and perspective available to solve critical problems increase dramatically. This same policy reasoning underpins the TRIPS agreement itself. Innovation and world trade are not zero-sum games; all players can profit provided that they all play by the rules. Conversely, when one country attempts to circumvent the rules and shield its firms from the competition necessary to make such a system thrive, not only does it lose out—the rest of the world does as well. Thus, China would be best advised to abandon its Indigenous Innovation Policies outright and in their place institute policies that implement the recommendations detailed below.

B. Alternative Strategies for Stimulating Indigenous Innovation

As suggested, potentially the most important step for China to take is to open its markets to the fierce competition of the world marketplace—perhaps the strongest force that drives innovation. Mounting political pressure from the international community may provide even more incentive for China to open its markets. The EU recently issued a forceful warning that although “China is important for Europe, Europe is even more important for China,” admonishing that China must open its economy to further trade and investment if it wants to continue doing business with Europe. The warning was rooted in the strongly held beliefs that opening up markets creates more innovative, prosperous and stable societies, and would ultimately be to both China’s and the EU’s benefit.

114 Id.
117 See id.
In addition to opening up its markets, China should take at least two further steps to promote its technological development: (1) increasing government investment in R&D with an eye toward future technologies, rather than establish product lists focused on existing technologies; and (2) strengthening IP protection within China. Both of these steps represent fair, legal, and productive measures to help innovation thrive in China in the future.

1. Increase government investment in R&D.

The five GPA Annexes leave a range of loopholes that enable governments to play a key role in fostering innovation. Substantial governmental investment in R&D, available through Annex IV, provides one attractive and reliable method of generating sustainable innovation. The government effectively acts as a customer to innovative companies and incentivizes them to develop solutions to problems that the whole country, rather than individual consumers, maintains an interest in solving. These innovations provide a vital complement to technologies developed by companies that focus primarily on selling products valuable only to individual consumers.

A prime example of an effective implementation of this strategy is the US government's Small Business Innovation Research (SBIR) program. Through the SBIR, the US government places its own R&D contracts with small businesses focusing on the development of new technologies to provide an incentive to develop innovative technologies that address the US' needs. The program thus plays both de-risking and funding roles that are crucial to developing valuable ideas that would otherwise not attract the resources to mature them into quality solutions.

Another effective way to stimulate R&D is to provide non-discriminatory tax concessions for R&D-related activities. Australia, for example, provides tax concessions of up to 175 percent for R&D expenditures, in addition to investing...
billions of dollars per year directly in R&D. In fact, one Boston Consulting Group (BCG) study indicates that R&D tax credits are among the most common and most effective incentives that countries use to stimulate innovation. With respect to China, however, the study notes that China’s most significant innovation tax incentive, the High- and New-Technology Enterprise Program, requires that core IP rights be owned or registered in China. This very likely limits the effectiveness of attracting foreign R&D investment to China.

Large government purchases of technology can also hinder innovation if they start to show a continuing preference for established solutions. It is crucial that government procurement focus on the R&D stage, during which new technologies are developed, rather than on mature products, for which the local government (and the rest of the world) does not reap a return on investment. Product lists focus inherently on existing technologies rather than the future innovations they are designed to stimulate. In addition, the national lists, at least in their current form, interact with the many smaller, provincial lists in confusing and contradictory ways, giving rise to substantial inefficiencies in implementing the system as a whole.

2. Strengthen IP protection within China.

The IP enforcement regime in China is widely characterized as lax and ineffective. The problems are deep-rooted and widespread, ranging from mere inadequacy of coordination among the various government enforcement agencies to corruption, protectionism, and perceived incentives by enforcement officials to overlook infringement activities. Criminal penalties are rarely

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124 See id.
125 See id.
126 See Ernst, 9 Econ Ser at 25 (cited in note 112).
128 See id.
130 See id.
applied, and civil penalties are often not substantial enough to deter future infringement activity. The consequences of a lax IP enforcement regime are straightforward: institutions and companies will be less likely to conduct innovative activities in regions in which their IP rights are not likely to be protected. One 2009 BCG study found that business executives consider the IP rights enforcement problem a top issue because of the implications for lost revenue. Consequently, business leaders are likely to decide to conduct their innovation activities elsewhere. The European Chamber also has argued that there is a need for greatly heightened IP protection in China. It urges that if IP is not sufficiently protected, (1) Chinese enterprises will be deterred from investing in innovation, and (2) European companies will be discouraged from further transferring technology to China. It also highlighted a growing concern among European companies that confidential information is frequently leaked at various stages of business development (such as project approvals, product certification, and patent filings), which would further deter European companies from transferring technology to China.

VI. CONCLUSION

Recent efforts by the Chinese government to foster Indigenous Innovation, particularly those that afford preferences in government procurement to domestic entities, potentially contravene several important international trade agreements. Moreover, they represent questionable policy both for China and its trading partners. This Comment has argued that China’s most productive strategy for becoming a twenty-first century leader in technology and innovation centers around opening up free trade, instituting much stronger IP rights protections, and implementing more robust and non-discriminatory tax and R&D incentives. In the business of global innovation, all players can win as long as they all abide by the mutually agreed-upon rules embodied in WTO treaties such as TRIPS and the GPA.

Although China has recently halted several of its Indigenous Innovation initiatives at the national level, there is substantial reason to be skeptical that the policies will be curtailed in practice. The provincial government agencies responsible for implementing national policy still appear to have Indigenous Innovation product catalogues in effect, and a commitment by the national

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131 See id.
132 See Andrew, DeRocco, and Taylor, *The Innovation Imperative* at *19 (cited in note 123).
134 See id.
government to halt Indigenous Innovation may or may not translate to meaningful action at the local level. As with all major development plans in China, the central Chinese government promulgated broad principles providing guidance for implementing Indigenous Innovation Policies. Then, the relevant ministries and commissions—both central and local—created specific measures implementing the overarching policy objectives. As it is, many of the local Indigenous Innovation catalogues and laws conflict with each other and the broader national laws. The process of implementation has begun, and full-scale reversal may not actually be occurring, despite rhetoric from the national government.

Indigenous Innovation Policies are evolving quickly, and enforcement of most policies has not yet begun. Moreover, much of the concern voiced by the US and EU reflects fear of future Chinese policies and the way new laws may be implemented. It remains unclear how the new policies will play out in effect, and to what extent discriminatory measures will actually be implemented. On June 25, 2009, Premier Wen Jiabao reaffirmed that China seeks to maintain a fair and open market environment, and that China would never discriminate against foreign enterprises or products. Fulfilling this promise would represent a significant step toward bringing China into compliance with its TRIPS and GPA obligations and commitments, and would help to propel China into the position of technological leadership it desires to occupy.

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135 See Section III.
