出國報告(出國類別:開會)

出席亞太經濟合作(APEC) 「中小企業智慧財產權商品化 (IP Commercialization for SMEs) 研討會」報告

服務機關: 經濟部智慧財產局

姓名職稱: 馬維清 專員

林函怡 科員

派赴國家: 俄羅斯(海參崴)

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摘要

APEC「中小企業智慧財產權商品化」研討會於 2019 年 9 月 10 日至 12 日在俄羅斯海參崴的遠東聯邦大學(Far Eastern Federal University, FEFU)舉行,邀請來自世界智慧財產組織(WIPO)、俄羅斯國家智慧財產學院(Russian State Academy of Intellectual Property, RSAIP)、菲律賓智慧財產局、專利事務所等相關人員擔任講者,並有俄羅斯、新加坡、菲律賓、印尼、馬來西亞、越南、智利、秘魯及我國等 9 個經濟體代表計約 20 餘人參與。

本次會議我方由資料服務組馬維清專員及國企組林函怡科員出席,並於會中就「智慧局對中小企業的能力建構」及「中小企業智慧財產創新推動策略」等 2 項議題進行簡報。會中共有 12 項討論議題,最後並以圓桌論壇之形式,由各與會經濟體分享其協助中小企業進行智慧財產商品化的措施,討論熱烈。

中小企業占我國產業結構比例近 98%,是觸動經濟發展的主體,在我經濟發展上扮演相當重要的角色,但是在各個智慧財產發展階段,面臨諸多挑戰,例如缺乏資金、技術瓶頸、缺乏專業人才等。如何為中小企業提供完整智慧財產相關資源及輔導措施,協助其提升研發能量,以及增加國際競爭力,是我國政府部門須持續關注之重要議題。

目 次

壹、	•	目的	. 4
"	•	過程	. 4
參、	•	會議情形	. 4
肆、	•	心得與建議	18
伍、	•	附錄	20

壹、目的

俄羅斯前於 2016 年第 42 次 APEC/IPEG (Intellectual Property Rights Experts Group, IPEG)會議提案「中小企業智慧財產權商品化」計畫,獲韓國、墨西哥、祕魯、菲律賓、越南等經濟體共同提案(co-sponsor),並於 2017 年 11 月通過 APEC 計畫經費補助。該計畫係邀集政府單位及國際組織或研究機構,透過研討會之方式,針對中小企業智慧財產管理及商品化的最佳實務進行經驗交換,並規劃將研討會成果彙整出版,希望藉此促進智慧財產權之開發及中小企業之創新能力。

為積極參與國際事務,深入瞭解與充分掌握國際上智慧財產權議題之最新發展趨勢,並強化與 APEC 各經濟體間之交流互動,積極參與 APEC 相關會議實有必要。此外,我國亦能藉由參與國際會議之機會,分享我國在中小企業智慧財產權商品化議題之措施及成果,以促進他國對我國保護智慧財產權相關作為之認識。

貳、過程

本次「中小企業智慧財產權商品化」研討會於 2019 年 9 月 10 日至 12 日在俄羅斯海參崴的遠東聯邦大學 (Far Eastern Federal University, FEFU) 舉行,會中共有 12 項討論議題,包括:WIPO 中小企業智慧財產商品化協助措施、智慧財產於中小企業活動中扮演之角色、智慧財產的管理與行銷、技術轉移、智慧財產權人員訓練、各經濟體協助中小企業智慧財產商品化的最佳實務分享等。

我方由本局馬維清專員及林函怡科員出席,並於會中簡報「智慧局對中小企業的能力建構」,向與會經濟體簡介中小企業 IP 專區、全球專利檢索系統、專利商品化教育宣導網等服務;另簡報我國「中小企業智慧財產創新推動策略」,說明我方協助中小企業運用創新研發能量的3項具豐碩成果之計畫:小型企業創新研發(SBIR)計畫、智慧財產價值躍升計畫及創新技術博覽會(TIE)。

參、會議情形

本次會議於 9 月 10 日上午 10 時進行至下午 6 時,次日於 10 時進行至下午 5 時 30 分,終日繼於 10 時進行至下午 2 時結束。謹將重要討論事項依會議議程分述如下:

一、會議開場:

首先由本項計畫的負責人(Project Overseer, PO) Ms. Anastasia Gribanova 歡迎各經濟 體代表參加本次會議,盼能透過本次會議的交流,驅動 APEC 場域的中小企業發 展。

其次由俄羅斯國家智慧財產學院(Russian State Academy of Intellectual Property, RSAIP)院長 Mr. Ivan Bliznet 說明,智慧財產在現代經濟發展中扮演不可或缺的驅動角色,無論是法規的完備或是人員的訓練都是愈顯重要的議題,該學院過去曾在中國大陸、泰國、菲律賓等地舉辦過類似的工作坊,成果豐碩,希望本次 APEC「中小企業智慧財產權商品化」計畫能延續相關議題的討論動能。

最後由世界智慧財產權組織(WIPO)中小企業及產業支援組組長 Mr. Guy Pessach 致詞,智慧財產為中小企業創新發展的關鍵角色,如何協助中小企業完善地利用其無形資產,為各經濟體之政策制定者及智慧財產主管機關的重要課題,期盼本次研討會能有深入的交流與討論。

二、「俄羅斯國家智慧財產學院(Russian State Academy of Intellectual Property, RSAIP) 簡介」:由 RSAIP 院長 Mr. Ivan Bliznets 主講。

RSAIP 為俄羅斯唯一專責訓練智權專業人士的高等教育機構,成立超過 50 餘年,現屬俄羅斯聯邦智慧財產局(Federal Service for Intellectual Property, Rospatent)轄下之組織,提供學士、碩士、博士等 3 種學程,教育對象包含學生、進階訓練專業人士及回流教育專業人士,其同時也致力於協助俄羅斯政府機關創建完善的智慧財產保護環境。

而為向下紮根智慧財產觀念, RSAIP 每年並針對 14 至 18 歲的中學生舉辦「國際智慧財產奧林匹亞競賽」(International Olympiad on Intellectual Property), 得獎者將可獲得攻讀 RSAIP 學位的獎學金。

此外,RSAIP 也積極與其他國際機構建立合作,和 WIPO、歐洲專利局(EPO)、中國大陸、韓國等均有多項合作計畫。其中最大宗的合作對象為 WIPO,相關活動包括每年舉辦反仿冒措施論壇,就仿冒物品之市場分析與仿冒市場之發展進行討論,以及針對高中學生開辦智慧財產教育夏令營,提供高中學生接觸智慧財產議題的機會等。RSAIP 並與 WIPO、EPO、中國大陸知識產權局(CNIPA)就遠距教學進行合

作,提供的課程涵蓋多樣面向,專利、商標、著作權、地理標示、植物品種權、不 公平競爭、國際註冊體系、智慧財產發展趨勢等均在其列。

三、「WIPO 之中小企業智慧財產商品化協助措施」:由 WIPO 中小企業及產業支援組組長 Mr. Guy Pessach 主講。

WIPO 認為中小企業、政府、學界 3 個部門,彼此間需要積極的互動與回饋,才能為創新及經濟發展帶來綜效,而如何有效協調這 3 個部門,使其處於一種生態平衡的狀態,便是 WIPO 中小企業及產業支援組的工作目標。首先在中小企業方面,其在創新產業中可能同時扮演「消費者」及「提供者」的角色,一方面從政府或學界尋求創新成果加以應用,一方面也可能提供自己的產出予其他單位利用。

WIPO 提供中小企業的協助措施,近年來逐漸地將重心從一般研討會或訓練課程的講授,轉移至以特定產業為基礎的研究計畫(specific sector/industry programs),WIPO 以數樣實際產品為主軸,展示整個產品發展過程中可能涉及的所有智慧財產面向,以更貼近實務的方式讓中小企業瞭解如何有效運用智慧財產,並針對不同成員國的當地產業發展情形進行客製化的調整。該項計畫首先以農糧及軟體產業作為示範,例如一項軟體產品發展的過程中,即可能涉及發明專利、新型專利、著作權、營業秘密、授權等不同面向的議題。WIPO 盼相較於一般課程講授,這項以特定產業為基礎的研究計畫能為中小企業帶來更多具體成果。

不僅只是協助中小企業,WIPO 近年也開展了以政府部門為實施對象的計畫,宗旨在於「Making IP work for SMEs」,目標則有以下 3 項:1.協助政府機構管理無形資產、2.確保每一個成員國都能界定出有哪些領域需要智慧財產相關的指導與協助、3.協助政府機關發展智慧財產支援工具與最佳實務。

最後,Pessach 組長重申在智慧財產商品化這項議題,中小企業、政府、學界 3 者 缺一不可,而且彼此間必須要有順暢且良性的互動,渠認為最有效率的方法便是聚 集 3 方舉辦共同的活動。

四、「智慧財產於中小企業活動中扮演之角色」:由 RSAIP 創新管理及智慧財產商品化 系所助理教授 Ms. Juliya Vasileva 進行介紹。

首先, Ms. Juliya Vasileva 簡要說明中小企業在全球經濟中扮演之角色。全球產業近九成為中小企業, 構成了全世界近半的工作人口, 也是各經濟體 GDP 的主要來源。

由於中小企業的特性在於能夠推動創新、支撐合宜的競爭環境、創造額外的工作機會、避免獨占現象、擴大消費者需求等,對所有經濟體而言,發展創新中小企業 (innovative SMEs)均為策略性規劃的重點工作。

根據調查,創新中小企業常常可能只拿到了 2%至 5%的政府補助,所產出的創新成果就占了該經濟體所有重要創新成果的 5 成。此外,創新中小企業的市場競爭相當激烈,只有約 3.4%能存活超過 3 年,然而現今全球有超過 150 間的大規模企業都曾經是小型創新產業,例如美國的 SpaceX(私人航太製造商和太空運輸公司)、Uber、Airbnb,中國的比特大陸(設計比特幣礦機定製晶片之半導體設計公司)、滴滴出行(共乘交通工具的手機應用程式)等,目前這些企業的資本額合計已超過一億美元。

其次,Vasileva 助理教授就俄羅斯的中小企業及小型創新企業概況進行簡介。俄羅斯中小企業約有六百萬家,其中微型企業就占了95%,為了有效支援中小企業的相關創新活動,俄羅斯自2009年以來持續修法及發展各項協助措施,並於俄羅斯各地廣設支援機構,至2017年底止,共計有700間相關機構,包含54間協助出口導向中小企業之協調中心、113間育成中心、25處產業園區及科技園區等。

儘管如此,根據一份針對俄羅斯小型創新企業的調查,近6成企業認為其之所以能成功,是因為做了好的產品選擇及擁有好的團隊,近4成歸因於有效的行銷策略,僅有5%的小型創新企業認為其創業成功的一項因素是來自於對智慧財產的適切保護,可見智慧財產保護的重要性被大大低估。

最後,Vasileva 助理教授說明智慧財產能為中小企業帶之優勢,最重要的是「提升競爭力」(increase competitiveness)—同時也是中小企業最重要的資產,然而,中小企業必須具有智慧財產權管理的知識,以將智慧財產權產生獲利並提升競爭力。智慧財產能為中小企業帶來的優勢主要包括:1.排他權(Exclusivity of Rights)、2.可獲利性(Profitableness)、3.資本化(Capitalization)、4.商業交易(Software deals or exchange)、5.建立企業形象(Formation of business image)、6.進入國際市場(Entering the international market)等。

五、「智慧財產權商品化:智慧財產權管理、智慧財產權行銷及減少創新風險」:由 RSAIP 創新管理及智慧財產商品化系所所長 Ms. Veronika Smirnova 主講。

(一) 智慧財產權管理

在創意轉換為產品的過程中,需運用智慧財產權管理原則,在組織、法律、財務、動機等層面,保護智慧財產權並有效運用在公司資產,然後運用智慧財產權管理方法,建置智慧財產權會計系統、進行智慧財產權評估、專利及研發授權支援、營業秘密保護等工作。在俄羅斯,專利必須由律師或會計師申請,費用很高,俄羅斯提供基金給中小企業,協助其提出國際申請時所需的國際律師費用,鼓勵企業透過PCT途徑進入國際市場。

(二) 智慧財產權行銷

將智慧財產權進行商品化及擬定行銷策略時,企業需先思考是否要申請專利、 何時申請專利、進入市場之時機、授權之價值及風險等因素,運用決策樹妥善 進行專利布局。到外國申請專利前,尚須考慮產品之商業潛在價值、競爭者、 海外申請專利程序、費用等因素。

(三) 減少創新風險

將風險管理的概念導入智慧財產權管理,可運用專利資訊,預測特定領域的發展、選擇研發方向,鑑別並保護專利申請策略、保護領域及申請項範圍,並運用智慧財產權商品化策略、確認商品化範圍、進行企業鑑價及智慧財產權鑑價。WIPO的專利全景報告(Patent Landscape)用於研究分析各種技術領域之創新及專利活動,以圖形視覺化呈現專利資訊,協助企業進行決策管理,有助減少創新風險。

六、「中小企業與大型企業之互動關係;技術移轉」:由 RGAIS 民商法所榮譽教授 Mr. Irik Mukhamedshin 主講。

傳統上,中小企業進行研發,開發新產品和技術,再將技術移轉(簡稱技轉)給大型企業進行量產,因此中小企業是創新產品的起始平台,而大型企業是創新的客戶。這個過程需要對以下各項目規劃詳細的產品開發藍圖(roadmap),才能進行智慧財產權商品化,包括:1.智慧財產權創造力(IP inventarization)、2.市場研究、3.創新活動的商業計畫、4.評估智慧財產權法律保護的最佳形式及可行性、5.利用廣告行銷其科學和技術產品、6.選擇合作夥伴、資金來源或是投資創新活動、7.評估在外國申請專利之可行性及最佳技術選擇、8.智慧財產權評估、9.選擇最佳形式,使智慧

財產權或表現智慧財產權的物質載體商品化等。

參與產品開發藍圖的人員,必須對法律、經濟、財務、數位科技等都有充分的專業知識,才能順利將研發成果商品化,提升競爭力。例如,須能夠評估產品收益多少,收入是否足以支付貸款。如果過於樂觀,將為大型企業帶來風險。

在俄羅斯的研發實務上,若要在外國申請專利,需先評估在外國發展的前景,並要考量商業授權,包括協商要銷售的智慧財產權,並要請合作夥伴提供協助與建議,尚須在國際展覽展示產品。因此,在外國申請專利費用很高,需要仔細評估後才會納入產品開發藍圖。

由於技轉是逐案處理(case by case),在俄羅斯的研發實務上,需要讓合作夥伴瞭解要買(賣)的專利價值,並選擇適當的契約形式,納入研發計畫的產品開發藍圖。其中,智慧財產權商品化的形式包含授權協議、投資協議、合資協議等,使表現智慧財產權的物質載體商品化的形式包含銷售契約、供應契約等。

七、「智慧財產保護、執法、與國外專利申請」:由 RGAIS 民商法所榮譽教授 Mr. Irik Mukhamedshin 主講。

俄羅斯有關智慧財產權之法律係集中於民法典中統一規範,保護標的大致可分為以下數類:1.著作權(文學藝術作品、電腦程式、資料庫等)、2.鄰接權(表演、廣播、資料庫內容等)、3.專利權(發明、新型、工業設計)、4.非傳統權利(積體電路、生產秘密等)、5.商標(傳統/非傳統商標、服務商標、原產地名稱等)。

Mukhamedshin 教授並提供詳盡的統計數據說明俄羅斯智慧財產概況,較值得注意者為專利部分,近5年專利發明申請件數,每年均維持在4萬件上下,其中外國申請案占總申請件數的三分之一,然而依據 Mukhamedshin 教授提供的統計資料,每年卻只有5百至7百件發明專利獲准註冊,相較於其他國家數量明顯較少,顯示俄羅斯國內的創新和發明的風氣仍有所不足。另受惠於時尚產業的發展,工業設計的申請案數量穩定甚至呈現小幅成長,每年約收受6千件申請案。

菲律賓提問,在向俄羅斯智慧財產法院提出的各類智慧財產爭議案中,可以看到有很大比例案件,法院均做成廢棄 Rospatent 處分的決定,可能原因為何? Mukhamedshin 教授回應,俄羅斯智慧財產法院雖為該國現今唯一有權處理智慧財產爭議的機構,但其成立的時間相當短,不一定有足夠的知識與經驗處理相關案件,

對於該機構的未來發展,這無疑是一項不利因素(drawback),但渠認為這也是智慧 財產保護制度在邁向完備的過程上,一種自然發展的歷程。

八、「中小企業智慧財產人力訓練」:由 RSAIP 院長 Mr. Ivan Bliznets 就「俄羅斯聯邦 數位經濟」(Digital Economy of the Russian Federation)專案之內容進行概要介紹。

為因應快速興起的數位經濟時代,俄羅斯聯邦政府自 2017 年起推動「俄羅斯聯邦數位經濟」專案,執行期程至 2024 年,RSAIP 並配合政府設立數位經濟部門(The Department of Digital Economics),提供相關議題的教育課程及職涯訓練,以利企業、學生、專業人士及各界民眾均有機會掌握相關知識及趨勢。

課程與訓練以下列 4 組方向進行:1.創造、2.科技、3.經濟、4.社會,並依照受訓人員之需求進行客製化設計。例如以來自中小企業的受訓人員而言,RSAIP 首先將協助其明確定義該企業所需之資源,再提供能實際運用至該產業的相關知識,並協助受訓人員取得必要的智慧財產專業資格。

智利提問,俄羅斯聯邦政府提供 RSAIP 多少資金執行相關計畫? Bliznets 院長回應「俄羅斯聯邦數位經濟」專案屬於國家層級,規模龐大,RSAIP 僅係配合政府政策推動一部分的計畫,沒辦法提供確切數據,但據其所知,「俄羅斯聯邦數位經濟」專案預估投入之經費總額超過 50 億元盧布(約7千6百萬美元)。

我方提問,依據先前提供之資料顯示,俄羅斯境內約有6百萬家中小企業,而俄羅斯幅員廣大,如何進行相關的課程及訓練?Bliznets 院長回應現今的確沒有足夠的資金能將這項計畫推廣至俄羅斯各地,加上各區域對於智慧財產概念的認知有相當的差異,重視程度也不盡相同,因此 RSAIP 目前僅將相關資源投注在創新或創意等較為前端的相關產業。Bliznets 院長補充說明,在智慧財產知識的教育與推廣方面,政府能否挹注足夠的資金是關鍵因素,一項很有趣的數據顯示,RSAIP 的運作橫跨蘇維埃政府及當代俄羅斯政府,在蘇維埃政府統治期間內因官方投注大量資金,受訓之中小企業人員超過40萬人,且每3年要接受再訓練;而在當代俄羅斯政府治理下,至今僅接收過約5千名來自中小企業的受訓人員,且多數是自掏腰包或由受雇企業提供訓練經費。

我方另提問,目前中小企業智慧財產人力訓練之成果為何?Bliznets 院長回應因其為新近發布的計畫,使用人數不多。

九、「俄羅斯智慧財產權商品化最佳實務」:由 RSAIP 助理教授 Ms. Juliya Vasileva 進行介紹。

俄羅斯的中小型創新事業體主要發展方向有 4 種,包含獨資發展事業(即新創公司 (start-up))、在大學及研究機構成立小型創新事業體(即衍生公司(spin-off or spin-out))、以科學園區或育成中心(business incubator)為基礎的中小企業,以及發展合作關係的中小型創新事業體(合資、策略聯盟、在研究領域合作及技轉)。

俄羅斯自 2012 年起開始「techup 計畫,每年根據創新、快速成長及出口潛力等標準,對於參與計畫的成長中科技公司進行評分,政府提供發展上所需支援,截至目前資料庫已有 220 個公司。從近幾年個案發現,小型高科技公司在評分上均有強勁成長,其中有許多是從大公司或研究機構衍生出來(spin-off),有 51%在創新領域上與本國人和(或)外國人發展合作關係,而且所有公司均有其獨特的計畫及團隊。

過去,俄羅斯政府的智慧財產權商品化計畫支援的中小企業,聚焦在存活的小型企業和新創公司,現在則聚焦於快速成長的高科技企業,並發展多種計畫以因應各種型態公司的需求。資金來源包含美國、芬蘭、法國、德國等國際計畫資金,主要用於協助成立新的高科技公司及發展中的高科技公司,協助將其科學技術成果商品化。

時至今日,智慧財產權不僅對於公司,對大學及研究機構也都很重要。小型新創公司在大學及研究機構的技轉中心、育成中心及智慧財產權商品化部門,進行智慧財產權商品化,在俄羅斯也相當普遍,同時大學也開始透過將其專利授權給公司來增加收入。

俄羅斯在財務、資訊、基礎建設上均提供支援予小型創新事業體。教育支援部分, 現已提供免費線上課程,並規劃在 2030 年前,成立至少 30 個小型新創公司服務中 心、至少 30 個測試及產品原型設計中心,並啟動措施增進創業社群之能力,包含 與全球教育中心合作,啟動科技企業家及基金專家教育計畫。

十、「菲律賓智慧財產權商品化最佳實務」:由菲律賓智慧財產局(IPOPHL)局長 Ms. Josephina Rima-Santiago 主講。

菲律賓在 2017 年之微中小企業總共占企業數量 99.56%,然而其出口營收金額僅占 出口總營收金額之 25%。由於該國由 7,641 個島嶼組成,在推動智慧財產權商品化 上,有其獨特的性質及難度。以下就智慧財產權創造、保護、運用,以及政府支援措施等4個面向介紹如次:

(一) 智慧財產權創造

菲律賓各政府部門有多項措施,其中,IPOPHL 製作「專利全景報告」(Patent Landscape Report),針對特定技術領域進行專利資料及專利活動之分析,協助企業製作專利地圖(patent mapping),科技部執行「發明發展計畫」(Invention Development Programs),包含:1.提供研究人員及發明人在測試及分析時所需之財務協助、2.「工業發明發展計畫」(Industry-Based Invention Development Program):發明透過智權申請及調整轉為工業生產,及 3.「概念產品原型設計計畫」(Concept Prototyping Program):利用學研機構的設施,協助企業將發明製作為產品原型(prototype),並強化學研機構的設施。

(二) 智慧財產權保護

菲律賓各政府部門有多項措施,其中,IPOPHL與WIPO及世界經濟論壇(WEF)合作進行「發明家協助計畫」(Inventor Assistance Program),針對開發中國家的發明家及小型企業,提供有限財務協助聘請專利律師,進行公益法律協助,以確保其專利得到保護,並提供「Juana Make a Mark 計畫」,減少微中小企業之商標註冊費用(減免金額將近 50 元美金)。此外,科技部進行「智慧財產權協助計畫」(IPR Assistance Program),提供資金支援支付新型專利申請規費,協助發明家、研究人員或個人之智慧財產權得到保護。

(三) 智慧財產權運用

IPOPHL 進行「聚焦行業別之技術媒合」(sector-focused technology pitching),協助媒合媒合技術持有人及企業;今年正規劃和貿工部投資署(Board of Investment)完成類似性質但更大規模的媒合活動,將聚焦於電子產業。此外,貿易及工業部進行「前進在地」(Go Lokal!),運用概念商店的創意,協助菲律賓微中小型企業及新創公司在城市商場中尋找免費場地,展示其創新及高品質的手工藝產品、設計產品,藉由免費的行銷平台提供機會,協助找到在地買家及大型買家,將商品打進主流市場。

(四) 政府支援措施

菲律賓政府有多個政府部門提供措施支援智慧財產權商品化。其中,IPOPHL 自 2010 年起啟用創新及技術支援辦公室(Innovation and Technology Support Office,簡稱 ITSO),協助大學及高等教育機構取得專利資訊,應用於研究、教育、產生創意及商業發展,提升在地研發能量。截至目前,菲律賓已有 94 所官學研界共同組成之 ITSO,推動在地發明申請數量提升,從 2005 至 2011 年平均每年 196 件,提升到 2018 年的 469 件。

十一、「中國大陸中小企業之智慧財產權商品化」:由高文律師事務所合夥人王正志簡要介紹。

(一) 公司設立資本額之智慧財產權比例

中國大陸對於公司設立資本額之智慧財產權比例,近年有相當大的變化。依據 1993年公司法第24條規定,有限責任公司設立時智慧財產權占資本額比例不 得超過20%¹。時至2013年,公司法已修法放寬,第27條規定取消公司設立 資本額之智慧財產權占比限制²。

(二) 智慧財產權鑑價及融資現況

隨著法規的開放,企業亟需處理智慧財產權鑑價、授權及移轉的問題。2019年8月16日,中國大陸銀保監會、國家知識產權局、國家版權局聯合發布《關於進一步加強知識產權質押融資工作的通知》,提出鼓勵銀行建立企業科技創新能力評價體系。2017年12月,廈門市首先成立智慧財產權銀行,提供智慧財產權融資服務予許多技術型中小企業。至於智慧財產權融資比例,一般銀行最高融資比例約50%,廣發租賃公司最高融資比例將近80%。2019年第1季,

第二十四條 股東可以用貨幣出資,也可以用實物、工業產權、非專利技術、土地使用權作價出資。對 作為出資的實物、工業產權、非專利技術或者土地使用權,必須進行評估作價,核實財產,不得高估或 者低估作價。土地使用權的評估作價,依照法律、行政法規的規定辦理。

第二十七條 股東可以用貨幣出資,也可以用實物、知識產權、土地使用權等可以用貨幣估價並可以依 法轉讓的非貨幣財產作價出資;但是,法律、行政法規規定不得作為出資的財產除外。

對作為出資的非貨幣財產應當評估作價,核實財產,不得高估或者低估作價。法律、行政法規對評估作 價有規定的,從其規定。

https://zh.wikisource.org/wiki/%E4%B8%AD%E5%8D%8E%E4%BA%BA%E6%B0%91%E5%85%B1%E5%92%8C%E5%9B%BD%E5%85%AC%E5%8F%B8%E6%B3%95_(2013%E5%B9%B4)

¹中華人民共和國公司法 (1993年)

以工業產權、非專利技術作價出資的金額不得超過有限責任公司註冊資本的百分之二十,國家對採用高新技術成果有特別規定的除外。

https://zh.wikisource.org/zh-hant/%E4%B8%AD%E5%8D%8E%E4%BA%BA%E6%B0%91%E5%85%B1%E5%92%8C%E5%9B%BD%E5%85%AC%E5%8F%B8%E6%B3%95 (1993%E5%B9%B4)

²中華人民共和國公司法 (2013年)

中國大陸金融機構之智慧財產權融資計6,448件,年增98%。

(三) 保護智慧財產權價值

中國大陸商標法、著作權法、反不正當競爭法均規定,侵權賠償金額係依據權利人因侵權而遭受的實際損失確定,若實際損失難以確定,侵權賠償金額可依據侵權人因侵權所得利益計算。例如:「新百倫」商標侵權案,美國知名廠商New Balance 公司被控侵害周姓商標權人之「新百倫」商標,法院以被告侵權獲利為基礎,判決被告應賠償人民幣9,800萬元;正泰集團控訴施耐德電氣公司(CHINT Group v Schneider Electric)之專利侵權案,經判決施耐德電氣公司須賠償人民幣1.575億元,是中國大陸有史以來賠償金額最高的案件。

十二、 圓桌論壇—APEC 各經濟體經驗分享:由與會各經濟體代表輪流分享其中小企業概況及智慧財產商品化的相關協助措施。

(一)馬來西亞

馬來西亞目前約有 97 萬 5 千家中小企業,創新產業更是其中的領導產業,2018 年的全球創新指數(Global Innovation Index, GII)顯示,馬來西亞創新產業的 GII 排名全球第一。為協助中小企業及學界進行創新產品或服務的研發,自 2016 年起推動相關協助計畫,至今已產出 343 件創新產品或服務,產出率達 6 成,成果豐碩。

而目前馬來西亞在智慧財產商品化議題面臨的最大挑戰,是大多數中小企業不 甚瞭解智慧財產註冊的重要性,對智慧財產的認知意識低落,從專利申請案量 即可看出,每年絕大多數的申請案均來自外國申請人。

菲律賓提問,相關協助計畫是否有較明確的優先推動方向?以及是否進行融資方面的協助?馬來西亞回應官方目前投入了7百萬美元的經費,原則上只要提出研發計畫進行申請,均能獲得資金,然而問題也漸漸浮現,很多資金常常是一去不復返,完全沒有回饋效用,因此官方開始要求申請者須備妥更周全的計畫,例如明確定義目標市場等等。至融資協助部分,已有部分小型銀行開始進行合作,並有部分小型科技企業已獲得銀行融資。

(二)印尼

印尼有超過6千3百萬家中小企業,貢獻了印尼每年出口總量的35.7%,更占了印尼96%的勞動人口。目前印尼提供中小企業的協助措施包括智慧財產管理/行銷/研發的訓練課程、資金與授權的媒合、專利申請等,也提供規費減免的優惠措施。

而除了印尼智慧財產局外,其他如科技、法律、貿易等相關政府單位也都設有培訓課程,讓中小企業人員提升有關智慧財產商品化的相關能力與知識。惟目前中小企業的智慧財產利用率仍然較低,以商標為例僅看到約 20%的註冊率,官方希望在 2020 年前能提升到 50%。

菲律賓提問中小企業智慧財產利用率低落的可能原因有何?印尼回應因中小企業通常較缺乏對智慧財產的理解或知識,另外印尼島嶼眾多且分散,官方雖已盡力推廣,也在各地設有分部,成效仍然有限。

(三)菲律賓

菲律賓表示其多數措施與經驗已於前一日的簡報中分享完畢,僅簡要補充數點內容。菲律賓與印尼相同,國境內有諸多島嶼,因此菲律賓智慧財產局設立了14個分處(satellite office),今年希望能再增設2間分處,分處的主要工作為提升中小企業的智慧財產意識,並依據地域性提供不同的服務。

另外,自 2013 年至 2018 年,菲律賓專利申請案件量成長約 24%,商標申請案件量成長約 21%。

俄羅斯提問,中小企業進行研發工作或智慧財產商品化的資金來源主要為何? 是由專利局或銀行提供,或中小企業自行尋求資金?菲律賓回應因菲律賓以製 造業為第一大產業,對於研發的需求相較不是太高,相關資金多數仍是由中小 企業自行籌措,或是尋求其他商業夥伴。

(四)越南

越南為農業國家,中小企業占比不高,約僅有 70 餘萬家,加上對智慧財產的 重視性低,申請專利註冊者相當少。而越南智慧財產局雖也有向中小企業提供 訓練課程,但內容十分基礎,缺乏進階性的教育訓練。

(五)智利

智利有超過 12 萬家中小企業,其智慧財產利用率約 43%,政府並提供 16 項計畫協助中小企業建構智慧財產能力或進行智慧財產商品化,除了提供資金利其研發產品外,並於大學內設立成立技轉及授權中心,然而目前約只有 8%的中小企業曾經接受過政府提供的相關協助,創新產業對智利 GDP 的貢獻更是低於一成。

一般而言,智利企業並不熱衷於創新或研發工作,僅有部分以出口為導向的企業較為注重這方面的發展,因此智利政府刻正嘗試提供各種誘因,以吸引更多的中小企業投入新創產品的研發。

智利並向俄羅斯提問,俄羅斯政府係以何種誘因驅動學界產出符合產業界需求的研發成果?俄羅斯回應其教育主管機關每年都會對學術機構進行評鑑,其中一項評鑑指標即是與產業之間的連結,另一方面學術機構為籌措資金,也會進行較具商業性質的研究計畫,而且也可能與大型企業進行相關合作,均可能驅動學界產出符合產業界需求的研發成果。

(六)新加坡

新加坡智慧財產局(IPOS)整合原有的專利審查、培訓、諮詢等部門,甫於今年成立「IPOS 國際事務機構」(IPOS International),目前有上百名專利審查人員(具備中英雙語能力且9成擁有博士學位)、30餘位專業顧問、9個資料庫,目的在橋接公私部門、協助建構智慧財產策略、加值無形資產的應用與商品化,進而讓企業邁向國際。

IPOS International 已提出一項免費線上工具「ILLUMINATE®」,能迅速地幫助企業評估其智慧財產及無形資產的健康情形、管理落差與風險,並提出改善建議。新加坡表示每一項科技或產業都有其發展的生命週期,企業常常不知道如何利用固有的無形資產,相關的協助措施將可協助企業檢視、定義可用的專利,據以規劃企業下一步走向。

另一項計畫「專利分析與科技掃描」(Patent Analytics and Technology Scans)則是應用互動式 AI 檢視大量的專利數據,藉以分析及預測全球的科技發展趨勢、可研究之新領域、競爭者與合作者、投資機會。實際應用包含分析技術領域熱點與領頭企業(top players)、判斷非技術領域熱點是否值得投資研發、就特定技

術領域評估企業是否要自行投入研發或向他人購買專利即可、找出專利申請趨勢的背後驅動因素等。所有數據及分析並以資料視覺化之方式呈現,讓企業一目瞭然,而相關研究報告亦公開於網站上,各界均可下載利用。

菲律賓提問新加坡協助企業智慧財產商品化的具體政策方向為何?新加坡回應為兩大方向,一是協助企業先找出現有的無形資產或優勢,二為幫助其架構無形資產商品化的最佳途徑。新加坡認為相關政策的推動一定要以企業為中心 焦點,並且需整合所有不同類型的無形資產一併評估,因無形資產彼此之間是 具鏈結性與互動性的。

(七)我國

我方首先介紹智慧局對中小企業的能力建構。為滿足中小企業智慧財產商品化每個階段的不同需求,智慧局提供多元的輔導措施及豐富的網路資源,包括建構中小企業 IP 專區,提供政府各部門有關中小企業的智慧財產資訊、資源及服務窗口;建構全球專利檢索系統,整合五大專利局、WIPO 及智慧局逾 6,600 萬筆專利資料;設置專利商品化教育宣導網,提供智慧財產商品化訊息交流分享並提供線上教學課程;以及派遣審查人員前往中小企業,針對其需求提供專利檢索、專利申請及審查實務等課程,協助中小企業提升研發能量等。

我方另說明中小企業智慧財產創新之推動策略。中小企業雖擁有充沛的智慧財產創新能量,卻容易因缺乏資源或專業人員,未能擬定合適的策略及進行完整的專利布局,為協助中小企業順利解決各種挑戰,我方長年推動小型企業創新研發計畫、智慧財產價值躍升計畫、創新技術博覽會等,除向與會經濟體概要計畫內容外,並輔以數據分享豐碩成果。

(八)秘魯

秘魯自 2012 年開始以產業界及學術界為對象,推動智慧財產能力建構及商品 化的相關支援計畫,至 2018 年止,共收受 215 件專利新申請案,惟多數申請 案係來自獨立發明人或學術機構,中小企業所提出之專利申請案仍占非常少 數。

十三、 「中小企業智慧財產權商品化」計畫研究成果

計畫 PO Ms. Anastasia Gribanova 表示本次研討會成果相當豐碩,並感謝各經濟體

協助填寫中小企業智慧財產商品化的實務調查問卷,後續會將研究內容彙整出版, 並置於 APEC 網站上供各經濟體參考利用。

會議總結:

由 RSAIP 教授 Ms. Veronika Smirnova 代表致詞,本次研討會相當成功,感謝各經濟體相關人員的參與,並就中小企業智慧財產商品化的議題進行經驗交換,也謝謝所有講者的專業分享。

透過本次研討會可瞭解到,中小企業智慧財產商品化的協助措施實有多種面向,期盼各經濟體持續為中小企業提供資訊、教育等各方面的協助,提升其對智慧財產的重視及利用。

肆、心得與建議

一、心得

- (一)本次研討會俄羅斯係以專家會議的方式,邀集各經濟體政府單位、國際組織或研究機構之代表,就中小企業智慧財產商品化議題進行了熱烈的討論,在知識經濟時代,知識的創新與運用已成為國家競爭力及經濟成長的主要驅動力,如何強化中小企業對智慧財產權的認知、提高中小企業面對智慧財產權問題的應變能力,並協助其完備國際智財策略、進一步提升貿易競爭力,是各經濟體將持續努力的一項重要課題。
- (二)俄羅斯早於1950年代即成立俄羅斯國家智慧財產學院(RSAIP),廣納各界專家, 提供學士、碩士、博士等學位予各界學生就讀,也針對高中學生開辦智慧財產 教育夏令營,以培育專業人士,雖曾歷經政治環境上的重大轉變,又因地幅廣 大等因素致各項策略推動不易,RSAIP仍堅守崗位,對智財教育之重視可見一 斑。

二、建議

(一) 為持續深化我國於 APEC 場域及 IPEG 會議活動之參與度,我國近年積極於 IPEG 架構下研提提案申辦 APEC 計畫,未來部分提案建議可視議題性質,參考俄羅斯召開專家會議之作法,相較廣邀外界參與之大型研討會,經費上較能

靈活編列,有助於提升計畫申辦成功之機會;又因智慧財產權議題頗具專業性,以專家會議方式舉辦相關活動,亦有利與會者就活動議題有更深入、聚焦的討論。

(二) 我國自 2005 年起推動「智慧財產專業人員培訓計畫」,並成立「智慧財產培訓學院(TIPA)」培植高素質專業人才,惟目標對象大多是企業、研發單位或智慧財產實務界之成員,未來或可參考 RSAIP 之策略,以向下紮根智財教育為導向,普遍擴散智財知識,尤其在數位匯流時代,更有將智財專業知能深耕為全民意識的必要。

伍、附錄

附件1、「中小企業智慧財產權商品化」研討會議程

APEC IPEG IP Commercialization for SMEs (CTI 32 2017A)

September 10-12, 2019 Vladivostok, Russia

Day 1 – September 10 (Tuesday)

Day 1 – September 10 (Tuesday)				
09.30 - 10.00	Registration			
10.00 - 10.30	Welcome remarks			
	- Ms Anastasia Gribanova, Project Overseer			
	- Mr Ivan Bliznets, rector of the Russian State Academy of Intellectual			
	Property (RGAIS), Doctor of Law, professor			
	- Mr Nikita Anisimov, rector of the Far Eastern Federal University (FEFU)			
	(TBC)			
	- Mr. Guy Pessach, Director, SMEs and Entrepreneurship Support			
	Division, Department for Transition and Developed Countries, World			
	Intellectual Property Organization (WIPO)			
10.30 - 11.00	Presentations about RGAIS and FEFU			
11.00 - 11.15	Coffee break			
11.15 - 12.30	WIPO presentation about the support of SMEs on IP			
	commercialization			
	– Mr. Guy Pessach, Director, SMEs and Entrepreneurship Support			
	Division, Department for Transition and Developed Countries, World			
	Intellectual Property Organization (WIPO)			
12.30 - 14.00	Lunch			
14.00 - 15.00	The role of IP in SME's activity			
	- Ms Juliya Vasileva, Associate Professor of the Department of innovation			
	management and IP commercialization, PhD in Economics			
15.00 - 16.00	Certain aspects of IP commercialization: IP management, IP			
	marketing, reducing of innovation risks			
	- Ms Veronika Smirnova, Head of the Department of Innovation			
	Management and IP Commercialization of RGAIS, Doctor of Economics,			
	professor			
16.00 - 16.45	Coffee break			
16.45 - 17.45	Collaboration of SMEs and large businesses, transfer of technologies			
	- Mr Irik Mukhamedshin, honorary professor of the Department of Civil			
	and Business Law of RGAIS, PhD in Law, academic advisor, professor			
17.45 -18.00	Summing up Day 1 of the seminar			

Day 2 – September 11 (Wednesday)

10.00 - 11.00	IP protection and enforcement, patenting abroad		
	- Mr Irik Mukhamedshin, honorary professor of the Department of Civil		

	and Business Law of RGAIS, PhD in Law, academic advisor, professor
11.00 – 11.15	Coffee break
11.15 - 12.30	Search and training of SME personnel on IP matters
	- Mr Ivan Bliznets, rector of RGAIS, Doctor of Law, professor
12.30 - 14.00	Lunch
14.00 - 15.00	Best practices of IP commercialization in Russia
	- Ms Juliya Vasileva, Associate Professor of the Department of innovation
	management and IP commercialization, PhD in Economics
15.00 - 16.00	Best practices of IP commercialization in Philippines
	- Ms Josephina Rima-Santiago, Director General, the Intellectual Property
	Office of the Philippines
16.00 - 16.15	Coffee break
16.15 - 17.00	Law & Practice: IP Commercialization in China SMEs
	- Mr WANG Zhengzhi, Partner, Beijing Globe-Law Law Firm
17.00 - 17.15	Summing up Day 2 of the seminar

Day 3 – September 12 (Thursday)

Day 5 – September 12 (Thursday)				
10.00 - 11.30	Experience of APEC economies			
	(in the format of round table)			
	The participants will be invited to give short presentations about IP			
	commercialization practices existing in their economies			
	Moderator – Ms Veronika Smirnova, Head of the Department of			
	Innovation Management and IP Commercialization of RGAIS, Doctor of			
	Economics, professor			
	- participants of the seminar			
11.30 – 11.45	Coffee break			
11.45 - 12.30	The results of research conducted within the framework of the project			
	implementation			
12.30 - 14.00	Lunch			
14.00 - 15.30	Identification and discussion of the best practices on IP			
	commercialization and further steps to address the needs of SMEs in			
	the IP field in APEC region			
	Moderator – Mr Ivan Bliznets, rector of RGAIS, Doctor of Law, professor			
	- speakers and participants of the seminar			
15.30 - 16.00	Summing up of the seminar			
	Closing remarks			

APEC IPEG IP Commercialization for SMEs (CTI 32 2017A)

Questionnaire

The Questionnaire is addressed to the participants of the Seminar under the APEC IPEG Project "IP Commercialization for SMEs", which will be held on September 10-12, 2019 in Vladivostok, Russia, and aimed to identify the best practices on IP commercialization for SMEs.

Please submit the completed Questionnaire to Ms Veronika Smirnova (<u>prorektor_nauka@rgiis.ru</u>) with copy to Ms Anastasia Gribanova (<u>amgribanova@rupto.ru</u>) and Mr Dmitry Neminushchiy (<u>rospat182@rupto.ru</u>).

I. General questions

- What organization do you represent?
 Ans: Intellectual Property Office, Ministry of Economic Affairs
- 2) How many SMEs are there in your economy? Ans: Roughly 1,437,000.
- 3) What is the ration of SMEs to large business in your economy? Ans: 97.7%
- 4) What is the average number of SME employees? Ans: 4.47
- 5) What industries do the SMEs work in?

Ans: Other than public safety and national defense, as well as compulsory social security, SMEs exist in all business sectors in our economy. The main sectors are: wholesale, retail, accommodation and dining, and manufacturing and construction.

- 6) What is the key activity of SMEs?
 Ans: Producing and selling products; providing services.
- 7) How many SMEs use the Internet in their work?

 Ans: According to an analytical report on the marketing behavior of SMEs in our economy in 2017 jointly carried out by Google and Ipsos ASI, 83% of the SMEs in our economy have been using digital marketing tools.

II. Institutional competence of the managers

1) What do you understand by the notions: «innovation»

Ans: Based on the current norms, propose ground-breaking ideas. Use existing knowledge/materials to improve or create things, methods, elements, paths, and settings

to fulfill societal needs or ideals in certain conditions. The results, to certain extent, should be beneficial to all.

«intellectual property»

Ans: This refers to creations of the mind which are worth monetary values and whose rights are affirmed by the laws.

«management of the IP rights»

Ans: This includes examining and maintaining IPR, organizing IPR management units, and planning corporate IPR strategies, so as for companies to stay away from risks while securing the greatest possible gains.

«patent search»

Ans: This is the most effective way to learn the technical content of specific patents. The steps to take are as follows: choose a topic, decide on the type of search, choose a database, select the patents to be searched, set search strategies, and finally perform the search. When the results come out, make necessary judgements and examine search results.

«technology transfer»

Ans: Based on a technology transfer contract or a likewise contract, the provider (owner) of the technology in question provides the machinery, technological data, manufacturing process, or any other needed information/services relating to the technology to a user or recipient, so that the user/recipient may also perform such technology.

«intellectual property commercialization»

Ans: To turn intellectual property rights into marketable commodities available through sales channels.

2) Are there any SME associations/unions in your economy? What assistance do they provide to SMEs?

Ans: Association of Small & Medium Enterprises: The association provides legal counseling and management assistance to SMEs. It also arrange courses and events on business management for SMEs, advocates relevant policies for the government, and offers job counseling to the general public.

3) Do you know about SMEs support programs in your economy? If yes, please name the programs and their main points.

Ans: In 1992, we established the SME Service System which according to the SMEs' managerial and operation needs included the following 11 service groups – financing, company management, production skills, R&D, information management, industrial safety, pollution prevention and control, marketing, cooperation, quality improvement, and entrepreneurship. Today, it still provides counseling services and a range of assistance to companies. This year, the projects it leads are as follows: Service Optimization and Value Add-ups for SMEs, SME Cooperation and Bidding of Public Projects, Digital Innovation and Global Marketing for SMEs, Support and Counseling for Micro Start-ups, Managerial Counseling for SMEs, and SME Business Matchmaking and New Services.

4) Do you know about any privileges for SMEs that are engaged in innovate activity? (including tax privileges)? If yes, please indicate which of them are used.

Ans:

Small Business Innovation Research (SBIR): According to application phase and applicant type, funds are provided at up to 50% of a total budget. Details are as follows:

Application phase

Preliminary research / preliminary planning (phase 1):

1.Individual applicant: Up to US\$32,258 2.Team applicant: Up to US\$161,290

R&D / advanced planning (phase 2):

1.Individual applicant: Up to US\$322,580 2.Team applicant: Up to US\$1,612,900

Phase 2+: This refers to turning engineering skills, industrial designs, model development skills, mass production skills (for pilot runs), and initial market surveys all into marketable add-ups, so as to add values to the technology and product in question, as well as to enhance value chains.

1.Individual applicant: Up to US\$161,290 2.Team applicant: Up to US\$806,450

III. Level of innovation activity

1) Are the SMEs of your economy engaged in innovate activity? If yes:

- what is their motivation for this?

Ans: To increase competitiveness of products and services, to carry out enterprise transformation, and to develop business sustainability

- what innovations are represented in SMEs work: organizational, marketing, technological?

Organization: Introducing internal digital management tools such as inventory control and financial management systems

Marketing: Using online and mobile payment and social media to expand sales

Technology: Introducing smart machinery for production systems, so as to improve production efficacy

- please define the level of the use of IP by SMEs of your economy (on a 1-10 scale) Ans: 6 $^{\circ}$
- pleasedefine the level of the use of digital technologies by SMEs of your economy (on a 1-10 scale)

Ans: 6 °

- do the SMEs of your economy implement radical innovations and advanced technological solutions?

If no, please specify the reason.

Ans: Yes.

2) Are the SMEs of your economy engaged in R&D?

Ans: Yes.

If yes:

- Do they plan to create or expand the production of innovative products?

Ans: Yes (partially).

- Do they sell finished results of IP or enterprises (startups) as a whole?

Ans: Yes (partially).

- Do they patent R&D products (in the country and in the international market)?

Ans: Yes (partially).

3) Do the SMEs of your economy use IP in their work?

Ans: Yes.

If yes, do they use proprietary solutions or operate under license agreements?

Ans: Both

Please indicate the ratio of own IP objects to the IP objects owned by third parties.

Ans: Not available.

4) What technologies are considered by SMEs as the opportunity to create new products and to endow existing products with new properties?

Ans: IoT, AI, medical biotechnology, etc.

- 5) What IP objects are engaged in the work of SMEs in your economy? Please arrange IP objects in order of their importance in SMEs' market success:
 - Copyright objects
 - Inventions
 - Utility models
 - Trademarks
 - Know-how
 - Selection attainments
 - Industrial designs
 - Computer software

etc.

Ans: Not available.

IV. Intellectual property management

1) Do the SMEs of your economy have development plans (strategies) in IP field? If yes, please select from the following:

- there is a planning document (which one?)

Ans: We implement the project entitled "Promoting Corporate Establishment of IPR Management System." The objective is to realize the vision of a universal establishment of

IPR management systems among domestic corporations, foundations, and research institutions through the establishment and promotion of the Intellectual Property Management System. At the same time, a fair and just verification mechanism should be established so as to help corporations obtain capability proofs of IPR management.

- there is an "idea" developed by top-management As to SMEs, the management levels reflect their ideas by instituting company policies.
- 2) Do the SMEs of your economy have employees responsible for IP? Ans:No. We rarely hear something like this.

If yes, is it a staff member (indicate his education / specialization) or an outsourcing specialist (indicate, if possible, on which issues and how often)?

3) Do the SMEs of your economy carry out market analysis and marketing research?

Ans: Yes (partially).

If yes, please specify:

- Why is it important?

Ans:

- 1. Understand the scale of a local market, the place's norms and practices, and relevant laws and regulations.
- 2. Link up with local government and SME resources, thereby facilitating company operations.
- 3. Focus on the key customers and learn their needs, so as to facilitate precision marketing.
- What risks were avoided?

Ans:

- 1. Misinterpreting of local market trends and lack of consideration of cultural norms, which might lead to unsatisfactory sales outcomes.
- 2. Limited development of our companies due to lack of assistance from the local government and SMEs.
- 3. Violation of local laws which can stop companies from functioning normally.
- 4. Lack of understanding of the companies' key customers and their needs, resulting in a waste of marketing resources.

If no, please specify the reason.

4) Do the SMEs of your economy conduct patent search?

If yes, please specify:

- for what purposes?

Ans: Patent search helps SMEs to effectively learn about industry trends. Thus, we have established a range of patent search systems, including global patent search. We want to assist SMEs in this regard and we will continue to introduce our patent search resources to more SMEs in need.

- whether SMEs do it independently or with the help of third-party organizations?

Ans: The SMEs may use our patent search system to do the search on their own, or ask a third party such as the Patent Search Center to perform the task.

5) Do the SMEs of your economy possess enough knowledge about IP strategy and IP portfolios of their competitors?

Ans: We ask the SMEs which participate in the government's counseling projects whether they would like to take courses on patent search, patent application, patent examination practices, and patent porforlios, and let them know that we can customize the courses to fit their needs and send lecturers to the companies. We hope to gather more momentum with the SMEs for R&D, and to help them acquire more knowledge in IP strategy-making and portfolio-designing, thereby outwinning their competitors.

6) Do the SME employees of your economy undergo special training in the field of IP protection, enforcement, evaluation and commercialization?

Please specify: What kind of training? Is it on the basis of higher education establishment or Technology Transfer Centre? Who owns the training initiative?

Ans:

- 1. We hold briefing events on "increasing patenting momentum and value" and also provide customized courses on intellectual property for SMEs, focusing on patent portfolio layouts and technological trend analyses. Our goal is to help companies register valuable patents.
- 2. Our "TIPA" –assists SMEs in cultivating IP talents by holding relevant trainings and IP certification tests, as well as setting fair talent-selection standard for SMEs.
 - 7) When the SMEs of your economy lack some competences in innovation activity, do they have understanding of where they could address to get them (outsourcing, additional employees, business plan, search for business partners, etc.)?

Ans: Yes.

8) Are the methods for financial and time risks reduction in the field of innovation activity of interest?

Please select from the following:

- yes
- -no
- yes, if they don't require financial investments Ans: Yes.
- 9) Do the SMEs of your economy use IP for the promotion of their products/services? Ans:Yes.

IV. Financing

1) Do the SMEs of your economy lack financial resources particularly for innovation activity?

Ans: Yes.

2) What are the sources for the SMEs financial support?

Ans: Mainly the banks. The government provides partial support.

3) Do the SMEs get any support from the government?

Ans: Yes.

If yes, please specify:

- how much?

Ans: US\$3.2 billion in total.

- for how long?

Ans: The project kicked off in May 2019. For now, it is not certain when the project will come to an end.

- as a part of what project?

Ans: SME Credit Guarantee Fund

- what type of support (grants, subsidies, direct financing, favourable terms, etc.)?

Ans: SME Hundred-billion Financing Plan – SME Credit Guarantee Fund

- individual support or in consortium with other SMEs?

Ans: Individual support.

If no, please provide the reason

4) Do the SMEs of your economy participate in any governmental programs for fostering innovations?

Ans: Yes.

If yes, please specify name of the program, period of time and conditions of participation.

Ans:

Time	Target
Ongoing	The project caters to SMEs with
since	innovative technologies and services
1989	
Ongoing	SMEs as defined by Standards for
	Identifying Small and Medium-sized
	Enterprises. The qualified SMEs may apply for the loan
Ongoing	Micro-enterprises and SMEs which
	provide daily life services
Ongoing	Social start-ups or those preparing to set
	up such businesses
Ian	SMEs and start-ups
	SIVIL'S and start-ups
Dec. 2017	
Ongoing	Companies that carry out innovative
Oligonig	experiments
	experiments
	Ongoing since 1989 Ongoing

SMEs Innovation	Ongoing	SMEs
Award		
SME Digital	Ongoing	SMEs as defined by the Standards for
Transformation		Identifying Small and Medium-sized
and Smart		Enterprises
Manufacturing		Leading companies may not necessarily
Promotion		be SMEs
Program		
SMEs Ecosystem:	Jan. –	SMEs as acknowledged by the Small and
Connection,	Dec. 2019	Medium Enterprise Administration
Creation,		
Innonvation		
Digital Innovation	Until Dec.	SMEs
and International	2019	
Marketing for		
SMEs		

If no, please provide the reason

- 5) Do SMEs in your economy need additional professional competencies to put into practice the existing instruments of governmental support for innovative entrepreneurship?
- if yes, please specify which competencies
- if no, please provide details

Ans: No. SMEs generally lack capital.

6) Have the SMEs of your economy ever been involved in disputes on IP?

Ans: Yes.

If yes, please provide details of case (if possible)

Ans: We have one eco-friendly shampoo manufacturer having suffered bad faith trademark application in foreign market.

V. Intangible assets

- 1) Do the SMEs of your economy have IP on the balance as an intangible asset? Ans: No.
- 2) Do the SMEs of your economy make an inventory of the results of intellectual activity? Ans: Yes.
 - 3) Do the SMEs of your economy conduct IP evaluation?

Ans: Yes.

If yes, please specify whether SMEs use their own resources or involve third-party organizations?

Ans: use their own resources

4) Do the SMEs of your economy receive remuneration for creation and use of IP? Ans: Yes.

- 5) What are the main expenditures of the SMEs of your economy on IP? Ans: IP application fees, annuities
 - 6) Do the SMEs of your economy receive tax privileges for innovation activity and use of IP?

If yes, please specify what tax privileges they receive.

If no, please provide the reason

Ans: Yes. In order to promote innovation and research and development of small and medium enterprises, a small and medium enterprise, by investing in research and development, may have tax credit up to 15% of the research and development expenses, applied to the current year profit-seeking enterprise income tax payable.

VI. IP commercialization

1) In your opinion, do the SMEs of your economy have clear potential for IP market commercialization in the near future?

Ans: Yes.

What ways of IP and innovation commercialization are used by the SMEs of your economy? (please, describe in more detail):

- independently
- by means of large organizations
- by means of Technology Transfer Centers
- by participation in exhibitions, including international ones
- other ways

Ans: Generally, it is usually done independently or by means of participation in exhibitions (including international exhibitions) so as to learn about the development of companies and the knowledge acquired may be used for commercialization of IP and innovative products.

- 2) What challenges and difficulties do the SMEs of our economy face when commercializing their IP and entering the market? (please, describe in more detail):
- Financial

Ans: insufficient budget, financial hurdles, difficulties in obtaining capital from outside sources, and exceedingly high innovation costs.

- Organizational
- Information

Ans: lacking in technologies and market information

- Infrastructure
- Political
- Legal
- Marketing/market

Ans: the market monopolized by other companies (competition risks), consumers not feeling assured about their needs for innovation products or services (necessity risks), insufficient domestic market demands, difficulty in direct competition in foreign markets

- Lack of understanding/necessity/experience
 - 3) What became the key factor of success of the SMEs of your economy in the process

of IP commercialization?

Ans: market

4) Do the SMEs of your economy take part in export operations?

Ans: Yes.

If yes, please specify with which countries? is it planned to change (reduce/increase) the volume?

Ans: According to our latest white paper on SMEs, in 2018, our overall exports amounted to US\$340 billion, with SMEs' accounting for US\$46 billion (13.68%). The exports mainly go to the three following regions: mainland China (including Hong Kong and Macau), the 18 New Southbound economies, and USA – they take up 70% of the total export value. From 2008 to 2018, the SMEs' contribution, both to exports and imports, is on a long-term decline. This shows that the SMEs have grown to rely on domestic markets more.

If no, please specify whether it is planned to start export operations in the next 5 years?

5) How is the profit from IP commercialization distributed among the SMEs of your economy? Is it regulated or done as circumstances require?

Ans: Not available.

VII. Cooperation

1) Do the SMEs of your economy cooperate with ther organizations in developing and launching new products?

Ans: Yes.

If yes, please specify with which:

- with national partners, foreign partners, both

Ans: Both.

- large business, research institutes, project or design offices and etc., SMEs, higher education establishment, Technology Transfer Centre and other consulting centres.

Ans: All of the above.

Who initiated the partnership?

Ans: Both SMEs and partnering research units.

2) Do the SMEs of your economy plan to expand local cooperation with other organizations at the regional level?

Ans: Yes.

- 3) Please, name the main criteria for the SMEs to consider the partnership opportunities in the field of innovations:
- availability of scientific, technological and human resources;
- knowledge of the target market;
- opportunity for further participation in production cooperation, etc.

Ans: All of the above.

4) Do the SMEs of your economy have experience of innovative project implementation with foreign companies? What problems do the SMEs face? (中小企業處填答)

Ans: Yes. Insufficient funds.

VIII. Results from the use of IP by SMEs:

- 1) What positive changes in the work of SMEs of your economy are associated with IP projects, which are already implemented?
- Sales growth
- Profit growth
- Public image/capitalization growth
- Business contacts
- Cost saving
- Risk reduction
- Protection against compeition
- Acceleration of commercialization processes of developing innovative products
- Receiving additional investment (crediting) for core activity
- Setting up new business/activity area, etc.

Ans: Sales growth, Profit growth, Public image/capitalization growth, Business contact, Risk reduction, Protection against competition, Acceleration of commercialization processes of developing innovative products, Receiving additional investment (crediting) for core activity, Setting up new business/activity area, etc.

2) In your opinion, what is a key factor of SMEs success: focus on a project team, technology value or other?

Ans: Continuous investment in R&D so as to acquire more values through technology, clear distribution of the critical mass in terms of industry supply chains, customized adjustment of products and services based on client demands, and open-mindedness for new sales channels such as e-commerce and community marketing.

3) Please, rate the importance of IP assets for the SMEs success(on a 1-10 scale)

Ans: 10

IX. SMEs needs in IP

1) In your opinion, what are the most serious barriers for SMEs to use innovation and IP more widely in their activity?

Ans: capital

2) What are the first-priority needs for the SMEs in the IP field?

Ans: expenses for developing patent portfolios in other economies

X. Please provide a detailed example of one IP commercialization/technology transfer project.

Ans: Our Intellectual Circulation and Utility Plan is a years-long project. It provides SMEs with services in four main directions: consultation and visits by consultants, guidance for commoditization, patent analytic diagnosis, and patent technology marketing and

matchmaking. The plan aims to speed up patent technology matchmaking and step up efficacy of patent usage. By so doing, we hope to increase opportunities for technology transaction and usage by the industries, as well as to create IPR values.