Decision and the Three Dissenting Opinions (1), (2), (3)

The Taiwan Fair Trade Commission Decision

Gong-Cu-Zi No.106094

Sanctioned Party: Qualcomm Incorporated
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As a result of the Sanctioned Party's violation of the Fair Trade Act ("FTA"), the Commission has decided as follows:

Holdings:

I. The Sanctioned Party possessed a monopoly position in the CDMA, WCDMA and LTE mobile communications baseband market, but it has refused to license chips to competing peers and required them to draft restrictive clauses, as well as taking measures such as not supplying chips without a license agreement and entering into exclusive rebate agreements with certain entities that has a [competitively] exclusionary effect. After reviewing its overall business model and activities, those are deemed to have harmed the competition in the baseband chip market by using unfair methods to directly or indirectly interfere with other entities from competing in violation of Article 9, Paragraph 1 of the Fair Trade Act

II. The Sanctioned Party shall, within 60 days of the day after it receives this Decision, stop all unlawful activities stated in this case, including: (i) refrain from continuing to apply contractual provisions requiring competing chip manufacturers who have entered into such agreements to disclose sensitive sales information such as chip prices, transaction partners, sales quantities and product model numbers; (ii) refrain from continuing to apply contractual provisions in relation to the refusal to supply chips if no license was granted on handset manufacturers who have entered into component supply agreements, and (iii) refrain from continuing to apply contractual provisions regarding exclusive transaction rebates which has a [competitively] exclusionary effect with those relevant companies who have entered into such agreements.

III. The Sanctioned Party is ordered to, within 30 days of the day after it has received the decision, notify chip competitors and handset manufacturers in writing that they may, within 60 days of receiving such written notice, to make an offer to the Sanctioned Party to amend [existing] patent licensing-related agreements or enter into new ones. After receiving such an offer, the Sanctioned Party shall negotiate in good faith; the scope of the negotiations shall cover but is not limited to any contractual provisions that the other party believes to be unfair pursuant to the decision. Further, the negotiation shall not restrict the other party from resolving disputes through a court or independent third party arbitration.

IV. The Sanctioned Party shall, for every six months of the day after it receives the decision, report to the Fair Trade Commission regarding the status of the aforementioned negotiations with the other parties, and report to the Fair Trade Commission within 30 days of any completed amendments or new agreements reached.

V. A fine of NT$23.4 billion is imposed.

Facts:

I. As reported on February 11, 2015, the Sanctioned Party has been investigated or penalized by various competition authorities around the world for its mobile communications chip patent licensing activities. After interviewing the relevant enterprises in Taiwan, the Commission discovered that the Sanctioned Party did indeed refuse to license to its competitors, as well as restrict handset manufacturers (hereinafter referring to both brand and OEM entities) from obtaining any chips (hereinafter including all baseband processor-related chips) if they do not enter into patent licensing agreements with the Sanctioned Party, while also providing Apple Inc. ("Apple") with incentive conditions in the form of rebates for exclusivity in transactions. As such activities are suspected of restricting competition, the Commission may initiate an investigation into the matter on its own. Two complainants have made similar or identical complaints in writing and are thus merged as a single matter; there was also one complainant writing to withdraw its complaint.

II. The state of the investigation:

(i) Letters were sent to [REDACTED] domestic and foreign handset OEM entities and [REDACTED] brand entities to come to the Commission to provide a statement or submit their comments in a written statement. The information collected is organized and summarized as below:

1. OEM manufacturers and brand entities work together in ways such as the OEM purchasing the spare parts, and the royalties to be paid by the brand entity; the spare parts and the royalties are sourced and paid by the OEM; or the spare parts and the royalties are sourced and paid by the brand entity. The chips are often designated by the brand entity for purchase, and the royalties are often paid by the OEM to the Sanctioned party; only a few are paid by the brand entity. A few brand entities manufacture their own handsets, while some commission OEMs for manufacturing, and some others entirely depend on OEMs for manufacturing. Some brand entities purchase the main parts and sell them to OEMs for manufacturing, while paying royalties to the Sanctioned Party; other brand entities purchase a few of the parts on their own, while leaving the majority to the OEM to purchase, and the OEM pays the royalties.
2. Handset manufacturer [REDACTED] who submitted to the investigation did not enter into a “Subscriber Unit License Agreement” (“SULA”) with the Sanctioned Party. All others have entered into such agreement, with substantially similar contractual provisions and royalties.
3. Handset manufacturer [REDACTED] who submitted to the investigation did not enter into a “Component Supply Agreement” (“CSA”) with Qualcomm CDMA Technologies Asia-Pacific Pte Ltd (a subsidiary indirectly held by the Sanctioned Party, hereinafter “QCTAP”). All others have entered into such agreement, with substantially similar contractual provisions.
4. Combined licensing of standard essential patents (“SEPs”) and non-standard essential patents (“Non-SEPs”): [REDACTED] once proposed a SEP-only contract but was refused. A majority stated that they never proposed a SEP-only contract. [REDACTED] said there is no harmful impact. [REDACTED] said it is not possible to use

the globally-registered patents of the Sanctioned Party in manufacturing handset, so a compulsory acceptance of unneeded patent licenses (non-SEPs) and paying royalties on them will result in an overpayment of royalties, increase costs, and lower competitive strength in the market. [REDACTED] said it is not possible to know whether it is using the Sanctioned Party's non-SEPs.

5. Use of the price of the entire handset as a basis for calculating royalties, and high rates in general: All companies indicated that the mobile communications patent technology licensed by the Sanctioned Party only covers mobile communications-related parts (such as the communications chip) and no other part of the handset, such as the external design, module development, the display, the CPU, the memory, the transportation costs, warranty costs, OEM human resources costs, etc. Yet, the Sanctioned Party uses the net selling price of the handset as the calculation basis for royalties instead of the extent of contribution its patent technologies provide to the handset. This is inherently discriminatory and increases the risk of double-dipping and overcharge of royalties, including the extreme unreasonableness in taking price factors that are completely unrelated to the Sanctioned Party's patents as bases for calculating royalties. In examining the average handset manufacturer's margins, they are lower than 5%-6.5%, thus [the Sanctioned Party's] rates are clearly unreasonable. There are several US courts and law enforcement agencies using the "smallest salable patent practicing unit" principle ("SSPPU"), and the calculation of royalties should use the baseband processor as the SSPPU instead of the complete device for use by the ultimate user.
6. Refusal to provide list of patents licensed: [REDACTED] stated that it requested a list but was refused. [REDACTED] stated that it could not know whether the licensed patents include non-SEPs or expired patents. [REDACTED] stated that it is possible to go the Internet or inquire with the USPTO. [REDACTED] stated that the Sanctioned Party did provide a list and did not refuse. [REDACTED] stated that the Sanctioned Party never provided a list. [REDACTED] stated that the Sanctioned Party refused to provide all of its SEPs and was requested to refer to the ETSI website.
7. Royalty-free cross-licenses: [REDACTED] said it does not have the relevant patents. [REDACTED] said it helps in reducing commercial

disputes. [REDACTED] said it limits licensees' incentive to engage in R&D and planning for the next generation SEPs in the communications industry, thereby blocking innovation and impacting the supply chain structure and the overall development. [REDACTED] said the Sanctioned Party did not agree to negotiate with respect to the royalty-free cross licensing, nor did the Sanctioned Party take account into the number of patents held by it to make the appropriate reductions to the royalties. [REDACTED] said it did not agree to cross-license patents that have value with those from the sanctioned Party, thus the Sanctioned Party also refused to enter into a licensing agreement.

8. Refusal to license competing chip peers: [REDACTED] said its client once thought the Sanctioned Party's chip competitor had obtained licensing and the patent was exhausted, but was denied such by the Sanctioned Party. [REDACTED] said it once approached a competitor of the Sanctioned Party to purchase chips. [REDACTED] said the Sanctioned Party providing its competitors non-exhausted patents, and the downstream entities must still pay high royalties to the Sanctioned Party based on the price of the whole handset, which pushed handset manufacturers to buy chips from the Sanctioned Party. [REDACTED] said because the chip purchase is based on the selling price, it was not a factor whether the patent license fee was included in it or not, thus whether the chip competitor has obtained a license from the Sanctioned Party does not interfere with that company's purchase decisions. [REDACTED] said if competitors obtained licensing from the Sanctioned Party that would exhaust its patent rights, the handset costs would be greatly lowered. [REDACTED] said 4G high-end markets still use the Sanctioned Party's chips, but low-end (3G) markets can consider using chips from other companies. [REDACTED] said the Sanctioned Party providing licenses to handset manufacturers but not chip competitors is discriminatory by [supply chain] level and is in breach of its FRAND commitments, thereby protecting its monopoly position in the baseband processor market and collect large royalties as a result; without the above licensing and sales method from the Sanctioned Party, there is a very high likelihood of creating relationships with chip suppliers other than the Sanctioned Party.

9. Refusal to provide chips if no license agreement is signed: 10

companies stated that prior to singing the patent licensing agreement, they were informed that they would not be able to obtain a supply of chips if they do not sign the patent licensing agreement with the Sanctioned Party. Because all have signed such licensing agreements, so no company's chip supply was terminated. Among those, [REDACTED] said because its affiliate did not sign, unless the agreement is amended to include such affiliate as a licensee, the Sanctioned Party refuses to provide chips to that company's affiliate. [REDACTED] said if the handset OEM does not sign a patent licensing agreement with the Sanctioned Party, it will not be able to obtain baseband processors made by the Sanctioned Party, so it will not be able to produce for handset brand entities mobile equipment that possesses mobile communications capabilities. The tying from patent licensing to the supply of chips constitutes a tying provision, and royalties are still required even if there is only a purchase of Sanctioned Party's baseband processors. For example, purchasing the Sanctioned Party's Wi-Fi chips will only require paying the price of the product with no additional royalties needed, and because the Wi-Fi chip market is highly competitive, the Sanctioned party did not require additional royalty payments, but with the Sanctioned Party holding onto a dominant position in the baseband processor market, it required purchases of baseband processors to also pay additional royalties.

10. Provide rebates for exclusive transactions: [REDACTED] said the Sanctioned Party provided different chip rebates depending on the product, specification, region and timeframe. One company said the Sanctioned Party had once provided concession rebates to be the designated chip component supplier. None of the other companies have entered into any rebate or incentive contract provisions.

(ii) Competing peers to the Sanctioned Party Company A, Company B, Company C and Company D were invited to summarize the disputed matters in this case. Their statements are summarized as below:

1. Combined licensing of SEPs and Non-SEPs:

   (1) The European Telecommunications Standards Institute ("ETSI") has no review mechanism in place regarding the SEPs declared by patent holders. Not all such declared SEPs are needed to practice the standard, and whether a product implementing the standard infringes on the SEP requires a decision from a court.

The technologies covered by non-SEPs are not needed to implement the standard, and companies may develop their own substitute technologies. The insistence of the Sanctioned Party to license SEPs with non-SEPs not only increased expenses but also blurred the FRAND obligations and boundaries resulting from the SEPs, thereby rationalizing its licensing practice of collecting royalties on the entire handset. After the licensee obtained the non-SEPs bundled together by the Sanctioned Party, it no longer has any incentive to obtain licensing for similar patents, which would cause others difficulty in competing in the non-SEP market.

(2) Cross-licensing negotiated by parties out of their free will is generally pro-competitive, but the licensing method required by the Sanctioned Party does not fall under voluntary negotiation, which left handset manufacturers with no choice but to accept the combined patent licensing by the Sanctioned Party. Regardless of the value, the substitutability of competing technologies or feasibility of workarounds, the Sanctioned Party was able to implement its monopoly strength from baseband processor SEPs to non-SEPs. Furthermore, the Sanctioned Party has never demonstrated that its non-SEPs are needed in the manufacturing of handsets.

2. Use of the price of the entire handset as a basis for calculating royalties, and high rates in general:

(1) The Sanctioned Party's SEPs do not cover the entire handset, nor do they provide the core value of a handset; they are limited to baseband technology related or baseband communications technology-based core patents, so the Sanctioned Party's patents have nothing to do with the other component of the entire handset other than the chip. The Sanctioned Party should therefore only be able to charge a fee on the required technologies for communications from its core inventions (i.e., solely the baseband processor or baseband-related parts). Otherwise, the collection of royalties based on the percentage of the handset's retail price is equivalent to collecting royalties on the components and functionalities other than the communications functions of a handset, thereby causing greater royalties to be paid on high-end phones that use the same 3G

technology, which is clearly discriminatory against high-end handsets with greater value added. Over a long period of time, this would cause handset manufacturer costs to increase, and it may even interfere with the widespread adoption of smartphones and the progress of technological advancement. The Sanctioned Party first collects large fees in the technologies market based on the value of the whole handset to attain enormous royalty profits, then provides high rebates in the chip market so that its own chip products have even greater price advantages. To downstream handset manufacturers, this practice is equivalent to paying in advance a deposit to enter into the market and then gradually amortize, thereby not only increase its loyalty to the Sanctioned Party, but also greatly lower the incentive for handset manufacturers to work with other chip suppliers; the result of the rebate in disguised form is further damage to the competitive strength of other chip suppliers, causing those other chip suppliers such as Texas Instruments, Freescale Semiconductors and Broadcom to one by one leave the baseband processor market competition.

(2) If the patent covered the entire handset, it would be reasonable to calculate the royalty based on the retail price of the handset. However, the Sanctioned Party's SEPs are almost entirely used on the baseband processor, but the royalties are calculated based on the handset's retail price, which can cause the difference in royalties to be 10 or 20 times greater. The Sanctioned Party may argue that because its SEPs and other technologies work together to increase performance, one competitor believes even though it is true that synergistic effects do occur when different technologies are combined in a final product (e.g., the ability to instantly send photos does increase the functionality of a camera in a mobile device), but such synergistic effect occurs on the overall technologies (such as the camera technology with the mobile communications network technology) instead of a single technology (the camera technology alone) and a SEP. To own a single SEP but collect royalties based on such synergistic effect is expanding the contribution of the SEP to the entire standard; unless the Sanctioned Party can prove that it is not possible to wirelessly send photographs without its SEP, it cannot claim the

value of all mobile communications standards currently in use, thus this royalty scheme is inappropriate. According to the latest published market survey, 80% of digital data from global smartphones and tablets are transmitted through Wi-Fi instead of 4G technology. If the Sanctioned Party's argument stands, then the Wi-Fi SEPs are much more conducive to raising performance of the other components than 4G technology, yet Wi-Fi SEPs are licensed in units of a single chip. The Sanctioned Party's use of its FRAND commitments to cause its patents to become SEPs, but it then went back on such commitments and decide to collect from mobile handset companies royalties in units of an entire mobile telephone system for SEPs that are primarily implemented in the baseband processor.

(3) According to the expert report by Dr. [REDACTED], less than 1% out of almost all of the Sanctioned Party's patent applications is actually substantively practiced in mobile devices. Further, according to the abstract report of the patent classification project (review of the Sanctioned Party's patent portfolio) from [REDACTED], a large majority (over 90%) of the Sanctioned Party's mobile communications SEPs are practiced in the communications chips found in handheld devices, and a large portion of non-mobile communications SEPs (over 80%) are practiced in the application processors of handheld devices.

3. Royalty-free cross-licensing:

(1) According to the rules of ETSI and the Institute of Electrical and Electronics Engineers ("IEEE"), when a holder of a SEP licenses the patent, it can request the licensee to provide a cross-license under the mutual benefit principle; however, this is limited to SEPs declared by the licensee for the same technological standard. In the patent licensing agreements between the Sanctioned Party and downstream companies, the Sanctioned Party compels the licensees to cross-license their patents to the Sanctioned Party, while not paying any consideration or providing any adjustments to the royalties. The Sanctioned Party thus obtains a large amount of third party patents from such cross-licensing, and applies the doctrine of patent exhaustion to strongly sell its chips externally, while asserting that the Sanctioned Party could provide a broad patent umbrella and the

customer buying the Sanctioned Party's chips need not fear patent infringement suits from a third party in addition to eliminating extra patent costs. According to a customer of competitors, if it approaches such third parties to obtain a patent license, it may raise the patent costs by about US$3 per handset, so when compared to chips from competitors, customers would indeed choose the Sanctioned Party's chips first. This shows that the patent umbrella provided by the chip suppliers does indeed provide a very large incentive to the purchasing policies of downstream customers.

(2) There are millions of patents in the semiconductor industry, thus cross-licensing agreements are entered to prevent infringement litigation as well as have a restrictive effect on each other. Cross-licensing may be royalty-free or require royalties. According to the FRAND commitments made by the Sanctioned Party to ETSI, SEPs may only be cross-licensed with SEPs of the same standard on a FRAND basis. However, the Sanctioned Party bundles SEPs and non-SEPs with SEPs for other standards so as to evade price restrictions and collect royalties from unfair competition; it then obtains the licensee's SEPs and non-SEPs through the use of the cross-licensing term and obtains greater patent protection, thereby further strengthening its dominant position in the chip market. In contrast, purchasing chips from competitors would expose the customer to greater patent infringement risks, to which the customer would put pressure on the Sanctioned Party's competitors to require indemnification in case of damages from third-party infringement claims, increasing the competitors' costs.

(3) According to the emails from the Sanctioned Party, because the Sanctioned Party has entered into contracts with many non-related third parties, so the user device (qualified user-end devices) which internally implements the Sanctioned Party's chip and the relevant software will also contain some third party patents, making it unnecessary to negotiate with, enter into licensing agreements with or pay royalties to a third party patent holder.

4. Failure to provide a list of patents licensed: [REDACTED] indicates that during negotiations, the Sanctioned Party only discloses

[REDACTED] patented technologies. No other company made any comments on this part.

5. Refusal to license chip competitors:

(1) The purpose of a standard-setting organization is to use the publication of technical manuals to make them transparent and lower the entrance obstacle for entities so that they may quickly participate in R&D and contribute to the broad acceptance of the technical standard. This also ensures that the inventor may receive reasonable compensation for efforts expended in joining with the standard setting, which gives more incentive to continue R&D. As such, the sole purpose of SEPs is to ensure that the inventor may receive a reasonable compensation for its research and development into its patented technology, not for use in blocking other competitors from entering the market. All market participants, whether they are downstream companies or competitors to SEP holders, have the right to obtain the patents needed to implement the standard at issue. The standard-setting organization IEEE specified in its bylaws that went into effect in March 2015 that in addition to entities manufacturing end user products, all component entities needing patents to implement a standard also have the right to seek a license for SEPs from patent holders. The Sanctioned Party's refusal to license chip suppliers caused downstream end products entities, such as handset manufacturers, to tend to choose to purchase the Sanctioned Party's chip products so as to avoid the risk of litigation from the Sanctioned Party. This strengthens the market strength of the Sanctioned Party in the handset chip product market, decreases competition in the chip product market, and ultimately caused the price of end user products to remain high, damaging the consumers. The above allowed the Sanctioned Party to also collect excessive royalties from downstream end user product entities, while striking at its competitors in the chip market through the combined use of all types of licensing terms to lock those downstream entities in place.

(2) ETSI is one of the organizations setting standards for global mobile communications. It has over 800 members, and Clause 6.1 of its IPR policy requires each member that has participated

in ETSI's standard-setting efforts and holds essential patents in to provide an undertaking in writing that such member shall grant irrevocable licenses on FRAND principles. The license covers "equipment", meaning any system or device fully conforming to a standard. Although system and device have multiple meanings, the term "system" typically refers to the completed end product (such as a complete mobile telephone system), and "device" usually referring to semiconductor chips, while the device referred to in ETSI's "equipment" term points only to components (i.e., components in a system). As such, the Sanctioned Party has a duty to grant a license under FRAND terms to all those who wish to obtain a license, including chip suppliers, and according to general patent exhaustion principles, this covers the customers of the chip suppliers as well (i.e., handset OEMs and brand entities) instead of just a set of limited rights to the chip supplier only, such as "agreeing to not assert patent rights" but reserving the right to assert against the chip supplier's customers. The Sanctioned Party's refusal to license chip suppliers with patent exhaustion may cause entities that do not have patents included in the standard or have complementary technologies to reduce its R&D, and handset entities must pay excessive royalties and reduce their resources on R&D, while the severe drop in R&D demand for baseband processor suppliers caused several to already drop out of the market, including Texas Instruments, Broadcom, ST-Ericsson, Fujitsu, Marvell, Renesas and NEC. Even if the Sanctioned Party argues that it will not initiate patent infringement actions against chip suppliers, whether it will assert its patent rights may be changed at any time.

(3) The Sanctioned Party has continually licensed its SEPs to other chip suppliers until 2007. Due to the 2008 *Quanta v. LG* decision at the US Supreme Court, the Sanctioned Party appeared to be concerned that patent exhaustion may occur from licensing at the chip level, thus it changed its licensing policy. In 2013, the Sanctioned Party once published a document clearly specifying that baseband processor suppliers are not within the scope of its general licensing plans, and if necessary, parties may enter into a patent standstill agreement to prevent exhaustion.

In the patent licensing agreements with the Sanctioned Party, [a licensee may] only manufacture [REDACTED] baseband processors [REDACTED]. [REDACTED] but the potential customer handset manufacturers contacted at that time all required the company to provide a guarantee that those potential customers will not be at risk of being sued by the Sanctioned Party for patent infringement, as well as provide indemnification if actually sued for infringement by the Sanctioned Party. [The entity] then sought clarification from the Sanctioned Party. The Sanctioned Party answered with tis policy to not license chip suppliers. The parties then further negotiated on the issue [REDACTED], a promise to first exhaust all possible means of resolution with the licensee (i.e. the customer of the competitor) before filing suit against the competitor, suspension of litigation [REDACTED], and the parties failed to reached consensus through negotiation in [REDACTED]. Thus, competitor [REDACTED] could not completely eliminate the risk of the Sanctioned Party asserting its patent rights. The Sanctioned Party has an advantageous position in the mobile communications technology market and mobile communications chip market. Its refusal to license SEPs to its chip competitors caused those chip suppliers without a license to face the risk of patent infringement or commercial instability, thereby blocking their opportunity to compete with the Sanctioned Party in the handset chip market. For downstream handset entities, the purchase of chips not manufactured by the Sanctioned Party put them at risk of the Sanctioned Party asserting patent infringement, with the Sanctioned Party filing a patent infringement action against China handset maker Meizu on June 24, 2016 as proof. This risk of litigation obstructs chip suppliers from engaging in R&D and increase their intangible costs. In addition, although the Sanctioned Party indicates that it will not assert its patent rights against chip suppliers, but the demand for handset entities to still obtain a license from the Sanctioned Party means that if they do not obtain a license from the Sanctioned Party, those handset entities may still face a risk of a claim for damages by the Sanctioned Party for patent infringement. If such risks become a reality, then the handset entity purchasing baseband processors from a competitor to the Sanctioned Party is likely to turn around and seek indemnification from that chip competitor. This puts pressure on the chip supplier, interferes with their investment in manufacturing capacity and R&D, and causes the chip competitors to drop out of the market, while further allowing the Sanctioned Party to charge large royalties based on the price of the entire handset and increasing the costs of the handset, reduce incentive to invest and innovate, and interfere with development of the mobile communications industry.

6. No chip supply without entering into a license agreement:

   (1) Even though the Sanctioned Party already has a dominant position in the chip market, to further increase or strengthen its chip sales, the Sanctioned Party uses more attractive licensing terms as an incentive to push customers to purchase its chips. This exploitation of the consumers’ demand for an essential product to increase the same entity’s sales of a non-essential product is equivalent to the tying of two different products for sale, and it creates an effect of restricting or eliminating competition on the other companies in the market for a non-essential product such as chips.

   (2) The Sanctioned Party uses its dominant position in the baseband processor market to request customers buying its baseband processors to obtain a patent license; but when the customer purchases the Sanctioned Party’s baseband processor, the chip already contains the Sanctioned Party’s patents, and the sale of chip has caused the exhaustion of the Sanctioned Party’s patents, so there should be no issue of the customer infringing on those patents. As to the other patents held by the Sanctioned Party, it could have preserved its patent rights by clearly stipulating in the sales contract that those patents are not transferred, so if the chip customer infringes on the Sanctioned Party’s other patents and refuses to take a license, the Sanctioned Party would naturally have a right to seek judicial relief in asserting its patent rights.

   (3) This model is not a typical state of the market. In fact, a majority of the Sanctioned Party’s SEPs are implemented on the baseband processor, and in theory the purchase of the Sanctioned Party’s baseband processor should leave no further

concern about issues regarding the patents implemented in it. However, the Sanctioned Party's division between the "sale of mobile communications chip products" and "mobile communications technology licensing" is intended to prevent patent exhaustion so that the Sanctioned Party can refuse licensing its chip competitors, while handset entities purchasing the Sanctioned Party's chips must still obtain a patent license, which allow the use of the retail price of the end product handset to be used as the basis for calculating royalties.

7. Providing rebates to request certain entities to engage in exclusive transactions: Out of the aforementioned [REDACTED] competitors, [REDACTED] had engaged in negotiations and discussions over technical specifications with Apple, including providing documents, price quotes and specifications research. Among those, [REDACTED] chips were chosen by Apple for use in the iPhone and iPad that came out in September 2016. Because the Sanctioned Party used rebates to restrict Apple to exclusive transactions, others have lost the opportunity to transact with Apple; the Sanctioned Party's use of providing attractive royalty rates and technical support to other handset manufacturers to induce through force to exclusively transact with the Sanctioned Party or otherwise reduce chip purchases from competitors. However, there is no evidence that can be provided. If so, the competitors cannot efficiently fight against the Sanctioned Party, and the objective to eliminate competitors is therefore achieved.

(iii) Competing peers to the Sanctioned Party Company A, Company B, Company C and Company D were invited to provide written statements and to speak in person at the Commission for explanations regarding the execution of agreements. Their statements are provided individually as below:

1. Company A:

(1) Background explanation: Research and Development into 3G WCDMA chips began from 2003 to 2004, with mass production starting in 2009 and thus become a competitor to the Sanctioned Party. At that time, companies such as ST-Ericsson, Texas Instruments, Infineon, Broadcom, Renesas…etc., were still on the market competing. The main 2G standards are GSM, GPRS, EDGE and IS-95 (CDMAOne); the main 3G standards are WCDMA

(UMTS), CDMA2000 (CDMA 1xEV-DO, hereinafter “CDMA”) and TD-SCDMA; the main 4G standards are LTE and WiMAX. However, with the main promoter of WiMAX leaving the WiMAX technology market in 2010, that technology is gradually being dropped by the companies.

(2) Mobile communications chips may be further split into SoCs (System-on-a-Chip) and separate solutions. SoCs integrate the baseband processor (handling communications signals), the application processor (handling the mobile platform calculations, abbreviated to “AP”), and connectivity (handling Wi-Fi, Bluetooth, FM signals) on the same chip, and this is currently the mainstream form. There are also high-end handsets by some handset manufacturers who use separate solutions for all, meaning the baseband processor, AP, and connectivity chip are all separate chips. The primary suppliers for mobile communications chips include the Sanctioned Party, Intel, MediaTek, Samsung, Spreadtrum and Hisilicon, while Texas Instruments, Freescale, ST-Ericsson, Nvidia, Broadcom and Marvell have long since left the competition due to rough results in their market promotional efforts.

(3) Regarding the state of agreements entered into with the Sanctioned Party: The Sanctioned Party had made commitments to ETSI regarding its 3G SEPs on several occasions in the past and expressed its willingness to license them on a FRAND basis to entities requiring those essential patents for communication pursuant to Clause 6.1 of ETSI’s IPR policy. The entities requesting the patents include but are not limited to manufacturers of components and sub-systems. As a result of the above commitments, the Sanctioned Party not only has a duty to provide a license to whichever downstream company that seeks its declared SEPs, it also has a duty to provide to its upstream companies a licensing agreement compliant with FRAND terms and conditions. Company A once emailed the Sanctioned Party during [REDACTED] for a draft license agreement for its WCDMA patents, but the Sanctioned Party refused to license such SEPs and [REDACTED] arrangement. The parties then [REDACTED]. The Sanctioned Party only agreed to a covenant not to sue right, but did not proceed with any patent

licensing. From the end of year [REDACTED] to year [REDACTED], further requests to the Sanctioned Party for a license was made, but they were all rejected. After more negotiations, the parties ultimately entered into [REDACTED] in year [REDACTED], but must still obey the obligation to provide sales reports [REDACTED] pursuant to the agreement during the negotiations. Afterwards, although the Sanctioned Party agreed to remove the restriction, it still repeatedly use joint announcements to intimate to Company A's customers that they must still obtain a license from the Sanctioned Party, or they may face the threat of patent infringement [actions] from the Sanctioned Party. At the same time, it was also agreed that if Company A's customers assert patent exhaustion against the Sanctioned Party, the Sanctioned Party would forbid Party A from selling to that customer [REDACTED]. The contents of the agreements entered into with the Sanctioned Party are explained as below:

A. [REDACTED]: The parties will not assert [a party's] CDMA SEPs against the other party's CDMA chips. Company A submits to the following restrictions: (i) [REDACTED] breach would result in punitive damages, (ii) [REDACTED]; (iii) [REDACTED]; (iv) [REDACTED]; (v) [REDACTED].

B. [REDACTED]: [REDACTED]

C. [REDACTED]: [REDACTED] because the Sanctioned Party refuses to license to Company A, a customer who buys Company A's chips but has not obtained a license from the Sanctioned Party will not be protected under patent exhaustion, and the customer must still face the potential risk of litigation from the Sanctioned Party. A chilling effect is therefore created among the downstream companies, and many customers do not dare to purchase Company A's chips.

2. Company B: [REDACTED] customers are primarily firms in regions using CDMA. CDMA assets [REDACTED] were all sold off in year [REDACTED], and there is currently no business [REDACTED].

3. Company C:

(1) Regarding the current state of competition in the market for standalone baseband processors: If categorized by price and quality, the low-end and mid-end market primarily integrates the

AP, GPU, baseband processor and other device functionality into a SoC, while high-end mobile phone suppliers tend to use standalone baseband processors. A company may separately upgrade the baseband processor and the microprocessor. This company currently only manufactures standalone baseband processors, and is a competitor of the Sanctioned Party in that market.

(2) Regarding the state of agreements entered into with the Sanctioned Party: [REDACTED] as the agreement is a license that does not exhaust the patent, thus the Sanctioned Party's license to the merged party does not reach the merged party's chip customers. [REDACTED] Afterwards, the parties separately engaged in licensing negotiations in year [REDACTED] and year [REDACTED], but because the Sanctioned Party refuse to license in a way that would exhaust its patent, no agreement was reached. After the US Supreme Court's decision in the *Quanta* case in 2008, the Sanctioned Party changed its licensing policy, as it had been separately licensing to and collecting royalties from chip suppliers and handset entities before the decision. After the decision, the Sanctioned Party felt that there is too great a risk of patent exhaustion by licensing to chip suppliers, so it started refusing to license to chip suppliers. Another reason the Sanctioned Party does not wish to license chip suppliers is because the handset price is higher than the chip price, so there would clearly be more royalties collected from handset entities by applying the same royalty rate to the retail price of the entire handset.

4. Company D:

(1) Background: [REDACTED] Other than as this company's mobile communications chip source [REDACTED], [this company] purchased from the Sanctioned Party and competitors [REDACTED]. Its current primary supplier is [REDACTED]. [REDACTED] the Sanctioned Party is the sole chip supplier with CDMA solutions, thus this company still must rely on Sanctioned Party's chips.

(2) This company manufactures handsets that are compliant with 2G, 3G and 4G technology standards, and it enters into patent licensing agreements largely through cross-licensing its SEPs with

other patent holders on a royalty-free basis.

(3) Regarding the state of agreements entered into with the Sanctioned Party:

A. [REDACTED] the agreement stipulates that no infringement of Company D's patents may be asserted against the Sanctioned Party, the customers of the Sanctioned Party and their affiliates, [REDACTED].

B. [REDACTED] , prior to obtaining the patent license from the Sanctioned Party, even if this company has already paid the consideration for the Sanctioned Party's chips, those chips still cannot be used. Due to the Korean Fair Trade Commission's decision in 2009 finding such rebate scheme as an abuse of market position, the parties separately entered into [REDACTED] in 2009.

C. [REDACTED]

(4) For business operational needs, this company will continuously make comprehensive evaluations of the pricing of chips obtainable through the market, as well as their performance and specifications, in determining whether to purchase those chips. Chips provided by competitors of the Sanctioned party are also within this company's evaluated product options. If the chips from competitors of the Sanctioned Party carry complete licenses, including those with patent exhaustion effect as a result of the Sanctioned Party's licensing, then handset entities may save a considerable amount of royalties during the handset sales stage, and it is believed that the products by competitors of the Sanctioned Party may be more competitive.

(iv) [REDACTED] provided written information and in-person explanations at the Commission as summarized below:

1. The holding of mobile communications SEPs and the state of licensing: [REDACTED] is a member of ETSI and the Telecommunications Industry Association in the US ("TIA") as well as many other international standard-setting organizations. SEPs are formed when they are declared by the patent holder to the standard-setting organization and the patent holder agrees to provide a license on FRAND terms; there is no relevant review mechanism involved. According to ETSI's database on the total number of SEPs: GSM (2G) – 38,903, UMTS (3G) – 73,882, and LTE (4G) – 99,392; based on the

number of SEPs declared by each patent holder to ETSI, the top ten patent holders are the Sanctioned Party, Samsung, Nokia, Huawei, InterDigital, Panasonic, LG, Motorola and NTT DoCoMo, holding about 78% of the SEPs amongst themselves.

2. The IPR policies of standard-setting organizations:

   (1) The ITU: According to the ITU's "Common Patent Policy", the patent holder may choose to provide licenses free of charge with other parties on a non-discriminatory basis on reasonable terms and conditions (RAND)(Clause 2.1) or not free of charge (Clause 2.2), or can even refuse to license under RAND (Clause 2.3). However, if a licensor refuses to license under RAND, the ITU would not include such patent into the standard. Further, according to the ITU's Patent Statement and Licensing Declaration Form," [t]he Patent Holder is prepared to grant a <u>Free of Charge</u> license to an unrestricted number of applicants on a worldwide, non-discriminatory basis and under other reasonable terms and conditions to make, use, and sell implementations of the above document."

   (2) ETSI: ETSI's IPR Licensing Declaration Forms state that "the Declaration …[is] prepared to grant irrevocable licenses…" The aforementioned language is not limited to a certain type of licensee and thus eliminates others, and the promise to license is under FRAND; the refusal to license or selective licensing is discriminatory, and this also violates the broader policy interests in prohibiting selective or discriminatory licensing of SEPs and preventing patent hold-ups. Furthermore, Clause 6.1 of ETSI's IPR policy also covers chip manufacturers, according to ETSI's life-long Honorary Director ○○○ (serving as ETSI's Director-General for 16 years from 1990 to 2006) in his article titled "Why the ETSI IPR Policy Requires Licensing to All". It is explained that ETSI's IPR policy allows every company that requests for a license to obtain that license, regardless of where the potential licensee is located on the supply chain, or whether it is an upstream or a downstream company; once a FRAND commitment is made, it is not limited to end products (such as handsets) but also covers components (such as chips). The "forbearance policy" neither complies nor satisfies the FRAND obligations, as the article describes examples of "forbearance

policies" including: An unilateral, non-written policy of not asserting patent rights in court; a promise to initiate litigation at a later time; a promise to not initiate litigation, unless the equipment manufacturer fails to make payment, and the SEP holder has exhausted all means of seeking legal remedies against such equipment manufacturer; or an agreement to not initiate litigation against a party (but reserve the right to sue others based on the products manufactured by that party).

3. Overview of the mobile communications chip market and the chip suppliers for mobile devices from [REDACTED]: The Sanctioned Party holds a dominant position in the mobile communications baseband processor market, and it further holds a [REDACTED] market share in LTE-standard baseband processors. Other suppliers include Intel, MediaTek, Spreadtrum, Samsung and VIA. [REDACTED].
4. The state of [REDACTED] usage of mobile communications chips: The first generation [REDACTED] handset was launched in year [REDACTED], which used a [REDACTED] baseband processor as the basis, and the assembly was done by a Taiwan OEM, with successful sales. This model continued to 2010. Afterwards, this company keeps launching a new generation [REDACTED] handset every September. In 2011, due to the need to enter into [REDACTED], there was a need to manufacture CDMA-spec handsets, [this company] started transacting with the Sanctioned Party. After fall 2011 to September 2016, [this company] continued to launch new 3G or 4G-related communications standard (with backward compatibility) [REDACTED] handsets and mobile communications-capable [REDACTED] tablets containing only chips from the Sanctioned Party, and the manufacture was done by a Taiwan OEM. The [REDACTED] handsets launched after September 2016 and sold in the market contain chips from both [REDACTED] and the Sanctioned Party. [REDACTED] in the past decade there were several evaluations of products from competitors of the Sanctioned Party, but because they did not reach the required technical standards, none were chosen. [REDACTED].
5. The state of mobile communications SEP licensing agreements with patent holders other than the Sanctioned Party: [REDACTED] has always tried to directly negotiate with the patent holder for a license. To manufacture mobile devices that are compliant with the 2G, 3G

and 4G technical standards, [this company] had entered into patent licensing agreements with [REDACTED] patent holders of mobile communications SEPs other than the Sanctioned Party. In most cases, the licensed patents are SEPs, a few are patent portfolios. The term of the license agreement is fixed or for up to the expiration date of the patent, and all royalties are fixed amounts; [REDACTED].

6. Regarding the request for [REDACTED] to engage in exclusive transactions by providing rebates:
   (1) Royalty payment scheme between [REDACTED] and the Sanctioned Party: In year [REDACTED] before entering into the handset market, Taiwan OEMs have entered into license agreements with the Sanctioned Party for the manufacture of handsets for different brand entities [REDACTED].
   (2) Regarding the state of agreements entered into by [REDACTED] with the Sanctioned Party: [REDACTED] However, the Sanctioned Party argues that using chips from [REDACTED] will still use the Sanctioned Party's patents, and as OEMs have entered into patent licensing agreements with the Sanctioned Party, thus OEMs received and sent royalty payments [on behalf of other entities] to the Sanctioned Party. Due to the large royalties paid, several rounds of negotiations were had before entering and amending the contents of the following agreements so as to obtain a royalty rebate from the Sanctioned Party. [REDACTED] never relied on a single supplier for components, thus this method is extremely high-risk both from a commercial perspective and a technical perspective. [REDACTED] also never agreed to an exclusive transaction arrangement, and the Sanctioned Party compelling [REDACTED] to exclusively purchase chips from the Sanctioned Party in exchange for a reduction of royalties, [REDACTED] but to obtain a large royalty rebate from the Sanctioned Party, the following agreements were negotiated and executed:
      A. [REDACTED]
      B. [REDACTED]
      C. [REDACTED]
      D. [REDACTED]
7. The impact on [REDACTED] and the relevant markets as a result of [REDACTED] entering into the above agreements:

(1) [REDACTED] stipulates that [REDACTED] may not use WiMAX technologies, while the WiMAX standard (developed by the IEEE) was supposed by Intel, Cisco and Samsung and competes with the LTE standard supported by the Sanctioned Party. The Sanctioned Party's act to eliminate competition from WiMAX technologies may interfere with Taiwan's efforts to promote the use of WiMAX.

(2) From 2011 to 2015, [REDACTED], but due to the restrictions in the above agreements, the opportunity for the Sanctioned Party's competitors to sell baseband processors to [REDACTED] during 2011 to 2016 was eliminated. If the assessment found it feasible, [REDACTED] may first do business with any one of the Sanctioned Party's competitors, thereby allowing it to become a supplier recognized by [REDACTED], and obtain the experience of working with engineers from [REDACTED]. This opportunity could have allowed the Sanctioned Party's competitor to receive key commercial recognition from [REDACTED], and become the baseband processor supplier for Apple. [REDACTED].

8. The impact on Taiwan companies, consumers and economic production as a result of the Sanctioned Party's restriction of competition:

(1) Chip suppliers: The Sanctioned Party's actions damaged the competitive strength of MediaTek, VIA and of other potential competitors. For example, in 2015, VIA was unable to grow its business in the chip market and was forced to sell that business to Intel; MediaTek is currently still incurring damages, particularly in the high-end market (high-end LTE chips).

(2) OEMs: The Sanctioned Party's abuse of its dominant position in the CDMA and high-end LTE chip market, and the unique operational weak point of Taiwan OEMs, forced them into signing agreements with royalty terms and other licensing conditions that are in violation of FRAND principles as costs in exchange for obtaining the Sanctioned Party's chips, while those royalties are then passed onto Apple.

(3) Brand entities: The Sanctioned Party not only sought from [REDACTED], but also other Taiwan brand entities (e.g., HTC and Asus) and the brand entities of other countries royalties beyond the FRAND principle level, thereby increasing the Taiwan

consumer's costs in purchasing handsets.

(v) Company C, Company D and Apple jointly submitted an expert report from [REDACTED], the conclusions from which are summarized as: Almost all of the Sanctioned Party's patent applications, particularly 96.9% of the claims investigated in that report are all or substantially implemented in the baseband processor or the mobile telecommunications network infrastructure facilities. Even with a broad interpretation of those claims, the report found that less than 1% of the claims are substantially practiced in the mobile device level. In the claims investigated in the report, 99.03% are not implemented on the mobile device. The Sanctioned Party's argument that "the baseband processor patents are typically implemented in the entire mobile device and not only in the baseband processor, the mobile telecommunications network infrastructure facilities or other particular components of the mobile device" is therefore unpersuasive.

(vi) The Sanctioned Party submitted more than [REDACTED] pages of written statements and arrived at the Commission to provide explanations [REDACTED]. A summary is provided as below:

1. Company background explanation:
   (1) The Sanctioned Party was established in 1985 and is a mobile communications systems company primarily engaged in patent licensing and chip products [REDACTED] has joined over 100 standard-setting organizations [REDACTED].
   (2) Patent licensing business: The Sanctioned Party's technical licensing department (QTL) handles the patent licensing business, providing SEP and non-SEP [REDACTED] patent portfolios (all of the Sanctioned Party's global patents). There are now over [REDACTED] that have entered into patent licensing agreements the Sanctioned Party. The Sanctioned Party holds globally [REDACTED] approved patents and pending patents [REDACTED] for use in mobile communications products, with about 20% being disclosed potential SEPs, about [REDACTED] being non-SEPs (those patents were not included in the standards, meaning those patents are not necessary for practicing the particular functions of the standard) [REDACTED].
   (3) Chip product business: [REDACTED] QTI and its subsidiaries are responsible for the Sanctioned Party's R&D involving mobile

communications, including chip and mobile communications R&D, improvements, products and services operations. [REDACTED] QCT is responsible for the chip business development, design and the supply of chips and system software to the Sanctioned Party's chip customers. QCTAP is QTI's indirectly-held subsidiary, and it has entered into component supply agreements (CSA) with Taiwan chip buyers. The Sanctioned Party supplies a variety of customized application specific integrated circuits (ASICs) for use in mobile communications devices (such as handsets, tablets or devices with other functionalities), with the core products being: A. baseband modem chips: This handles reception of voice and digital information and sets the same information for transmission; typically, the Sanctioned Party's modem comes with an application processor (AP) on the same chip. B. radio frequency chip: This uses one or more radio frequencies to transmit and receive radio signals. C. power management chip: This optimizes the overall power consumption of the mobile communications device. D. Chipset: This includes a combination of at least three of the above.

2. The evolution of mobile communications technology:
   (1) First generation (1G): In the mid-1980's, Motorola first introduced in the United States analog mobile communications handsets. Their functionality, reliability, network capacity and practicality were all very limited.
   (2) Second generation (2G): R&D only commenced in the late 1980's. The first standardized 2G technology uses time-division multiple access (TDMA) methods, or in other words GSM, which were used in Taiwan, Europe and some US telecommunications companies for use as the standard mobile communications technology. The Sanctioned Party also introduced code-division multiple access (CDMA) technology into the mobile communications industry, with the IS-95 standard being used by Japanese and Korean telecommunications companies, as well as some of the smaller US telecommunications companies such as Sprint and Verizon.
   (3) Third generation (3G): The telecommunications companies using IS-95 technology later upgraded to the Sanctioned Party's 3G CDMA2000 standard, while GSM could not develop an

appropriate 3G tech based off TDMA. GSM later switched to using WCDMA (a variant of the Sanctioned Party's CDMA technology) to implement its 3G standard, thus the global 3G network came to depend on the Sanctioned Party's CDMA technology.

(4) Fourth generation (4G): As early as 2002, the Sanctioned Party started R&D on 4G's orthogonal frequency division multiple access (OFDMA) technology, [REDACTED]. The Sanctioned Party has already become a world-leading innovator in 4G LTE-related standards. The Sanctioned Party is further continuing the investment in 5G foundational technology.

3. The status of mobile communications chip market:

(1) The types of baseband modem chips from the Sanctioned Party: [REDACTED]

(2) The Sanctioned Party's competitors: Starting from 2010, competitors for UMTS/WCDMA chip sales include MediaTek, Intel/Infineon, Samsung, Spreadtrum, Marvell, Hisilicon, Ericsson, Rockhchip, Freescale, ZTE, Broadcom, Renesas and Icera/Nvidia. Competitors in the LTE chip sales include MediaTek, Samsung, Hisilicon, Spreadtrum, Marvell and Intel. Other companies such as Altair, Leadcore, GCT, ZTE and Sequans have announced their plan to manufacture monolithic or multi-module LTE baseband modem chips.

(3) The current state of competition: [REDACTED] three companies, MediaTek, Spreadtrum and the Sanctioned Party, are supplying almost all the WCDMA baseband processors, [REDACTED] As for LTE baseband processors, according to the data from Strategy Analytics, growth in other companies' sale have greatly decreased the Sanctioned Party's market share [REDACTED] The steady decrease of the Sanctioned Party's market share in the baseband process proves that the chip sales market is filled with active competition. [REDACTED]

(4) The reason behind the fluctuations in the baseband processor market share: [REDACTED] the main reason for the change is related to the wins and losses in the competition among the handset entities. As such, the fluctuations in the baseband processor market share are unrelated to whether there is an agreement with the Sanctioned Party.

4. The types of patent licensing agreements from the Sanctioned Party: The Sanctioned Party's patent licensing terms are highly uniform, but each licensee may still negotiate individual terms with the Sanctioned Party, such as the value of the executed contract and the term of payment, the scope of the cross-license, the geographic scope of the license, the licensed products, etc. ETSI was aware of the Sanctioned Party's licensing terms before the 3G standards were accepted, and after the LTE standard was accepted, the Sanctioned Party immediately announced its royalty rates.
   (1) SULA: [REDACTED] is the Sanctioned Party's global standard patent licensing agreement. The patent licensing agreement signed by Taiwan businesses are almost all SULAs.
   (2) [REDACTED] CTPLA): The Sanctioned Party's recently amended new template CTPLA replaces the SULA as the contract template for sales of handsets and tablets outside of Mainland China. [REDACTED] CTPLA and SULA are in many ways very similar to each other.
   (3) [REDACTED] (CPLA): The Sanctioned Party was penalized by China's National Development and Reform Commission in 2015 and thus submitted an improvement plan, under which a special license only covering China mobile communications SEPs shall be provided with respect to devices sold and used in China and devices manufactured in China for sale to a jurisdiction where the Sanctioned Party has no patent rights. Devices that are sold outside of China will still follow the aforementioned standard SULA terms. The CPLA is applicable to all licensees and not just only licensees within China. The Sanctioned Party has already notified licensees in Taiwan in writing in February 2015 that they may apply the CPLA. Currently, there are [REDACTED] Taiwan entities who have signed the CPA, [REDACTED].
5. The combined licensing of SEPs and non-SEPs: A handset entity would have to remove all the valuable features from its products and analyze each one of its products for the potential risk of infringing on any one of the Sanctioned Party's voluminous patents, or that which may lead to high-cost patent infringement litigation only if it does not wish to pay royalties for the Sanctioned Party's non-SEPs. This is why licensees tend to obtain a license for the Sanctioned Party's patent portfolio and avoid having to work around the Sanctioned Party's

non-SEPs, thereby eliminating the aforementioned analysis costs and risk of litigation. Licensees have never been requested to or compelled to take a license for the Sanctioned Party's complete patent portfolio (SEPs and non-SEPs), and only a few have requested to obtain SEPs [licenses]. While the Sanctioned Party is happy to negotiate, it will first provide information as to the importance of obtaining [a license for] non-SEPs, so that the licensee may make a decision with ample information. If a licensee's requested scope is less than the Sanctioned Party's patent portfolio license (particularly only for licenses of the Sanctioned Party's SEPs), the Sanctioned Party has always been willing to engage in good faith negotiations and sign such licensing [agreements]. The Sanctioned Party has never refused any handset entity from negotiating licensing only over the SEPs, such as [REDACTED] have negotiated with the Sanctioned Party over a licensing agreement for just the SEPs. Although the Sanctioned Party have long been providing SEP-Only licensing, it has no concrete pricing plan, and there are not many companies who negotiates such form of licensing; the applicable scope of the corrective action to conduct SEP-Only licensing at the to the China NDRC's request is also only limited to Mainland China, and the scope for Taiwan handset entities are applicable to the entire world. For [REDACTED].

6. Royalties based on the retail price of the entire device: Motorola is one of the early innovators in mobile communications. It had already developed a licensing scheme for large numbers of mobile communications patents in the early 1990's, and it only licensed patent portfolios to device entities. Such licensing scheme became the model for all other entities with mobile communications patent portfolios in developing their own licensing schemes, as Nokia, Ericsson, Alcatel and the Sanctioned Party, etc. have all used Motorola as a mode for their licensing schemes. The Sanctioned Party has the right to obtain complete consideration for the value provided in its invention patents, regardless of whether multiple small royalty payments are collected through the component supplier, device manufacturer or system manufacturer, or a single lump sum from the device manufacturer. The Sanctioned Party's SSPPU is the complete mobile communications device; jury trials at US courts have never restricted how contracting parties may structure the licensing agreement, or what kind of basis is used for royalties. The

Sanctioned Party's patent portfolio includes mobile communications SEPs, non-mobile communications SEPs and non-SEPs; a large majority of the patents cover innovations at the system level or the device level, thus the Sanctioned Party's patents are not "mainly contained in the communications chip". This can be seen from the expert report (of Prof. ○○○). Because the value of the Sanctioned Party's patents is realized at the device level, there is thus no reason to choose baseband processors for use as the basis for the Sanctioned Party's royalties, and the best license scheme should be to cause the royalty to reflect the value created by the invention, thus the suitable basis for royalties should be the entire handset device (see the expert reports of Profs. ○○○ and ○○○). The Sanctioned Party's insistence on licensing the terminal device is for compliance with ETSI's IPR policy on licensing only terminal devices, and the definition of device being referring to the end user or system, while components (chips) do not fall under a device. On average, high-performance devices can get more value out of the mobile communications technology than low-performance devices. For example, a 16GB iPod Touch is sold at US$199 retail in the United States, and the retail price of a 16GB iPhone SE is US$399. These devices are highly similar in terms of hardware, operating system, high-level applications and performance, but the difference is that the iPhone has LTE mobile communications capabilities. Even though the two are similar devices, in comparison to the iPod Touch which doesn't have mobile communications capabilities, in order to enjoy LTE mobile communications capabilities (iPhone SE), a consumer needs to pay an additional US$200 in the United States. Furthermore, the Sanctioned Party has tens of thousands of patent portfolios, so an attempt to go through each patent and each claim to verify how such patent is implemented in which component or a combination of components, just to confirm the applicable royalty basis and rates for each patent as well as the total price to be paid, is clearly unrealistic and inefficient. Multi-layer licensing would cause the Sanctioned Party and the individual licensees from each level to have to determine whether the individual license should be included in a particular license agreement, the value to be obtained and the royalties to be paid, which makes the licensing more complicated and prone to result in disputes.

7. Provision of a list of patents: After the Sanctioned Party was sanctioned by China's NDRC and ordered to make rectifications, an announcement was put up on the company web page of all patent lists, and they are regularly kept updated. Although the Sanctioned Party did not make announcements or prepare a complete list of its patent licenses prior to the NDRC's investigation, such information is public information which may be found by searching the databases at ETSI's website or that of other standard-setting organizations. Non-SEPs are public information and can be easily found on the Internet in patent databases. Further, the scopes of the licenses in the SULAs signed by the licensee are all different due to regional standards, the required list cannot be deemed as identical, and the Sanctioned Party has never refused to provide the licensee with a patent list and the contents, scope or validity term of its patents. [Should] any Taiwan company request the Sanctioned Party to provide a complete list of its global SEP and non-SEP licenses, the Sanctioned Party would ask it to refer to standard-setting organizations' website and public databases.
8. Royalty-free cross-licensing: Parties engage in a comprehensive negotiation over a license agreement and evaluate the pros and cons to reach a final agreement. The individual considerations for the cross-licenses are all the result of commercial negotiations and then reflected onto the overall clauses of the individual agreement. As such, even where the results of the negotiations do not result in an adjustment of the royalties in the Sanctioned Party's license agreement, the considerations included in the other provisions of the agreement may be quite different. Consideration appears in many different forms, including monetary and non-monetary forms. [and indeed] any object that reflects the value given from one party to another; the entire exchange of consideration is completely reflected in all of the provisions of the agreement and is dependent on the commercial negotiations between the parties on equal grounds. The Sanctioned Party describes the cross-license that it obtains from the licensee as [REDACTED] as most of the Sanctioned Party's licensees either have no patents of their own, or they have user interface, imagery or handset software related patents that will not be implemented in the Sanctioned Party's modem chip, they are thus of less value to the Sanctioned Party. None of the Sanctioned Party's

Taiwan licensees have submitted to ETSI 3G or 4G-related SEPs, or only very small patent portfolios that are necessarily unrelated to the Sanctioned Party's chip business so as to use for adjusting royalty rates. Even though the Taiwan licensees do not have any potential SEPs, cross-licensing is still useful for the Sanctioned Party's defensive purposes and is thus necessary, as the situation may change during the contract negotiation process; the defensive value of the meaningless patent cross-license with the licensee is already included into the overall contract provisions for comprehensive consideration. However, some licensees may already possess patent portfolios that are valuable to the Sanctioned Party, so the royalty rates are adjusted after negotiations. Further, there is no evidence showing that the Taiwan licensees have proposed any of their particular patents for the Sanctioned Party's assessment when signing the license agreement, not to mention that the Sanctioned Party has the right to refuse considering those patents. The Taiwan [REDACTED], because they do not possess any patent portfolios that are related and meaningful to the Sanctioned Party's chip business, so the cross-license has no significant impact to the Taiwan licensee's business.

9. Refusal to license chip competitors: The FRAND (fair, reasonable and non-discriminatory) principle is a contractual commitment between the patent holder and the standard-setting organization. The FRAND commitment does not require a SEP holder to go outside the long-existing industry practice and license to component suppliers. The Sanctioned Party [REDACTED] is a ETSI member, the FRAND commitment in its IPR policy is a license to a "system" or "device" manufacturer that "completely complies with" the mobile communications standard instead of a component supplier. The industry is well aware that "device" refers to a complete end-user device; individual components are not a system or a device, cannot respond and interact with the mobile communications network, nor can they comply with any mobile communications standard. According to ETSI's 65th General Assembly (March 2015), ETSI's IPR policy does not include the IEEE's recent SSPPU concept; second, ETSI's members Apple, Cisco and other businesses proposed to amend the IPR policy in 2014 and 2015 to specifically request component-level licensing, and use the modem chip price as the royalty basis, but such proposals were not accepted, which proves

that ETSI's IPR policy does not require component-level licensing. The Sanctioned Party has no duty to license to component suppliers, which is also the industry practice in the mobile communications industry. The Sanctioned Party did once enter into a [REDACTED] with [REDACTED], however, because the US federal Supreme Court's Quanta v. LG decision in 2008 held that "when a product which substantially practices a patent is licensed for sale, the patent holder's right is exhausted, and it is prohibited for patent holders to use patent law to control the use of the product after the sale", it appears that any licensing agreement may cause the patent right to be exhausted, thus the Sanctioned Party no longer enters into license agreements with chip suppliers. Although the Sanctioned Party did not license to chip suppliers, [REDACTED]. In 2009, the US Court of Appeals for the Federal Circuit rendered a decision in Transcore v. Electronic Transaction Consultants Corporation in which it was held that an unconditional covenant to not sue has the same effect as the exhaustion of a licensed patent, and because the Sanctioned Party's covenant not to sue typically includes restrictions and conditions, it is distinguishable from the above decision. As a result, the Sanctioned Party was still willing to enter into a covenant not to sue. Afterwards, the US Court of Appeals for the Federal Circuit reached a decision in Tessera v. International Trade Commission in which it held that even a conditional covenant not to sue may cause a patent to exhaust through a chip sale. Due to the above legal developments, a covenant not to sue may still be interpreted as the same as a licensing agreement, which will also lead to patent exhaustion, thus in year [REDACTED], for chip suppliers who wish to enter into official contracts with the Sanctioned Party, [REDACTED]. In the decision in the case between Nokia and HTC in 2013, the court refused to recognize the "reservation clause", thus the Sanctioned Party again amended agreements with chip suppliers [REDACTED], which is an agreement where both parties agree not to make any particular assertions against the other for a certain period of time. The Sanctioned Party has yet to assert patent infringement against any chip supplier since 2006; [REDACTED]. Thus, from 2010 onwards, no component supplier paid any chip royalties to the Sanctioned Party. Separately, the Sanctioned Party once had entered into two "covenants not to sue" with [REDACTED] in [REDACTED] for CDMA

SEPs and non-SEPs, [REDACTED] because chip suppliers can use non-exhausted patent agreements and not assert the Sanctioned Party's patents against a chip supplier to obtain standard technologies from SEPs, it is not possible to eliminate a competing chip supplier from the market. If the Sanctioned Party is compelled to license its patents at a chip-level exhaustively, it must collect royalties from chip competitors, which would increase the manufacturing costs of those chip competitors and cause them to be less competitive than the Sanctioned Party's chip business. The Sanctioned Party's avoidance of such methods is partially to promote the overall growth and competition of the mobile communications industry by ensuring fair competition for all chip suppliers.

10. Refusal to provide chips without a license agreement: Although the CSA [REDACTED], but if the customer do not wish to enter into a patent licensing agreement with the Sanctioned Party, and the chip use integrated into the handset for use, the use of the Sanctioned Party's patented technology may lead to patent infringement. The Sanctioned Party thus requests businesses who wish to purchase the Sanctioned Party's chips to have to obtain a SEP license first. The refusal to sell chips to infringers who have not received a license is to avoid the Sanctioned Party's interests from being damaged due to the time and costs of an infringement action; as infringing handset entities do not pay royalties, unfair competition is also created against those other handset entities who have signed patent licensing agreements. The Sanctioned Party has over [REDACTED] Taiwan patents and over [REDACTED] Taiwan SEPs, the Taiwan companies who have obtained a patent license from the Sanctioned Party are all based on voluntary bilateral negotiations between the parties; the Sanctioned Party has never refused to sell its chips or reduce the chip supply because it wished to compel a Taiwan company to sign a patent license agreement. Besides, the mobile communications chip market is highly active and very fierce competitively, with new competitors frequently entering the market and the market shares rapidly changing. Handset entities thus have many choices with respect to chip supply and can change suppliers. With chip prices continuing to fall year over year, the Sanctioned Party has already continued to lower its chip prices in response to the competitive pressure. Further, the Sanctioned Party's chips are sold by its

subsidiary, the subsidiary never had, nor did it have the authority to, license the Sanctioned Party's patents, and the agreement between the Sanctioned Party and the chip customer clearly states that the chip customer did not obtain any intellectual property from buying the chip, thus the chip price set by the Sanctioned Party does not reflect the value of any of its patents. If the Sanctioned Party sells chips to an unlicensed customer, that sale may be deemed to have an exhaustion effect, and the Sanctioned Party will not be able to seek compensation from a customer with already-exhausted patents, thereby depriving the Sanctioned Party's patents of their values as well as suppress future R&D investment. Every one of the Sanctioned Party's standard licensing terms for mobile communications standards is established before the Sanctioned Party's sale of the modem chip for that standard, thus the licensing terms are not initiated [as a response] out of issues with the chip supply, and they have been constant even as chip sales fluctuate.

11. Providing rebates and request [REDACTED] for exclusive transactions:
    (1) [REDACTED] did not enter into any licensing agreements with the Sanctioned Party, nor did it ever pay royalties to the Sanctioned Party. [REDACTED] the Sanctioned Party licensed OEMs manufacturing and selling devices practicing the Sanctioned Party's CDMA and WCDMA SEPs as well as other specific patents. The Sanctioned Party sells the chips to the OEM, the OEM directly pays the Sanctioned Party and then take the chips for [REDACTED]. Later, [REDACTED] sells its manufactured devices and pays royalties to the Sanctioned Party [REDACTED].
    (2) The Sanctioned Party never requested [REDACTED], and [REDACTED] also never agreed to exclusively use the Sanctioned Party's chips. This can be seen from [REDACTED] deciding [REDACTED] purchase [REDACTED] chips and repeated requests from [REDACTED] to the Sanctioned Party's competitors for chip sales during the time the parties' chip sales agreement was still in effect. The Sanctioned Party's concession In the agreement with respect to chip sales to [REDACTED] is an independent royalty arrangement, and royalty arrangements are not affected by whether [REDACTED] is purchasing all, a part of, or no chips from the Sanctioned Party. The parties' agreement was because of [REDACTED] using its favorable bargaining position to

compel the Sanctioned Party to make significant pecuniary and other forms of concessions, including using the [REDACTED] provision as a condition for [REDACTED] allowing the Sanctioned Party to obtain [REDACTED] business. This agreement never mentions royalty rebates to [REDACTED] in exchange for the exclusive use of the Sanctioned Party's chips. The agreements between Sanctioned Party and [REDACTED] do not affect the royalty payments from OEMs, nor do they affect the amount [REDACTED] should pay to the OEMs.

(3) An explanation of the past negotiations and agreement signings between the Sanctioned Party and [REDACTED] is provided as below:

A. [REDACTED] during the 4G standard setting period, WiMAX was competing with the Sanctioned Party's CDMA-based standard. Because if [REDACTED] starts using GSM, when technology evolves to 3G, it will use CDMA-based technologies (such as WCDMA) instead of WiMAX, thus [REDACTED]. As seen from the appearance of the agreement, [REDACTED] never provided [REDACTED] with a royalty rebate in exchange for exclusive use of the Sanctioned Party's chips. [REDACTED]

B. [REDACTED] the background of the signing was because [REDACTED] uses GSM technology and completely [REDACTED], the Sanctioned Party thus signed as it wishes to gain the [REDACTED] business opportunity. The agreement stipulates the terms and conditions under which the Sanctioned Party sells chips to [REDACTED], and if [REDACTED] decides to use the Sanctioned Party's chips (this decision is not guaranteed), the Sanctioned Party and [REDACTED] will execute a subsequent [REDACTED], and the Sanctioned Party would supply [REDACTED] OEM with the price of the modem chip. Afterwards, [REDACTED] shall instruct the OEM to issue purchase orders to the Sanctioned Party for the Sanctioned Party's chip as [REDACTED] desires. [REDACTED] insisted on unconditional MFN terms, and the Sanctioned Party agreed to provide chips to [REDACTED] and guarantee that it will maintain the supply, while [REDACTED] has no corresponding purchase duty or a commitment to buy a certain quantity of the Sanctioned Party's chipsets. [REDACTED]

C. [REDACTED] The background of the agreement signing was because the Sanctioned party had made large investments in [REDACTED], and if [REDACTED] decided to purchase an immaterial quantity or otherwise decide to not use the Sanctioned Party's chips at all, the Sanctioned Party's investment would have become a loss, thus the parties negotiated [REDACTED] to protect the Sanctioned Party's investment and encourage Apple to purchase the Sanctioned Party's chips. [REDACTED] to secure protection for the Sanctioned Party's prior investment. [REDACTED].

D. [REDACTED] The background of the agreement signing was because [REDACTED] held a considerable number of patent portfolios, and the Sanctioned Party did not obtain a cross-license for [REDACTED] patent. To cause [REDACTED] to promise to not assert its patents against the Sanctioned Party within a certain period of time, the Sanctioned Party agreed to pay [REDACTED]. In terms of financial impact, it is similar to an arrangement to lower royalty rates to compensate for the value of the cross-license. The arrangement of this provision is completely independent from and irrelevant to the use of the Sanctioned Party's chips, not to mention that [REDACTED].

(4) Because of the strong bargaining position of [REDACTED] and the strength of influence on the Sanctioned Party, these agreements are thus different from the others between the Sanctioned Party and chip customers. These agreements do not require [REDACTED] to exclusively use the Sanctioned Party's chips. [REDACTED] was still in effect during [REDACTED], and the baseband modems of [REDACTED] were purchased from the Sanctioned Party and [REDACTED]. Since [REDACTED] chips are already used in [REDACTED], it proves that the signing of the agreement with [REDACTED] did not make it favorable for the Sanctioned Party to eliminate competition, and [REDACTED] and other handset entities chose the Sanctioned Party's chips due to the technical advantages. The Sanctioned Party never provided its chip customers a basis for lowered royalties or provided its

licensees with royalty rebates, nor did the Sanctioned Party apply different royalties bases depending on whether the licensee is also a chip customer of the Sanctioned Party or the quantity of the Sanctioned Party's chips that the licensee purchased. [REDACTED] However, such activity was found by the Korea Fair Trade Commission in 2009 as the calculating reduction of royalties based on the prices of the Sanctioned Party's components, in violation of Korea competition law, [REDACTED].

12. Regarding extraterritorial effect and the principle of comity: International law recognizes two common jurisdiction foundations - the territorial principle and effects doctrine. In the context of patent, the territorial principle clearly states that jurisdiction bellows the state that granted the patent, thus when territorial principle is applicable, Taiwan only has the jurisdiction to regulate the Sanctioned Party's licensing of its Taiwan patents. The Sanctioned Party's licensing of foreign patents does not substantively affect the Taiwan consumer or the competition within Taiwan, nor is there any direct impact. In most situations, a provision by which the Sanctioned Party licenses a foreign patent has no way to cause any "substantive" effect on the Taiwan consumer. For example, since nearly no smartphones are manufactured in the United States, products manufactured in Taiwan (or any other region in Asia for use in Taiwan does not need to obtain a license of an American patent; a Taiwan company selling products within the territory of the United States , the royalty paid for an American patent will affect the Taiwan company's cost structure and potential interests, but only to the same extent as the impact on the cost structure of another foreign company operating in the United States dealing with the local costs, compliance with local law, the rent for leasing office space in the US, etc. Since there is no effect on the Taiwan consumer, there is also no effect on the Taiwan mobile device market competition; in fact, they are clearly of no "substantive" effect to any Taiwan interest. In the Sanctioned Party's sales in the United States, the EU, Mainland China or other areas, the royalties it collect in each of those jurisdictions would at most only "substantively" affect competition and the consumer interest in each such respective jurisdiction, with the effect on Taiwan at most being secondary and indirect. For example, the secondary effect that arise from the increase or decrease of a Taiwan company's profit as a result of the

corresponding royalty that needs to be paid for a right from a non-Taiwan patent cannot be deemed identical to a direct effect. The Commission has no jurisdiction over licenses on patents issued by other sovereigns, and the Commission is recommended to refuse to exercise the jurisdiction in this case out of the principle of comity.

13. A total of [REDACTED] expert reports were submitted during the investigation period, the key points being [REDACTED].

(vii) Procedural arguments and petition to suspend the investigation or engage in administrative settlement:

1. The Sanctioned Party [REDACTED] sent a letter regarding the execution of the investigation procedure [REDACTED].
2. The Sanctioned Party also [REDACTED] brought experts and prepared written information to arrive at the Commission for providing an explanation regarding the issues at dispute, the facts, and a request to suspend the investigation or engage in administrative settlement. The contents of the presentation include an overview of the Sanctioned Party, the device-level licensing issue and the advantages thereof, broad patent portfolios, the FRAND commitment, how the Sanctioned Party's licensing practices do not violate the FTA, the international rules on the enforcement of competition law, extraterritorial effect and comity, the cooperative partnership between the Sanctioned Party and Taiwan, as well as proposed corrective measures and the advantages thereof [REDACTED].

(viii) Written requests were made to the Ministry of Economic Affairs, the National Communications Commission, the Institute for Information Industry, the Industrial Technology Research Institute and the Taipei Computer Association for expert opinions, which may e found in the file. Only the Taipei Computer Association did not provide a response.

III. The Investigation Results:

(i) Summary of the mobile communications industry: The effective operation of a cell-style communications system, including the user device (such as the handset or other terminal devices), network facilities (such as the cell tower and network infrastructure facilities) and the communication protocol between the user device and the network facilities (the standard).

1. Communications standards per the advance in technology include 1G (analog voice frequency modulation communications, no support for digital communications services), 2G (the digitization of voice signals),

3G (in addition to voice communications, digital connections and multimedia services), and 4G (high speed digital transfer). Starting from the 2G era, the Sanctioned Party became a primary holder of SEPs in each generation, with about [REDACTED] of all 3G (WCDMA/UMTS) and 4G (LTE) patents as disclosed by ETSI, which are the highest percentages for the aforementioned standards.

2. The global handset supply chain is split into upstream, midstream and downstream entities representing 4 sectors in key chips and components, design manufacturing and assembly (OEM), and the brand. The top five smartphone brands in the world by order are Samsung, Apple, Huawei, OPPO and VIVO; the primary brand entities in Taiwan include Asus, HTC and Acer. The OEMs in Taiwan include Hon Hai, Wistron, Pegatron, Compal, Inventec, Qisda, Arima and others.

3. A complete handset has over hundreds of components, including the baseband processor, frequency chip, memory, application processor, the display, battery, etc. Among these, the baseband processor is the key component determining which communications standard the smartphone product uses. In addition to the Sanctioned Party, the other global suppliers of baseband processors include at least MediaTek, Spreadtrum, Hisilicon, Intel and Samsung. In particular, Samsung's are primarily made for its own products and are not externally sold in principle. According to the statistics from Strategy Analytics, the Sanctioned Party has over 50% of the global market share in the CDMA and LTE baseband processor market over the past three years, and is No.1 in the world.

(ii) The state of agreements entered between the Sanctioned Party and mobile communications terminal device brand companies, OEMs and chip suppliers:

1. The state of agreements with mobile communications terminal device brand companies: The Sanctioned Party and most brand entities have entered into patent licensing agreements (SULA), in which the scope of the license and the royalty calculations is stipulated; there is also a component supply agreement (CSA) with QCTAP, which requires having entered into the patent licensing agreement first before buying the Sanctioned Party's chips (CSA [REDACTED]). Although there are brand entities who have not signed a SULA with the Sanctioned Party, it indirectly pays royalties to the Sanctioned Party through its OEMs.

There is also one brand in Taiwan who has not entered into any kind of agreement with the Sanctioned Party.

2. The state of agreements with OEMs: There are hundreds of OEMs around the world, and the main competitors are businesses in Taiwan and in China. Well-known smartphone brands still mainly use Taiwan entities as their OEMs. All have signed a SULA with the Sanctioned Party and a CSA with QCTAP. The CSA stipulates no chip purchases may be had without signing a SULA. (CSA [REDACTED])
3. Chip suppliers: Currently, other than the Sanctioned Party, chip suppliers primarily include MediaTek, Intel, Samsung and Mainland China-based companies Spreadtrum and Hisilicon. [REDACTED]

Reasoning

I. Summary of the mobile communications standard industry: Wireless networks is one of the methods of communication, and mobile communications is one form of wireless communications, and it not only enables communications between two fixed locations, such communications may even be done while moving. In order to achieve the purpose of communications and digital transfers, there must be an end-user device (a handset) which complies with each generation of communications standard protocols for communications and digital transfer functionalities so as achieve such functionalities; that handset must also have components built-in that execute the communications and digital transfer in ways that are compliant with the communications standard protocol, which then goes through a broadly distributed telecommunications network (i.e., telecommunications service providers such as Chunghwa Telecom, Taiwan Mobile and Far EasTone) to execute the standardized communications protocol. Each is described as below:

(i) The mobile communications standard and the standard-essential patented technologies:

1. In the mobile communications industry, in order to cause all related products to use the network and achieve mutual connection, it is necessary for the industry to draft a common standardized technology solution. The standard technology refers to a technology used for a particular industry that is chosen by the government, a standard-setting organization or industry personnel so as to achieve high compatibility between product and technology. Once the

relevant patents are included into the standardized technology proposal, those patents become SEPs. In the mobile communications industry, the currently active international standard-setting organizations include the ITU, the ETSI, the IEEE, the TIA, the TTA, the ARIB, the TTC and the CCSA, among others. The aforementioned standard-setting organizations also work with the communications industry, such as the 3rd Generation Partnership Project (3GPP: promoting WCDMA and LTE standard specifications), and the 3rd Generation Partnership Project 2 (3GPP2: promoting CDMA standard specifications). In Taiwan, the Taiwan Association of Information and Communications Standards (TAICS) was established in 2015 to actively work toward setting standards.

2. The development of a communications standard protocol: With the evolution of mobile communications technology, different communications standards were formed in different eras. According to the information in the ITU's website, Bell first launched a cell analog mobile communications system in 1978, and with improvements, mobile phones have become an indispensable life necessity for the modern-day person. The origins go back to the first generation mobile communications technology in 1970 which employed an analog system (Advanced mobile phone service, or AMPS for short) and only provided voice services. Taiwan first started opening telephone numbers beginning with 090 for use by mobile phones in July 1989. In the 1980s, the digital second generation mobile communications system is developed, providing voice and low speed digital transmission services; the mainstream standards include GSM, GPRS and IS-95 (CdmaOne). Taiwan gradually introduced the European GSM mobile specifications from 1995 to 1998, but 2G services have since been terminated with the expiration of licenses on June 2017. IS-95 was developed by the Sanctioned Party and widely included by standard-setting organizations in the United States, Korea, Japan, China and other countries. In late 1990s and 2000, the third generation mobile communication system was introduced, with the mainstream standards being WCDMA (also known as Universal Mobile Telecommunications System and abbreviated to UMTS, used by 85% of telecommunications companies in the world), CDMA2000 (used by certain telecommunications companies in the United States, Japan, Taiwan and China), and TD-SCDMA (used by China Mobile). All three

use the Sanctioned Party's CDMA-based technology. Taiwan opened up 3G mobile phone services in 2005. The third generation mobile communications system, in addition to providing voice communications, also uses the greatly increased bandwidth to provide transmission of data and multimedia files, and subsequently, due to the desire of the mobile communications industry to enhance the overall network service quality and market competitive strength, the ITU then confirmed in 2010 the two major 4G standards in LTE and WiMAX, and LTE's penetration reached 100% in 2012. 4G technology is built on orthogonal frequency division multiple access (OFDMA for short), while Taiwan initially used WiMAX to setup the 4G standard, but changed to LTE in 2014.

3. The process to include a standard technology and the FRAND commitments from the members of a standard-setting organization: In principle, the standard setting process is done through a common decision procedure via a vote between the members of the standard technology proposal group, then with the standard technology decided, the patent holder then declares and submits to a standard-setting organization the patent as a standard-essential patent (SEP); the standard-setting organization itself has no relevant process to assess or examine whether the declared patent is indeed valid or essential. At the same time when its members submit SEPs, the standard-setting organization will require its members to sign a written agreement that they commit to license others the use of the SEP under "FRAND" methods and conditions. If a member refuses to sign, the standard-setting organization may vote to throw out [the member's] relevant technical standard so that the SEPs declared by the member who refused to sign the agreement will not be considered essential. This FRAND policy may be seen in the ETSI and the ITU's IPR policies. Handset entities, chip suppliers and telecommunications service providers may all be members of a standard-setting organization and hold SEPs.

(ii) The supply chain and competition for mobile end-user devices (primarily handsets and tablets):

1. Handsets: Mobile communications achieve the purpose of communications or data transfer under the communications standard protocol structure by having a device with a built-in component equipped with communications and data transfer functionalities.

The increase in the use and the transmission speeds of 3G and 4G communications technologies lead to the rise of smartphones, and with iPhone and Android pushing 3G device hardware and the changes in the functionality of the device, smartphones have gradually become the mainstream mobile communications device since 2008. According to the statistics from Strategy Analytics, as of 2014 4Q, smartphone sales make up over 70% of all handset sales. In examining smartphone sales, Samsung manufactures and sells its own handsets, while other brands uses many kinds of commissioned manufacturing (OEM, ODM, EMS) to engage in manufacturing and sales, such as Apple, HTC, Acer and other brands. Taiwan is well-known for its OEM services, such as Hon Hai, Wistron, Pegatron, Qisda, Inventec, and Arima, who negotiate prices either [by the brand] or by themselves to purchase components for assembly on behalf of the brand entity and collect on the costs of the components and the manufacturing fee; or they may, purchase components from a party designated by the brand and pay and receive the fees for the component on behalf of the brand and separately assess the labor costs. For royalty payments, it depends on whether the brand has signed a patent licensing agreement with the Sanctioned Party. Some brand entities pay the royalties on their own, while others have OEMs and the Sanctioned Party enter into a patent licensing agreement so as to have the OEM collect and then make payment to the Sanctioned Party on behalf of the brand.

2. Key chips: A smartphone has different component designs depending on the functionality needs and differences in specifications. One smartphone handset may include up to hundreds of components, with the key chips being the baseband processor (a semiconductor device in a handheld device, commonly called baseband or modem, and the product may be in the form of a single chip, a SoC, or a chipset), the frequency chip, the application processor, the wireless communications chip, the power management chip, the display driver chip, the touch control chip, the photoreceptor chip and other image detection chips. Among those, the baseband processor is the most directly related to the transformation, amplitude modulation and processing of signals. The baseband processor is used to compress/decompress the digital signal, encode/decode frequencies, stagger/de-stagger, encrypt/decrypt, formatting/de-formatting,

multiple access encoding/decoding, amplitude modulation/de-modulation, as will other manage communications agreements, control the input and output interface and other calculation tasks. Some purchase standalone chips, such as Apple; others integrate the main functions (such as the baseband processor, application processor, memory, etc.) into a single system chip (SoC), which is the current mainstream chip sales trend. Further, some communications devices integrate different functionalities together, which may include baseband processors, the RF chip, the power management chip, Wi-Fi, Bluetooth and other chipsets, depending on the mix-and-match by the client.

II. Jurisdiction in this case:

(i) According to the Taipei High Administrative Court 102-Su-Zi-1062 Decision: "According to Article 6, Paragraph 1 of the Administrative Penalty Act: 'This Act shall apply to violations of an administrative duty that are punishable and occur within the territory of the Republic of China.' Paragraph 3 stipulates: 'If any one of the act or the result of the violation of an administrative duty occurs within the territory of the Republic of China, it shall be deemed a violation of an administrative duty within the territory of the Republic of China.' As such, as long as the act which is an element of the breach of an administrative duty is done within the territory of Taiwan, or if a part or the entire result of the breach of the administrative duty is within the territory of Taiwan, they shall all be considered a violation of an administrative duty within the territory of Taiwan regardless of the nationality of the actor, and the Administrative Penalty Act shall apply. Further, based on the aforementioned language of the Administrative Penalty Act, it is a general rule that is commonly applicable to all kinds of administrative penalties, thus a violation of an administrative duty as specified in other laws or self-government regulations, which is also punishable under said other laws or self-governance regulations, shall be again examined under the rationales and principles of the Administrative Penalty Act; those that pass the examination may then be punished…second, according to 'the term "enterprise" as used in [the FTA] refers to any one of the following: 1. a company; 2. a sole proprietorship or partnership; 3. A trade association; 4. Any other person or organization engaging in transactions through the provision of goods or services,' it can be seen that the scope of the term 'enterprise' in the FTA only needs to meet any one of the characteristics listed in Article 2, Paragraphs 1-3 of the

FTA, meaning that being a person or organization that is continuously-existing and is independently engaging in commercial activities is sufficient. Therefore, under Taiwan jurisprudence, even though a foreign company that has not been recognized has no legal personhood, but as the Supreme Court 50-Tai-Shang-Zi-1898 Precedent states, it shall be considered as a non-corporate group, so if it engages in transactional activities through providing commercial products or services, it would meet the 'continuously-existing', 'independent' and 'engaging in transactional activities' elements, and is thus an enterprise that is regulated by Article 2, Paragraph 4 of the FTA."

(ii) Although the Sanctioned Party and QCTAP are companies with addresses of establishment that are outside of the territory of Taiwan, as Taiwan is a main manufacturer and seller of handsets with a complete supply chain, self-manufactured chips, handset OEMs and handset brand sales; there are 3 handset brands, and at least 10 handset OEMs in Taiwan, and most of them have entered into a SULA and pay royalties to the Sanctioned Party. Second, most of Taiwan's OEMs (either of Taiwan's own brands or foreign brands) and brand entities rely on the Sanctioned Party's chips and have signed CSAs with QCTAP and are bound by them [REDACTED]. Also, Taiwan's MediaTek is also a baseband processor supplier that has a competitive relationship with the Sanctioned Party, but as the Sanctioned Party's refusal to license caused it to sign a mutual covenant not to sue, the refusal to license by the Sanctioned Party affects the choice of downstream handset entities in the counterparty for chip transactions, thus it cannot be said that the Sanctioned Party's patent licensing activities and chip sales have no substantive, immediate and clear effect on the supply and demand and competition in the relevant markets in Taiwan. As the Sanctioned Party entered into the relevant agreements with entities that are established in Taiwan, under the effects doctrine for jurisdiction in international competition law as well as Article 6, Paragraphs 1 and 3 of the Taiwan's Administrative Penalty Act, Taiwan naturally has jurisdiction in this matter.

III. The actor of the conduct: The primary businesses of the Sanctioned Party (Qualcomm Incorporated) are the development, design, and sales of baseband processors and other semiconductor devices for use in handsets and other mobile consumer products, as well as the licensing of mobile communications technology related intellectual property. The Sanctioned Party possesses CDMA, WCDMA and LTE mobile communications SEPs, and the licensing of intellectual property to outside parties is handled by the technology licensing department (i.e., QTL), while handset entities sign the SULA with Qualcomm Incorporated. Qualcomm Technologies, Inc. (“QTI”, 2012) is a wholly-owned subsidiary of the Sanctioned Party that is responsible for the R&D and improvements of mobile communications and chips, as well as the operation of products and services businesses. Qualcomm CDMA Technologies Asia Pacific Pte. Ltd. (i.e., QCTAP) is an indirectly-owned subsidiary of QTI. Taiwan’s handset entities enter into CSAs with QCTAP from 2001 to 2009 in order to purchase the Sanctioned party’s chips. The Sanctioned Party also entered into [REDACTED] with [REDACTED], [some were] signed by Qualcomm Incorporated, and only [REDACTED] was signed by QCTAP. The contract provision issues in the SULA, such as the combined licensing of SEPs and non-SEPs, the use of the entire retail price of the handset as the royalty basis and generally high royalty rates, the failure to provide a list of patents licensed, and the royalty-free cross-licensing, only relate to Qualcomm Incorporated; issues such as the refusal to license to chip competitors, refusal to supply chips without a patent license agreement, providing rebates to request Apple to engage in exclusive transactions and other activities related to patent licensing and baseband processor supply are related to Qualcomm Incorporated and QCTAP, but since QCTAP is an indirectly-held subsidiary of Qualcomm Incorporated with its business strategy completely controlled by Qualcomm Incorporated while linked together economically, and even though QCTAP signed the CSAs, the agreement still stipulates that a SULA must be entered into before purchasing chips, which is related to the licensing interests of Qualcomm Incorporated, so as a result, QCTAP is merely a signatory actor with respect to the licensing provisions at issue in the CSAs. Therefore, the licensing terms and conditions and the effects of activities conducted in this case shall all be deemed as decided and overall assumed by Qualcomm Incorporated as the substantive actor in this case.

IV. The relevant markets: According to Article 5 of the FTA: “The term "relevant market" as used in this Act means a geographic area or a coverage wherein enterprises compete in respect of particular goods or services.” Further, according to Item 4, Subitem 2 of “Fair Trade Commission Guidelines on Handling Patent and Technology Licensing Agreement Matters”, in reviewing a technology patent licensing agreement matter, the Commission is not bound by the form or language of the licensing agreement, and it will focus on the potential or actual restriction of competition effect that such technology patent licensing agreement may create on the relevant market. The operation of mobile communications functionality is primarily based and realized on the mutual connection and effect among the mobile terminal device and the cell tower of the mobile communications service provider. The connection between the mobile device and the communications service requires going through a baseband processor with a common mobile communications standard (i.e., a protocol) and the use of radio frequency (RF) signal processing and modulation, etc. functionalities to achieve, thus the mobile communications industry includes the component market (such as baseband processors), the handset market and the mobile communications services market. Further, as the baseband processor is a key component of a handset, baseband processors required by handset entities must conform with the mobile communications standard of the time (including backwards compatibility) in order to function. As the Sanctioned Party is a primary supplier of mobile baseband processors, and it is involved with the refusal to license to competitors SEPs for mobile communications standards such as CDMA, WCDMA and LTE, the demand for handset entities to first enter into a patent licensing agreement before buying its baseband processors, and the provision of a rebate to Apple for exclusive transactions with itself, thereby eliminating competitors from transacting with Apple, the matter in substance involves the market competition in the CDMA, WCDMA and LTE mobile communications standards baseband processors. Each is separately covered below:

(i) The unique characteristics of mobile communications SEPs: Taiwan's 2G primarily uses the GSM standard (only Asia Pacific Telecom uses IS-95), the WCDMA standard for 3G (only Asia Pacific Telecom uses CDMA2000), and the LTE standard for 4G. For 2G, TDMA (time-division multiple access) was used as the mainstream (GSM) technology standard, and that technology had no direct relationship with the Sanctioned Party, since the Sanctioned Party used CDMA (code division multiple access) technology in the 2G era. Going to 3G, the mainstream standards (WCDMA, CDMA2000, TD-SCDMA) are all based on the Sanctioned Party's CDMA technology; and when moving to 4G, the Sanctioned Party is still the holder of SEPs for the mainstream LTE standard. [REDACTED] among the different generational mobile communications systems, the greatest difference in specification is the difference in multiple access connection technologies in the over-the-air interface; specifications and differences must be examined in order to determine mutual substitutability among the different multiplexing connection technical systems, but at the time each technical specification was drawn up, different schemes and factors were introduced, thus it is not possible to directly replace one with another in practice without modifying the entire structure. Further, each generation had different mainstream technical specifications, the patented technologies among the different generations of mobile communications systems all have their independent functionality, and such technologies may not be interchanged with one another. For third generation technology (3G), WCDMA, CDMA2000 and TD-SCDMA all use CDMA technology, and the greatest difference between WCDMA and CDMA 2000 is the spectrum bandwidth, and TD-SCDMA uses TDD time-division multiple access technology, which differs from the frequency-division multiplexing (FDD) used by WCDMA and CDMA2000. Thus, although the three systems all use identical multiple access technology (CDMA), there are still differences in key technical aspects and specifications, thus they are not interchangeable with one another. In the fourth generation technology (4G), LTE and WiMAX both uses OFDMA multiple access technology, but as seen in the case file, those are not compatible with each other either. Because the 3G mobile communications standards used in Taiwan include CDMA and WCDMA, and 4G is LTE, there is no substitutability among each other; to produce products under each such communications standards, licenses for different technical standards must be obtained, and the relevant technical standards are also the relevant chip technical specification standards needed by the entities involved in this case for manufacturing, thus the manufacturing and sales of mobile communications baseband processor in this case are closely intertwined with the SEPs for the CDMA, WCDMA and LTE mobile communications standards.

(ii) The mobile communications baseband processor market: Even though a mobile terminal device may contain hundreds of components, but the baseband processor is an indispensable key component for mobile communications technology. Every terminal device (such as a handset) must contain a baseband processor that complies with the mobile communications standard supported by the network operator's network so that the objective of transmitting communications and data may be achieved. When suppliers manufacture baseband processors that comply with different technical standards, it must also work with the technical standard platform at that time, and baseband processors with different technical standards may not be substituted for each other; further, as it takes years to complete an upgrade and change of the network infrastructure, to ensure that users with handsets that use the previous generation standard may communicate with users using the new generation handsets, the baseband processor must be backwards compatible with the previous generation standard, thus in practice, baseband processors that work comply with several standards are commonly used. Further in practice, due to the differences in the designs and requirements among terminal device brand entities, [the baseband processor] may be sold in market in the form of standalone chips, integrated in a system chip with multiple functions (SoC), or as part of a chipset, and as the relevant technical standards are also the relevant chip technical specification standards needed by the entities involved in this case for manufacturing, the relevant market in this case is the products and technologies of baseband processors using the CDMA, WCDMA and LTE standards.

(iii) The geographical market: CDMA, WCDMA and LTE standards are set as a result of standard-setting organizations ETSI or ITU and entities from Asia, Europe and the Americas who possess mobile communications technologies or who wish to use such technologies coming together to establish and participate in these standards. The SEP users and the licensees are not affected by differences with the region of the patented technology or of the licensor; for handset entities and chipset providers to manufacture a product that meets the communications standard, it is necessary to obtain a license from the SEP holder. According to the top 10 global WCDMA and LTE patent holders submitted by the Sanctioned Party to ETSI, they are located in the United States, Japan, Korea and Mainland China, thus all around the world. 3G CDMA, WCDMA or 4G LTE are even more widely used in many regions of the world; as mobile terminal device entities are often global enterprises, they do not consider the geographic location of the baseband processor supplier, but instead they look at the price, quality, risk of patent disputes and other factors of the modem chip for the mobile communications standard and select baseband processors from different sources all over the world, assemble the devices at factories all over the world, and then ship the handset or device for sale to each country, with their sales activities covering any particular region. In consideration of the physical properties of baseband processors, their transportation costs and the commercial transaction practices of baseband processor suppliers and users, the geographic region in this matter is global for use as a calculation basis; but in assessing Taiwan's jurisdiction in this matter, the main considerations will still revolve around the impact on the relevant businesses in Taiwan.

V. The Sanctioned Party is a monopoly:

(i) According to Articles 7 and 8 of the FTA, "The term "monopolistic enterprise" as used in this Act means any enterprise that faces no competition or has a dominant position to enable it to exclude competition in the relevant market," and "An enterprise shall not be deemed a monopolistic enterprise as defined in the preceding article if none of the following circumstances exists: (1) the market share of the enterprise in the relevant market reaches one half of the market; (2) the combined market share of two enterprises in the relevant market reaches two thirds of the market; and (3) the combined market share of three enterprises in the relevant market reaches three fourths of the market…." Paragraph 2 further provide that "Under any of the circumstances set forth in the preceding paragraph, where the market share of any individual enterprise does not reach one tenth of the relevant market or where its total sales in the preceding fiscal year are less than the threshold amount as publicly announced by the competent authority, such enterprise shall not be deemed as a monopolistic enterprise. Pursuant to this Commission's announcement of the "Threshold Sales Amount for Exclusion from Monopoly Considerations", entities making less than NT$2 billion over the fiscal year will not be included as part of the monopoly considerations. The Sanctioned Party's total sales amount for the past fiscal year was US$23.553 billion. According to Article 3 of the Enforcement Rules of the Fair Trade Act: "The following factors shall be taken into consideration when determining whether an enterprise constitutes a monopoly as referred to Article 7 of the Act: 1. The market share of the enterprise in a relevant market; 2. The possibility of substitution of the goods or services amidst changes in a relevant market, giving regard to considerations of time and place; 3. The ability of the enterprise to influence prices in a relevant market; 4. Whether formidable difficulties exist to entry to a relevant market by other enterprises; 5. Import and export status of the goods or services."

(ii) A mobile communications standard is the standard selected by an international standard-setting organization in accordance with the global uniform mobile communications standard setting procedure. SEPs included into the standard have unique and unsubstitutable characteristics, and in order for the relevant products to comply with the relevant standardized technology proposal, SEPs so included are also indispensable to that device; this means that SEPs represent essential patents that must be obtained for products or services to comply with the standard. Essentially, the manufacture, sales, lease and other disposal of, repair, use or provision of a product or service which includes such standard must necessarily involve the use of the relevant SEPs. Second, the Sanctioned Party has a considerable number of SEPs for CDMA, WCDMA and LTE, mobile communications-related businesses in Taiwan and other countries manufacturing baseband processor products that comply with CDMA, WCDMA and LTE standards must obtain from the Sanctioned Party a license for the SEPs of those standards, and those SEPs may not be replaced by other patents. As such, it is clear that SEPs in the relevant technology market has no substitutability. The Sanctioned Party was a primary developer for 2G-CDMA, participated in the 3G standard drafting process and the promotion of 4G standards, as well as a member of standard-setting organizations such as ITU and ETSI. The Sanctioned party has a very high proportion of SEPs for 3G (CDMA, WCDMA) and 4G (LTE). Given the absence of substitutability for SEPs, other technologies cannot compete, and the holder of SEPs for mobile communications standards has a considerable amount of influence in the market due to its indispensable nature. Even if handset entities had chosen to use baseband processors supplied by the Sanctioned Party's competitors, to comply with the 3G and 4G standards, they would not be able to avoid the Sanctioned Party's 3G and 4G SEPs.

(iii) The mobile communications standards between countries are different, and there is also no uniformity of standards within an era, thus chips that respond to each generation and each standard (including backwards compatibility) are available in the market at the same time. Yet because of the change in generations, and new generation communications standards will gradually become more common with time, thus it is the current market trend for the supply quantity for newer chips to be always greater than that for the previous generation. The Sanctioned Party is a main developer of CDMA technology, started engaging in baseband processor manufacturing in 1995, began sales of 3G-CDMA chips in 2000 and 3G-WCDMA chips in 2001, while sales of 4G-LTE chips commenced in 2009.

(iv) Strategy Analytics is a third party statistical institution for the mobile industry. According to the statistics data from Strategy Analytics, the Sanctioned Party has a monopoly position in the CDMA, WCDMA and LTE baseband processor market as described below: (1) From 2008 to 2016, the only CDMA baseband processor suppliers were the Sanctioned Party and VIA, with the Sanctioned Party having over 70% market share every year in this period, while VIA's market share is clearly not comparable, (2) For WCDMA baseband processors, in addition to the Sanctioned Party, the suppliers also included over the years MediaTek, Spreadtrum, Intel, Hisilicon, Texas Instruments, ST-Ericsson. The Sanctioned Party had the number one market share for WCDMA baseband processors from 2011 to 2014, with over 50% from 2011 to 2013, but do not exceed 50% in all other years. However, from 2008 to 2016, the top two WCDMA baseband processor entities take up more than two-thirds market share, and from 2009 to 2014, the No.2 market share is still a considerably behind that of the Sanctioned Party. Although the Sanctioned Party's WCDMA baseband processor market share has clearly decreased in 2015 and 2016 and is ranked No.2 and No.3 respectively, this is more because of the introduction of the 4G-LTE standard in 2011, the penetration of LTE baseband processors (with backwards compatibility), and the generational standard gradually being replaced by LTE as the mainstream, as seen from the statistics data from Strategy Analytics. The global output of WCDMA baseband processors from 2008 to 2016 peaked at 2014 and then fall gradually year after year (about [REDACTED] million pieces in 2014, [REDACTED] million pieces in 2015, and [REDACTED] million pieces in 2016); and from 2011 to 2016, the global output of LTE baseband processors was growing by multiples year after year, with [REDACTED] million pieces in 2011, to [REDACTED] million pieces in 2016, passing the 3G baseband processor output in 2015 and [the mainstream] gradually becoming LTE (3) Other than the Sanctioned Party, the main suppliers of LTE baseband processors include MediaTek, Samsung, Hisilicon, Spreadtrum and Intel. The Sanctioned Party has always had more than 50% market share for the LTE baseband processors other than in 2010 (Samsung was No.1 in 2010, but Samsung's baseband processors are for its own use and not sold in the market, while the market shares of MediaTek, Hisilicon, Spreadtrum and Intel also clearly do not compare with that of the Sanctioned Party's).

(v) To summarize, pursuant to the definition of a monopoly enterprise in Article 3 of the Enforcement Rules of the Fair Trade Act in considering the market shares, the substitutability, the ability to impact market price, and bar of entry into the market and other factors, the Sanctioned Party has had over 70% market share every year in the CDMA baseband processor market from 2008 to 2016, and its total sales turnover for the 2016 fiscal year was [REDACTED], only the Sanctioned Party and VIA are competing in that market, with the Sanctioned Party's having an overwhelming position in the CDMA baseband processor market, and it has the ability to eliminate competition; the Sanctioned Party also has over 50% of the LTE baseband processor market from 2011 to 2016, and the market shares of competitors such as MediaTek, Hisilicon, Spreadtrum and Intel clearly do not compare with that of the Sanctioned Party's , so the Sanctioned Party also has an overwhelming position in the LTE baseband processor market, and it clearly also has the ability to eliminate competition there. As the WCDMA technology specifications are based on CDMA, the Sanctioned Party already had over 50% market share at the time WCDMA was becoming mainstream (based on the changing trends in the 2G output numbers, 2011-2013), and in consideration of that there is no substitution for baseband processors of different generations and different standards, as well as the Sanctioned Party's advantage in holding SEPs so that other businesses must obtain SEP licensing from the Sanctioned Party and faced difficulties in conducting own research to work around the Sanctioned Party's SEPs, even if the Sanctioned Party has cut back on the production of WCDMA baseband processors since 2015 due to the confirmation of LTE's mainstream status in the market, it does not change the fact that it had a monopoly position in the WCDMA baseband processor market from 2009 to 2014. As a result, it is clearly recognized that the Sanctioned Party meets the aforementioned definition of a monopolistic enterprise with respect to both the relevant product and technology markets for baseband processors using the CDMA, WCDMA and LTE mobile communications standards.

VI. Regarding the Sanctioned Party's violation of Article 9, Paragraph 1 of the FTA:

(i) Intellectual property law grants to inventors or creators the right to exclude others because it causes the rightholder to happily continue inventing, researching and creating, and the results of their work may be spread and exchanged so as to achieve the goal of encouraging creations, invention and technical innovation. Article 45 of the FTA thus excludes its application for "proper conduct in relation to the exercise of a right", thus the terms and conditions of a patent licensing agreement between a patent licensor and a licensee shall be negotiated by the parties in accordance with the freedom of contact principle; in the event of a dispute, it shall be resolved pursuant to civil means in principle. However, if the patent holder oversteps the bounds of proper conduct in exercise of its right, abuses its exclusive rights, disrupt the market trading order, and damages the interests of the consumer and the overall economic body, then according to Article 45 of the FTA, the FTA may still apply to such exercise of a right. As a result, in handling patent and technology licensing matters, the Commission has drafted the "Fair Trade Commission Guidelines on Handling Patent and Technology Licensing Agreement Matters" to define terms, set out the basic principles, the steps of the review and analysis, examples of non-violations of the FTA, examples of prohibited matters in technology licensing agreements and the legal effects.

(ii) As the improvement in technology causes products to become multidimensional and more complicated. The compatibility and interoperability of different products have become relatively important. To ensure that products are interoperable, there is a need to set out product standards, thus standardization has been thought as pro-competition. However, uniform product standards can also reduce the differences in the products, which may give rise to monopolization of key intellectual property and other anticompetitive effects, thus while the standard-setting organizations encourage the use of standard technologies and value-added innovations, they also take account of the risks of abuse of intellectual property, and include intellectual property policies into the obligations of a member with relevant patents seeking to join in the organizations, imposing them with the duty to disclose its patents and voluntarily make a commitment to the standard-setting organization to license in a engage in fair, reasonable and non-discriminatory manner. The FRAND principle does not mean every licensee shall enjoy the exact same licensing terms and contents, instead, when each licensee negotiates with the SEP licensor, the considerations and the bases in the decision to license shall be the same. The SEP holder must treat every licensee equally with respect to the licensing conditions and royalties, and the basic conditions in the licensing agreement should not contain any unreasonably discriminatory treatment. In principle, the FRAND commitment is a part of the participation contract for a SEP holder to join in a standard-setting organization, and is an agreement between the SEP holder and the standards-setting organization. As to what exactly the individual license terms and conditions shall be, the parties shall negotiate and realize the language in accordance with the freedom of contract principle and the guidance of FRAND.

(iii) According to Article 9, Paragraph 1 of the FTA: "Monopolistic enterprises shall not engage in any one of the following conducts: 1. directly or indirectly prevent any other enterprises from competing by unfair means…" Item 7, Subitem 1 of the aforementioned Guidelines stipulate that if a party of a technology license agreement is a monopoly and is in violation of the states indicated in Item 6, subitems 2 through 4, it may constitute a violation of Article 9 of the FTA. Further, according to Item 4, Subitem 3, subparagraph 6 of the Guidelines, in reviewing a technology license agreement, international or industry customs in the relevant market shall be taken into consideration. There are an abundant number of examples where the competition law competent authorities and the courts in other countries reviews a dispute over what FRAND is supposed to be during negotiations for a licensing agreement between a SEP holder and a licensee. In Article 3.1.(1) of "Guidelines on the Use of Anti-Monopoly Law in Intellectual Property Rights" ("JFTC Guidelines") announced by the the Japan Fair Trade Commission, in determining whether a SEP holder is abusing its monopoly position, the responses of the parties in the licensing negotiations under FRAND shall be considered, such as whether there are any concrete indications of the facts and mode of infringement of the SEP, the licensing terms and conditions plus their rational basis, whether responses in good faith and in accordance with commercial practices were provided to a party's questions, among others. Recently (July 2015), the European Union Court of Justice decision in the case between Mainland China's Huawei and ZTE found that a licensee should have a proper expectation of feasibility with respect as to whether it could receive a FRAND-compliant license; if the SEP holder refuses to provide FRAND-compliant terms, it may in principle constitute an abuse of market position, and the licensee may make an allegation of a violation of competition law in the SEP licensor's request to cease infringement. If the SEP holder requests cease and desist of infringement in the following situations, then there is no abuse of market position: (1) the SEP holder first issues a patent infringement warning clearly indicating the patent that was being infringed upon, and when the counterparty expresses a desire for a license agreement that is compliant with FRAND terms, the SEP must submit in writing a FRAND-compliant license proposal, including a clear indication of the royalty amount and calculation methods; (2) if the counterparty continues its infringing activities and do not respond to the SEP holder's offer in a manner consistent with industry customs or the principle of good faith; if the counterparty does not wish to accept the SEP holder's offer, it must immediately provide a counteroffer that is compliant with FRAND. If the parties still cannot reach an agreement on FRAND terms, then they shall agree to have an independent third party to decide on the royalty amount, and this is still considered a civil dispute between the two contracting parties. As a result, if the SEP holder does not follow the aforementioned steps, it may have abused its market position.

(iv) Regarding the Sanctioned Party's refusal to license baseband processor competitors:

1. Mobile communications devices require many different components working with each other to achieve the expected functionalities. The world has already developed setting standards through standard-setting organizations to ensure that the devices, systems and networks to the products from different manufacturers on the supply chain may operate and be compatible with one another. In order to avoid intellectual property holders abusing their rights, such standard-setting organizations also establish intellectual property policies and request their members to disclose IP or relevant patented technologies that may become part of a standard, and as for patents that have already been included into a standard, the SEP holder is requested to license them under FRAND terms.
2. In antitrust law's handling of exclusionary practices by monopolists, the concept of the essential facilities doctrine is formed. "Essential facilities doctrine" refers to facilities that meet the following elements: Possessed or controlled by a monopolist; competitors cannot reproduce or replace such facilities in a short time and in an economically reasonable as well as technically feasible manner; the competitor cannot use such facilities and thus has no means to compete with the holder or user of such facilities; the holder or user of such facilities refuse to provide such facilities to other competitors. The term "facilities" here is not limited to tangible, actual facilities, as it also includes abstract service of capabilities or function, even intellectual property. As mentioned above, to manufacture products

that comply with CDMA, WCDMA and LTE standards, the Sanctioned Party's SEPs are required, and there is no other substitutable technology.

3. The Sanctioned Party's is a member of ETSI, and according to Clause 6.1 of ETSI's IPR policy, "…the Director-General of ETSI shall immediately request the owner to give within three months an irrevocable undertaking in writing that it is prepared to grant irrevocable licenses on fair, reasonable and non-discriminatory terms and conditions under such IPR to at least the following extent: Manufacture, including the right to make or have made customized components and sub-systems to the licensee's own design for use in manufacture; sell, lease or otherwise dispose of equipment so manufactured; repair, use or operate equipment; and use methods…" The Sanctioned Party makes up [REDACTED] of ETSI's announced SEPs, thus it must per the aforementioned Clause 6.1 of the IPR policy to make a commitment to ETSI that it will license in accordance with FRAND principles; the above commitment clearly requires the Sanctioned Party to license competitors for the manufacture and sales of baseband processors that implement the Sanctioned Party's SEPs, and the Sanctioned Party is deeply aware that a refusal or restriction in entering into a license agreement with baseband processor competitors is considered an act in breach of such FRAND commitment. This can be seen from the Sanctioned Party's litigation against Ericsson, in which it argued that Ericsson had the duty to license its SEPs to the Sanctioned Party, and its announcement that it will license its SEPs to "all participants in the industry" under FRAND terms.

4. As admitted by the Sanctioned Party, [REDACTED] thus the handset entities must further still sign a patent license agreement so as to "use" the chip. The Sanctioned Party did indeed [REDACTED] sign a license agreement with competitors, but such agreements are all non-exhaustion agreements. [REDACTED] The Sanctioned Party further argues that in the *Quanta v. LG* decision before the United States Supreme Court in 2008, any license agreement may cause a patent to be exhausted; as the company does not comply with the holding, it therefore refused to license SEPs to baseband processors. However, the holding in the *Quanta* case in 2008 explains that any license agreement is an exhaustion agreement, and the decision did

not rule that a refusal to license industry peers is compliant with the law; the principle in determining whether a patent right was properly exercised also must consider whether there was patent exhaustion. If the right holder voluntarily and lawfully distribute products manufactured using its technologies into the Taiwan market, transaction activities of others for such product has no patent infringement issue; if the right holder attaches restrictive conditions to such transactions, the FTA still applies. In this case, the Sanctioned Party ignores the commercial practice that its rights are exhausted once the chips at issue are sold but instead argues "non-exhaustion" with respect to licensing competing industry peers, then further adds restrictive clauses that hampers effective competition. These are not only in violation of international exhaustion principles but have also damaged the competition order in Taiwan. Therefore, they are naturally recognized as in breach of Taiwan's FTA.

5. Peers in the manufacture of baseband processors once approached the Sanctioned Party for a license, as seen in the statement of [REDACTED] companies. In consideration of the risk of litigation and customer requirements, {REDACTED} asked the Sanctioned Party for a draft WCDMA patent license agreement for review, [REDACTED] sent several letters during the period to the Sanctioned Party requesting a license agreement that is compliant with FRAND principles, but the Sanctioned Party clearly indicated in [REDACTED] in which it denied it has a duty to provide a license to [REDACTED] company. However, among the Sanctioned Party and [REDACTED] company [REDACTED] agreements, none of them are patent licensing agreements. Another [REDACTED] company said that [REDACTED], because the potential customer handset entities at that time all required a guarantee that it will not face a patent infringement lawsuit from the Sanctioned Party, they contacted the Sanctioned Party to clearly provide a license for external sales of chips. [REDACTED] company did not receive consent to license from the Sanctioned Party. After several rounds of negotiations and proposals, the Sanctioned Party agreed to not sue [REDACTED] company, or promised that it will seek all possible remedies from [REDACTED] clients before filing suit against [REDACTED] itself. [REDACTED] because those are distinguishable to licensing, [REDACTED] refused and halted all negotiations. Currently,

chip supplier [REDACTED] in [REDACTED] sought to engage the Sanctioned Party in conducting license negotiation talks, but because the Sanctioned Party refused to license in a way that would exhaust its rights, no agreement was signed. As a result, it is very clear that the Sanctioned Party refused to license to competing industry peers.

6. Even with a [REDACTED] signed between the Sanctioned Party and competing industry peers, the effect of such kind of an agreement is merely a commitment that the competing industry peer will not be sued for infringement by the Sanctioned Party for manufacturing chips, which is ultimately different from a license where an external sale after manufacture would exhaust the patent right, and the counterparty in the transaction with the Sanctioned Party's competitor will not be immune from the risk of infringement simply because the Sanctioned Party made a non-assertion promise to the competitor. As a result, the handset entity has less incentive to choose the competitor's baseband processors when making a choice of baseband processor supplier or due to the licensing issue, or the handset entity may require the competitor to provide an additional cost guarantee for the [risk of] infringement action. For example, [REDACTED] had made as similar request to [REDACTED] company. To the baseband processor supplier, the risk of infringement from using the handset to calculate royalties is clearly not comparable to the chip supplier's risk of infringement, thus the Sanctioned party's refusal to license competitors in the industry has clearly increased the costs of its competing peers, as well as face the potential risk of interrupted sales or uncertainties in the transaction. Furthermore, because the competing industry peers cannot obtain a patent license from the Sanctioned Party, in order to avoid the Sanctioned Party initiating infringement actions against its customers, most also tend to focus on the manufacture of chip products that are not directly related to the Sanctioned Party's provided license scope. For example, [REDACTED] company focused on TD-SCDMA chip production, or [REDACTED] company only produces for itself. The inability of competing peers to obtain licensing from the Sanctioned Party causes competition to be restricted, and the inability to obtain licensing from the Sanctioned Party has also restrict their technical innovation.

7. Although the Sanctioned Party argues that it has promised to its

competing industry peers that it will not initiate infringement lawsuits, and the competing peers are not prohibited from manufacturing chips, but from the [REDACTED] that it has entered into with [REDACTED] company, even though it promises not to initiate an infringement lawsuit against [REDACTED] company, [REDACTED] company is restricted to [REDACTED]; the Sanctioned Party may request halting sales upon breach and impose [REDACTED] as a punitive damages for breach; (ii) [REDACTED]; (iii) [REDACTED] submits sales reports to the Sanctioned Party, the contents of which include details such as [REDACTED]. [REDACTED] company did not have a license, thus in principle it was not necessary for it to submit the aforementioned sales report for audit, but because [REDACTED] company in fact obtained a non-exhaustion covenant not to sue in lieu of its failure to obtain a patent license, [REDACTED] assume an obligation to periodically provide [REDACTED] and other commercially sensitive information; moreover, if [REDACTED] desires to sell baseband processors to anyone who has not signed a patent license agreement with the Sanctioned Party, it would be forced to ask such handset entity to first sign a patent licensing agreement with the Sanctioned Party, and then the Sanctioned Party would use this opportunity to make contact with such customer or potential customer of its competitor so as to work towards an opportunity for a transaction and maintain its market superiority. Although that agreement was [REDACTED] amended [REDACTED], and the sales report [REDACTED] was changed to [REDACTED]. In looking at the contents of the agreement between [REDACTED] company and the Sanctioned Party, the Sanctioned Party uses the signing of a mutual non-assertion agreement to obtain sensitive transactional information from the competing [REDACTED] company, then use its patent license agreement with handset entities to interfere with the transactions between such handset entities and the baseband processor competitors, thereby hampering the business activities of such baseband processor competitors. Even during the applicable term of the [REDACTED] provision, the sales reports submitted by [REDACTED] company is also used assess the change in competition in the WCDMA and LTE market, as well as maintaining a grasp on the state of [REDACTED] company's sales, as well whether the counterparties of such transactions have entered into a patent license agreement with the Sanctioned Party, thereby monitoring those entities who have not signed an agreement for litigation purposes, thereby causing those who have not signed to enter into a patent license agreement with the Sanctioned Party. The above can be seen from [REDACTED] company's [REDACTED] customer [REDACTED] entering into a negotiation for a patent license agreement and reduce its business with [REDACTED] company due to an infringement action from the Sanctioned Party.

8. The effect from the Sanctioned Party's refusal to license competing peers is particularly marked in competition among high-end handsets. The competing peers are in a disadvantage with respect to the supply of high-end handset chips because of the difficulty in working around the Sanctioned Party's SEPs and the R&D innovation [required], while the handset entities using the chips from the competing peers will face the risk of an infringement action, thus the Sanctioned Party's chip faces almost no competition in the high-end handset chip market. This can be seen from the use ratio of the Sanctioned Party's chip in Taiwan's main high-end handset brands is consistently over [REDACTED], as well as evidenced by [REDACTED] ratio.

9. To summarize the above, the Sanctioned Party possesses CDMA, WCDMA and LTE SEPs and is a monopolist in the baseband processor related market leveraging its vertical integration to establish a dominant market position. It goes against the original intent of the FRAND commitment in standard-setting and refuses to provide to competitors requesting a license a license negotiation opportunity with fair treatment, but instead only uses a mutual covenant not-to-sue in lieu of the SEP license under FRAND that the competitors were requesting from the Sanctioned Party. This has caused competitors without a license to face the risk of a patent infringement action and the instability from having its supply cut. Competitors are also asked to provide sensitive chip sales data for audit so as to stay abreast of the competitors' sales information and interfere with their R&D and business activities. The restriction of competition in the baseband processor market helps to ensure, maintain or strengthen its dominant position in the baseband processor market and its business model of licensing at the handset entity level.

(v) Regarding not providing chips to handset entities who have not signed a patent license agreement:

1. As described above, high-end handset entities have a high degree of reliance on the Sanctioned Party's chips. If they cannot obtain the Sanctioned Party's baseband processors, they will incur a very large cost and thereby seriously affect product design and market launch strategies. In transactional practice between handset entities, most brand entities use an OEM for assembly, and Taiwan's OEM either engage in brand procurement per the brand entity's instructions, or they procure and assemble their own before selling the completed product to the brand. [REDACTED] although there are [REDACTED] handset entities in the country who have not signed a license agreement with the Sanctioned Party, but they primarily pay royalties through OEMs in Mainland China. If those entities' use of OEMs for the payment of royalties to the Sanctioned Party is also added, the proportion of businesses paying royalties to the Sanctioned Party would be even higher. Further, as all of Taiwan's handset entities have purchased chips from the Sanctioned Party, and given the total value of chips that they purchased from the Sanctioned Party make up about [REDACTED] annually of the Sanctioned Party's total operational revenue from chips, Taiwan companies therefore have a very high demand on the Sanctioned Party's chips.
2. In the CSA entered between a domestic handset entity and QCTAP, the [REDACTED] in the contract clearly states: [REDACTED] Per this stipulation, if no patent license agreement was signed, no procurement can be made to begin the OEM work. This can be seen from the case file how the Taiwan handset entities who accepted the investigation of the Commission in this matter stated that during the negotiation period, the Sanctioned Party had clearly informed them that there must enter into a patent license agreement before signing a component supply agreement to engage in procurement; and it is in fact the case that all have signed a corresponding patent license agreement before signing the CSA. Moreover, the case file also shows that Taiwan handset entities also testified that because their affiliates are not applicable parties to the license agreement, the Sanctioned Party refuse to provide them chips because they have no license agreement with the Sanctioned Party.
3. Although the Sanctioned Party argues that the implementation of the policy to supply chips only upon signing a license agreement is to

avoid infringement disputes with its customers and the long court litigation process, thereby saving litigation costs and prevent damaging the goodwill in the transactions, however, under the patent exhaustion doctrine, when the supplier sells a component (such as the baseband processor) to a handset entity, the act of the sale has terminated any rights the supplier may have had under patent law, and the supplier has no right to question the buyer's subsequent use or resale of such component. As there are at least more than a hundred components in a handset, there are hundreds of component suppliers, while the Sanctioned Party is primarily engaged in the manufacture of baseband processors (including SoCs). When the Sanctioned party supplies the chips, it should have as a matter of course provided a product whose patents will exhaust with no concerns of infringement for the buyer's rights. Even if it is deemed that the terminal device manufacturer must obtain a patent license from the Sanctioned Party, the Sanctioned Party does not provide a list of patents, the license agreement contains licensing of SEPs with non-SEPs, the royalty is calculated on the retail price of the entire device and the royalty-free cross-license provisions, all of which are criticized by the licensees. Among those, the failure to provide a list of patents and the combined licensing of SEPs and non-SEPs, there is not yet sufficient blameworthiness or it is difficult to assess the pros and cons of the combined licensing of SEPs and non-SEPs; but for the use of the entire device to calculate [royalties] and the royalty-free cross-licensing parts, although the Sanctioned Party argues that it is more efficient to engage in price bargaining when the retail price of the entire device as a base for calculating royalties because its patent portfolio covers beyond the communications chip, and that the patent license terms have already reflected the value of the licensee's SEPs licensed back to the Sanctioned Party, the appropriateness and reasonableness of those provisions, on the other hand, are already heavily disputed, and such disputes may be resolved and the equality of the parties in the contract formation process ensured via equal negotiation between the licensee and licensor, arbitration under a third party, or court litigation. Each is further elaborated below:

(1) Using the retail price of the entire device as the basis for royalties: Based on Item 5 of the aforementioned Guidelines, if the licensed technology is part of the manufacturing process or

otherwise exists in the component, for ease of calculation, the use of the manufacture and sales volume of the final product, or the use of the raw materials needed for manufacturing the licensed technology product, or the number or frequency of the use of the component as a basis for the implementation fee of the license (Item 5, Subitem 3) is in principle not against the provisions on restriction of competition in the FTA. However, if inappropriate circumstances are present after reviewing per Items 3 and 4, the Commission may still determine such as an abuse of monopolistic position. In the license agreements between the Sanctioned Party and licensees, the calculation of the running royalty is based on the net retail price of the terminal device multiplied by a certain royalty rate instead of a single component (such as the baseband processor). In examining the contents of the license agreements between the Sanctioned Party and licensees, other than the royalty rate, there are also a cap on the royalty payment and other licensing terms, such as the contract signing fee (also with different payment by installment terms), whether the contract signing fee may offset the royalties or whether to pay a fixed amount of royalties, etc. The royalty rate is only one of the monetary payment conditions under the licensing terms, other matters such as the contract signing fee, the number of payment installments, or whether there is also a separate fixed royalty payment and whether that may be offset are all within the scope of royalty negotiations and are thus also part of the basis of the meeting of the minds between the parties in forming the contract. Given that the parties' contractual dispute is civil, whether such royalty payment calculation is reasonable should have been part of the basis in the contract negotiations over the licensing scope and conditions, so that the licensee's opportunity to bargain on equal footing may be preserved, but the Sanctioned Party uses the refusal to provide chips as a premise, so it was difficult for handset entities to obtain an opportunity to engage in equal negotiations or request for arbitration over the reasonableness of using the retail price of the entire handset as a basis for royalty calculations.

(2) Royalty-free cross-license: The patent licensing agreements entered between Taiwan businesses and the Sanctioned Party

[REDACTED]. Taiwan handset OEMs and brands have few SEPs that are within the scope of the cross-license, and both the technological level involved and the importance is difficult to compare to transnational patent holders with broad patent portfolios, as can be seen in the case file. However, in Taiwan, there are [REDACTED] handset businesses that have [REDACTED] SEPs for 3G, and [REDACTED] SEPs for 4G, and since SEPs are declared by the patent holder to the standard-setting organization instead of being registered after review, many may have a patent litigation purpose, and whether those patents are [actually] SEPs may only be clarified upon an infringement action. Given that the SEPs' characteristic is their essentialness, and the R&D for SEPs represent the result of considerable investments by a business, the use of [the cross-license] provision lowers the Taiwan industry's incentive to innovate, as asserted by the testimonies of the licensee businesses here in Taiwan. Because the royalty-free cross-license from the handset entities enables the Sanctioned party to strengthen the protection from patent infringement for the chips that it sells, it has greater advantage than competitors. Whether the licensee agrees to the cross-license depends on whether the licensee's bargaining position was on equal footing, and the licensee's overall assessment and evaluation of the overall exchange of consideration in the cross-licensing of patents and the terms involved should have served as the basis for such equal bargaining. However, the Sanctioned Party uses the execution of a patent license agreement as a premise for the supply of chips, therefore, as the licensee's request for a supply of chips is hampered by the demand for such chips, it has no choice but to accept the Sanctioned Party's conditions and sign the license agreement. The above can be seen from the responses provided by handset entities in Taiwan in response to the investigation.

4. Given the disagreement between the buyer and the seller with respect to the appropriateness of the license and the licensing terms, the Sanctioned Party may seek arbitration with a third party or court litigation in order to resolve the dispute. However, the Sanctioned Party uses the reliance of the handset entities on its baseband

processors to request them to first sign a patent license agreement or otherwise refuse to supply chips, which caused the handset entities to be unable to challenge the Sanctioned Party's license terms in court, and the risk of infringement further blocks off the handset entities from an opportunity to negotiate on equal grounds a reasonable royalty and licensing terms.

5. As the handset entities are stuck in a difficult position due to the demand for chips, they lost the opportunity to bargain equally and must agree to sign with the Sanctioned Party the royalty-free cross-license provision. This has increased the cost of the handset entity in using baseband processors supplied by the Sanctioned Party's competing peers, lowered the demand for the relevant chips for the processors from the Sanctioned Party's competing peers, as well as lowered the handset entities' incentive and capability to invest and innovate, causing the price of using the baseband processors from the Sanctioned Party's competing peers to increase. This has allowed the Sanctioned Party to maintain a growth in market share while increasing chip prices; and when it cuts chip prices, it may use royalties to offset, causing the competing peers to be unable to compete by price reduction, and thereby weaken the competitive restrictions on the Sanctioned Party as a result of changing baseband processor prices.

6. To summarize the above, the Sanctioned Party's policy of not providing chips without a license agreement has caused handset entities to be unable to have a sufficient opportunity to bargain with the Sanctioned Party on equal grounds regarding the licensing terms, which has then caused the handset entities, in consideration of the chip demand, to accept licensing terms that are favorable to the Sanctioned Party and purchase the Sanctioned Party's baseband processors, thereby increasing the prices of the baseband processors from the Sanctioned Party's competing peers, lowering the demand of transaction counterparties for baseband processors from the Sanctioned Party's competing peers, and excluding such competing peers from competition. This also caused handset entities to pass on the high royalties to the consumer, thereby increasing the price that the consumers must pay for handheld devices.

(vi) The Sanctioned Party's use of rebates to request [REDACTED] for exclusive transactions:

1. To maintain its monopoly in the market, a monopolist often employs all kinds of unfair methods to directly or indirectly interfere with other businesses joining the market competition so that it may continue to enjoy outsized profits with no competing peers. Commonly seen schemes include using business arrangements such as rebates and exclusive transactions to eliminate competing peers. A rebate for exclusive transaction clause that is found to have no reasonable economic justification may therefore constitute the unlawful act of abuse of monopoly position.
2. [REDACTED] makes up [REDACTED] of the global smartphone market, and it is considered a high-end handset. Yet, like other handset brand entities, its bargaining power in relation to the Sanctioned Party's patent license is limited by its need of the Sanctioned Party's CDMA and LTE baseband processors; its terminal mobile devices launched after [REDACTED] that use the Sanctioned Party's chips make up nearly [REDACTED]. Although [REDACTED] never entered into a SULA, or into a CSA with QCTAP, but [REDACTED], and receives and pays the royalty to the Sanctioned Party [pursuant to the] license patent agreement with the Sanctioned Party. [REDACTED].
3. [REDACTED] started negotiating the license agreement with the Sanctioned Party in [REDACTED], but because the parties had many differences in opinion with no consensus reached, [REDACTED], and continued to negotiate the licensing terms (including royalties) with the Sanctioned Party. [REDACTED], in wishing to reduce the high royalty costs, further entered into [REDACTED], [REDACTED], [REDACTED] and [REDACTED] agreements with the Sanctioned Party. [REDACTED] during the [REDACTED] period, [REDACTED] the need to increase the scope of the CDMA license, the parties further [REDACTED] and signed [REDACTED], and regarding the rebate for the royalties paid for the license scope, it was agreed for the Sanctioned Party to pay a [REDACTED] bonus, [REDACTED] bonus and [REDACTED] bonus to [REDACTED], [REDACTED] during this time the parties engaged in considerable negotiation over the payment of the rebate clause, [REDACTED] thus it is credible for [REDACTED] to assert that the aforementioned agreement entered with the Sanctioned Party is a royalty rebate [agreement].
4. Further, in the aforementioned royalty rebate-related agreement between the [REDACTED] and the Sanctioned Party, there are also

terms on restrictions to bonuses, such as [REDACTED] requesting [REDACTED] ([REDACTED] WiMAX is one of the 4G standards pushed by Intel, and Taiwan once strongly encouraged using WiMAX technology, which competes with the LTE standard supported by the Sanctioned Party); [REDACTED] requested [REDACTED]; [REDACTED] also entered into a bonus payment and compensation restriction clause similar to [REDACTED]. From an overall look at the relevant agreements entered between [REDACTED] and the Sanctioned Party, there was indeed an agreement for exclusive use of the Sanctioned Party's chips in order to receive a considerable rebate [REDACTED]. Thus the exclusive transaction clause is in effect a restriction on the use by [REDACTED] of baseband processors supplied by the Sanctioned Party's competing peers, which caused the [REDACTED] terminal device launched by [REDACTED] from [REDACTED] prior to [REDACTED] to all carry the Sanctioned Party's baseband processors. Even if [REDACTED] during this period still continued to assess other potential baseband processor suppliers, in the end, due to the high royalty rebates and bonuses plus the aforementioned contractual compensation scheme, it was not until the [REDACTED] prior to the termination of the aforementioned agreement did [REDACTED] launch some handsets that carry baseband processors from [REDACTED]. The large rebate is no doubt the price consideration (including the royalties) put forth by the Sanctioned Party to incentivize [REDACTED] to avoid using chips from competing peers, and the purpose of such is merely to strengthen the Sanctioned Party's ability to eliminate competition with no reasonable economic purpose to speak of.

5. [REDACTED] is ranked [REDACTED] in terms of the global smartphone market share and is a leader in that industry. If a baseband processor supplier can win purchase orders from [REDACTED] to a certain commercial scale, and improve the quality of baseband processors through working with technical[/engineer] personnel from [REDACTED], so there can be no baseband processor supplier who does not wish to obtain purchase orders from [REDACTED] and work with their engineer team to improve technologies. [REDACTED] once [REDACTED] made two assessments of whether the Taiwan company may become a baseband supplier [REDACTED], but because of the exclusive transaction restriction, the Taiwan company's chance to become a potential supplier of [REDACTED] and increase its

technologies and product quality was stillborn.

6. The Sanctioned Party argues that each agreement with {REDACTED} is independent, different and has valuable consideration from both parties instead of providing a royalty rebate. However, in seeing the [REDACTED] agreements between the parties, other than the bonus in [REDACTED] and [REDACTED] bonus for chip discounts, all other bonuses are related royalty rebates, [REDACTED] yet regardless of whether the agreement between the Sanctioned Party and [REDACTED] is for royalty rebate or a chip discount, it does not change the fact that the Sanctioned Party is using an exclusionary clause in exclusive transactions to pay [REDACTED] large bonuses.
7. To summarize the above, the Sanctioned Party has a monopoly in the 3G and 4G communications standards and baseband processors, it has executed with [REDACTED] an exclusive transaction rebate clause with an exclusionary effect, which inappropriately and effectively eliminated the opportunity for other baseband processor supplies to supply their chips to [REDACTED], thereby damaging the competition in the baseband processor market.

(vii) As mentioned above, the Sanctioned Party possesses considerable numbers of CDMA, WCDMA and LTE mobile communications SEPs, and is also a monopolist in the baseband processor market using vertical integration to sustain its dominant position. It leverages its advantage in mobile communications standards to refuse licensing chip competitors the mobile communications SEPs so as to prevent its patents from being exhausted through the competitor's use at the baseband processor level. This also increases the costs of transactions between handset entities and the competing peers; and to realize the payment of royalties in the terminal device, it requests the handset entities to [sign] a patent license agreement or otherwise refuse to supply them baseband processors, causing the handset entities to accept the licensing terms that are favorable to the Sanctioned Party in consideration of their need for chips. The Sanctioned Party then uses its main transactional counterparties [REDACTED] to provide exclusive transactions in consideration for royalty discounts as an incentive, causing competitors to be unable to obtain licensing and lose or reduce its opportunities to make transactions, or otherwise put them at a disadvantage in rice competition. As the Sanctioned Party's competitors are unable to avoid the Sanctioned Party's SEPs as well as obtain a license, it is difficult to not transact with handset entities who have not been licensed by the Sanctioned Party and have not signed a mutual non-assertion agreement under which they would have been required to provide commercially sensitive information such as transaction partners and volumes to the Sanctioned party for audit. The intertwining and synergistic effect from the Sanctioned Party's refusal to license competing peers and requests to stipulate restrictive clauses, the no license no baseband processor supply policy and royalty rebate clauses to certain entities in exchange for royalty rebates lead to an increase in the price of baseband processors from the Sanctioned Party's competing peers, lower the transaction partner's demand for baseband processors from such competing peers, eliminate the competition from the Sanctioned Party's competing peers, and further stabilize the Sanctioned Party's business transaction model. After review of the activities involved in its overall business model, they are found to have damaged the competition in the baseband processor market, used to secure, maintain or strengthen the Sanctioned Party's monopoly position in the baseband processor market, thus they constitute a violation of Article 9, Paragraph 1 of the Fair Trade Act for a monopolist to "directly or indirectly prevent any other enterprises from competing by unfair means".

VII. Regarding the Sanctioned Party's petition to the Commission to suspend the investigation and engage in administrative settlement:

(i) According to Article 28, Paragraph 1 of the FTA: "In conducting investigations into an enterprise's conduct that may violate the provisions of the Act, if such enterprise makes commitments to take specific measures to cease and rectify its alleged illegal conduct within the time prescribed by the competent authority, the competent authority may suspend the investigation." According to Article 136 of the Administrative Procedure Act: "If an administrative agency cannot confirm the facts and legal relationships that an administrative decision is based on after investigating the matter per its duty, in order to effectively achieve the administrative purpose and resolve the dispute, the matter may be settled with the people and an administrative agreement reached in lieu of an administrative decision." Lastly, according to the Item 3, Subitem 1, subparagraphs 1 and 2 of the Commission's "Principles in Handling A Suspension of the Investigation": "Article 28 of the FTA on the suspension of investigation shall not apply to the following situations: (1) The activities involved in the matter has seriously impacted the competition order (2) there has been no clear difficulty in investigating the facts of the violation or the facts collected are sufficient to allow the Commission to conclude whether there is a violation of the [FTA].”

(ii) Although the Sanctioned Party did propose corrective measures in search of a suspension of the investigation or an administrative settlement, or making an offer for administrative settlement to the Commission, the Sanctioned Party’s refusal to license competing peers and the request for restrictive clauses, the no license agreement no chip supply policy, and the provision of rebates to [REDACTED] for requesting exclusive transactions have all being found to be an abuse of market monopoly power. Given that Taiwan is a main manufacturer country for handsets and baseband processor components, the Sanctioned Party’s unlawful activities have seriously impacted the country’s competition order and the facts have clearly demonstrated such. Besides, the investigation has already concluded and there has been apparent difficulties in the investigation process, while the corrective measures proposed by the Sanctioned Party cannot compensate for the harm caused by the aforementioned anticompetitive activities. On a separate note, an offer for an administrative settlement is not compliant with the elements for an administrative settlement in the Administrative Procedure Act, all of which have been reviewed at the meeting of the committee members of the Commission. Thus, the suspension of investigation and administrative settlement do not apply in this matter.

VIII. To summarize the above. The Sanctioned Party’s refusal to license to chip competitors, the requirement for restrictive clauses, the no license agreement no chip supply policy, the provision of rebates to request Apple to engage in exclusive transactions and other activities are in excess of a proper exercise of patent rights and has created an actual restriction of competition. After review of the activities involved in the overall business model, they are deemed to have violated the prohibitory regulations under Article 9, Paragraph 1 of the FTA. According to Article 40, Paragraph 3 of the FTA, which authorizes the Commission to draft the “Penalty Calculation Standards for Serious Violations of Articles 9 and 15 of the Fair Trade Act” (”Penalty Calculation Standards”), this case is considered a “serious violation” under Article 40, Paragraph 2 [of the FTA]. After reviewing the motives of the sanctioned parties, their purpose and expected unlawful profits, the extent of harm from the impact to the CDMA, WCDMA and LTE standard baseband processor market that such unlawful activities have caused, the duration such unlawful activities threatened the trading order, the amount of unlawful profits thereby obtained, the size of the companies, their current operational status, business revenue and market position, the number of violation instances, evidence of regret and cooperation with the investigation, and the degree of culpability and the ability to repay the fine, according to Article 4 of the Penalty Calculation Standards: “The penalties levied under Article 40, Paragraph 2 of the FTA shall be set according to the basic amount and other adjustment factors”, Article 5: “The basic amount in the above Article refers to 30% of the revenue illegally obtained from sales of goods or services during the period of illegal behavior,”, and Article 7: “The penalty under Article 4 may not exceed a total of 10% of the sanctioned enterprises’ sales revenue for the last fiscal year”. The final holdings of the Commission are thus made in accordance with Article 40, Paragraph 2 of the FTA and as stated in the Holdings above.

October 20, 2017

If the Sanctioned Party wishes to appeal, it may initiate administrative litigation with the Taipei High Administrative Court within two months of the day after the receipt of this Decision.

Dissenting Opinion (summary) By Commissioner WEI, Hsin-Fang

Regarding the decision of the Fair Trade Commission (the "Commission") (Ref. No. Gong-Chu-Zi-106094) (the "Decision"), I have the following dissenting opinion based on the documents and evidence to which I had access during the review period and the contents of the Decision which is available to the public:

1. **[The Decision] did not consider the impact of [Qualcomm's] actions on competition and consumer welfare using economic analysis and, thus, the effect of this Decision is protecting the "competitors" instead of "competition" which deviates from the intent of the Fair Trade Act.**

For purposes of competition law, the term "competition" means the competition among enterprises in responding to consumers' needs in terms of price, quality, quantity, diversity, etc. As time goes by, this becomes a process of choice by which more efficient companies replace the comparatively less efficient ones ultimately enhancing a consumer-orientated, more competitive and faster-growing national economy to achieve the goal of the competition law.

Article 9, Item 1 of the Fair Trade Act provides that an enterprise shall not directly or indirectly prevent any other enterprises from competing by unfair means, which is a prohibitive clause to prevent an enterprise from abusing exclusivity. How should it be determined whether the conduct in question constitutes a "prevention of competition by unfair means" under this clause? From an economic analysis perspective, such shall be determined based on the effects of the conduct on consumers, namely whether the conduct in question can improve consumers' welfare, so as to avoid only considering the form and appearance of the conduct and confusing the protection of "competition" under the Fair Trade Act with the protection of "competitors". The regulator should avoid directly treating the preservation of a particular market structure (how many enterprises in the market are currently engaging in competition) as protecting competition. In other words, the regulator should not have the mindset that keeping existing enterprises in the market guarantees competition. The intervention of the regulator to keep existing enterprises in the market may only protect the enterprises from competition. A competition law enforcement agency should determine the competitive harm which would impact consumers' welfare in each case and whether there are compensating efficiencies to give to consumers. Such requires a reasonable analysis supported by facts and evidence. This means that the cases of abusive exclusionary conduct should be determined based on a “rule of reason” analysis. The European Commission takes the view that the purpose of the regulations in connection with abuse of exclusivity is to protect competition, not to protect competitors. Hence, the core to be focused on when enforcing the laws is whether there is anti-competitive “foreclosure” which eventually harms consumers’ welfare. Competitors in the market cannot be prevented from competing on the merits with existing dominant enterprises. Competitors should compete using higher quality, novel products, timely innovations or other better performance with existing dominant enterprises to pursue the entrance to or expansion of the market, which is the so-called the true meaning of protection of competition.

So-called consumers’ welfare has multiple aspects and multiple considerations. Aside from the impact of the subject conduct itself (such as the impact of Qualcomm’s licensing model on its competitors, OEMs and end consumers), the impact on consumers’ welfare from the regulator’s intervention should also be evaluated at the same time (for example whether or not there would be negative impacts on Qualcomm or its competitors’ incentive for innovation; whether it is more efficient if the technology followers adopt package license; whether charging royalty from competitors leads to, increased chip prices of the competitors, which may limit the OEMs’ choices and is anti-competitive; whether the cost is increased due to the need for conducting patent analysis; whether the price will be higher if Qualcomm’s rights are exhausted when selling chips which are integrated with a patent license). Aside from short term interests, the long term impact should also be taken into account (for example, lack of incentives may adversely affect innovation or enhancement of quality, lower willingness to participate in the standard-setting organizations, restrict improved technology from being adopted as the standard which would damage consumers’ welfare as a whole, and make it difficult to acquire complete technology). In addition to reviewing the direct effect on the market involved in the investigation (such as the baseband processor market and licensing market in this case), the possible effect on the neighboring markets should also be examined (such as chip manufacturing, the packaging and testing market and the possible effect on transferring orders. It should also to take into account that the products of OEM for mobile phones are mainly for export not for domestic consumption). A comprehensive evaluation of the entire economy requires an economic analysis with enhancing consumers’ welfare as a core principle of the competition law enforcement agency, and the competition law enforcement agency should not only consider industry policies. Even though it may not be easy to determine the long term or indirect effects due to the difficulty in obtaining evidence, and sometimes it is unavoidable for the determination to be subject to the regulator's subjectivity, such factors should not be ignored solely because they are difficult to be evaluated, and at a minimum, the factors that have been evaluated and the impact on consumers' welfare should be expressly explained in the Decision.

The contents of this Decision reflect that this Commission adopts a method of reviewing "formality", which focuses on comparison of gain and loss between Qualcomm and its competitors, and rarely mentions how the current business model of Qualcomm, either changed or unchanged, will impact consumers' welfare. When a rule of reason economic analysis is conducted, competitive harm should be established based on large amount of facts and evidence, and the presumption that the regulator should bear in mind is that market participants should compete with each other on the merits. Apple Inc. testified that "…over the past 10 years [we] had evaluated the products of the competitors many times, but none was adopted because they did not meet the technical standard…". Qualcomm competes primarily on the strength of the quality of its products and holds an advantageous position in the competition. If the competitors do not have the true merits to advance consumers' welfare, why should the competition law enforcement agency intervene to maintain specific enterprises' existing positions? Why not leave those competition problems for the market to resolve by itself, and let the outcome of the market operation manifest consumers' true value? This Decision, however, only establishes that the subject conduct does exist in form without considering Qualcomm's possible defenses (such as necessity, efficiency, welfare to end consumers, etc.), and without including a comprehensive evaluation of the possible short term and long term effects of the subject conduct on the interests of companies in the same industry, downstream companies and end consumers. This Commission adopts an illegal per se position when applying Article 9, Item 1 of the Fair Trade Act, which is at odds with the legislative intent of the regulations prohibiting any abuse of a monopoly position and is at odds with the trends of the enforcement of competition laws in Europe and the United States.

Taking Item I of the main text of the Decision "Entering into a rebate clause with a specific enterprise for exclusive dealing arrangements" as an example, this Decision lacks a substantive demonstration and link between the facts and the conclusion. It seems that the subject conduct is determined to be "unfair" anti-competitive conduct as long as it is confirmed that there are so called exclusive dealings and royalty rebates which are conducted by a monopolistic enterprise. The legal consequence is decided by the type of conduct, and such conduct is considered as illegal per se. In September 2017, the Court of Justice of the European Union issued a ruling in the case between Intel and the European Commission, and the Advocate General rendered a legal opinion, which provides many perspectives for conceptualizing the issues. The gist of the ruling of the Court of Justice of the European Union is that all circumstances should be examined to determine whether the conduct in question has possibility or ability to restrain competition in a case involving abuse of exclusivity by a monopolistic enterprise. The Advocate General, Wahl, particularly emphasized that only behavior which constitutes an expression of market power to the detriment of competition and, thus, to consumers is prohibited and accordingly sanctioned as an abuse of dominance. Therefore, the effect of anti-competition is most crucial. Irrespective of whether we are dealing with an enforcement shortcut such as that offered by the concept of “restriction by object”, EU competition rules seek to capture behavior that has anticompetitive effects. To date, the form of a particular practice has not been deemed important. To determine whether or not the subject conduct has the possibility or ability to restrain competition, we should review the scope of the market which is affected by royalty rebates, the duration, the performance of the competitors in the market and reduction of prices, and a test of “competitors with the same efficiency”. With respect to the evaluation of the effect of rebates terms, in addition to the concern over potential anti-competition, it is recognized in economy studies that it is possible that rebate terms may advance efficiency of competition, making the positive effect greater than the negative effect, and the major indicator to be examined is whether total output has increased or not.

2. The definition of unilateral market causes a lack of logic in the link between construction of market power and abuse of exclusivity by a monopolistic enterprise

Regarding the definition of a market, the Decision defines the product market as being “baseband processors using CDMA, WCDMA and LTE and various telecommunication standards” as a market and concludes that Qualcomm is a monopolistic enterprise in such market. This Decision does not expressly recognize Qualcomm as being a monopoly in the technology market.

Is it necessary for this case to additionally define a technology market? In theory, it should be decided by observing the connection between technology and the product. If a specific technology is a production input of a product, the need to seek licensing to legally obtain this technology is called a "derived demand for inputs". When price elasticity or demand for technology license is relatively low, such technology is likely to constitute a market, which is no different, in concept, from a normal product market. In other words, for a patent technology which is a production input, it should be examined by a hypothetical monopoly test. When royalties are raised to a level which exceeds the competitive level, but the demand decreases very little or the demand of being licensed still remains the same, it means that such technology is an irreplaceable input for producing a specific product. Further, if such technology is an irreplaceable technology or the switching cost is very high and the amount of royalties does not represent a high percentage of the production cost, it is possible that the technology market exists in this specific case. The patent technologies in this case which are considered as standard and essential patents have similar traits, are unavoidable, irreplaceable and not easily transferred production inputs for manufacturing various baseband processors. Thus, the establishment of a related technology market should be considered.

This Decision only recognizes Qualcomm as a monopolistic enterprise without defining the technology market. As for the subject product, competitors are not Qualcomm's counterparties and do not rely on Qualcomm's processor products. Technology licensing is the target that competitors intend to trade with Qualcomm; however, this Decision does not define the technology market, and therefore does not recognize Qualcomm as a monopolistic enterprise in such market. So how can it come to the conclusion that Qualcomm's refusal to "license" to its competitors constitutes an illegal abuse of its monopoly position? As a result, the strange conclusion that "Qualcomm abuses its dominant position in the baseband processor market, due to its refusal to enter into licensing agreements with its competitors" is included. Considering the structure that this Decision tries to establish, the reasoning should be that the use of the market power in the patent licensing market has been extended to the product market and there is a foreclosure effect in the product market (decreasing the willingness of OEMs to purchase the competitor's products).

Item II.1 of the main text of the Decision requires Qualcomm to "suspend the terms in the agreements… with its competitors". It is obvious that it is impossible for Qualcomm and its competitors to sign a chip supply contract. The requests under Item II.1 of the main text of the Decision are all about the terms in relation to the relevant patent contracts (although it is not called "licensing") between Qualcomm and its competitors, which definitely fall within the scope of the technology market. This Decision does not recognize the existence of the technology market, but requires Qualcomm not to abuse its monopoly position in the technology market based on the regulations prohibiting abuse of monopoly, which is a logical contradiction.

3. <u>The reasoning that a breach of FRAND commitment by refusing to license competitors constitutes a violation of competition laws is an incorrect reason</u>

Another basis on which the Commission concluded that Qualcomm's refusal to grant a license constituted a violation of the Fair Trade Act was that Qualcomm did not meet its FRAND commitment made to the relevant standard-setting organization. However, the policy adopted by the international standard-setting organizations emphasizes the balance of interests between licensors and licensees rather than assuming that potential licensees are the parties that need help.

In light of the history of how the European Union has dealt with SEP cases during the past ten years, there are several noteworthy points：first, the issue of whether an exercise of patent rights is improper is often raised in cases where a SEP holder petitions a court to issue an injunctive order; second, the purpose of seeking an injunctive order by the SEP holders is to prevent competitors' products from sale or coming to the market; third, the defense raised by competitors to assert that SEP holders improperly exercised their patent rights was, in all cases, that the SEP holder breached its FRAND commitment (i.e., in this type of case, the FRAND commitment was used as a defense by the accused infringers); forth, disputes as to whether the licensing was done in compliance with the FRAND commitment were primarily resolved by court judgments; fifth, the adoption of the licensing terms which substantively violated the FRAND commitment would not necessarily constitute a violation of Article 102 of the "Treaty on the Functioning of the European Union". The competition law enforcement agency should follow its normal processing practice to investigate, analyze and decide the relevant cases. For example, in the Motorola case, the European Commission examined each factor such as market definition, recognition of dominant position, the facts of the abuse, the anti-competitive effect on the market and the arguments submitted by the party who was found to have violated the competition law. In that case, exceptional circumstances, such as the necessity to establish standards in the information and communication industry, characteristics of the relevant SEPs and the legitimate expectation of third parties to be licensed based on the FRAND commitment made by the patent holders were also considered. What needs to be emphasized is that the

European Commission still used Article 102 as its decision basis. Although the decision-making process focused on patent holders' FRAND commitment in terms of the balance of interest between two sides, the European Commission still reviewed elements provided in Article 102 to determine whether the competition law was violated due to a breach of the FRAND commitment. Such has nothing to do with the rules of the standard-setting organizations. This principle remained unchanged in the Huawei v. ZTE case.

It appears that the Decision took a view that, if a patent holder breaches their FRAND commitment and refuses to grant a license, an abuse of market power can be found. Thus, after quoting the decision of the Huawei v. ZTE case by the European Union, it held that "if the SEP holders do not implement above procedures, there is an abuse of market power". However, what a FRAND commitment involves is technology licensing, not a product transaction. In other words, the point at issue is whether Qualcomm refused to grant a license rather than its refusal to sell products. The Decision neither clearly defines the relevant technology market nor determines that Qualcomm was a monopoly in the technology market. As such, why are the regulations prohibiting an abuse of monopoly applied to refusal to grant a license to its competitors in a case where a company which is not determined as being a monopoly in the technology market?

As to applying the FRAND commitment in the competition law context, the FRAND commitment itself does not increase or decrease the elements, standards or burden of proof provided by the Fair Trade Act. The FRAND terms can be merely treated as the minimum requirements of the patentee's conduct in its licensing activities and such fact needs to be considered when applying the Fair Trade Act. It does not amount to a legal element under the relevant law. It is a misunderstanding that, so long as the FRAND requirement is not met, an abuse of market power likely would arise. In the Huawei v. ZTE ruling, the so called FRAND compliant conduct that was examined was not only the licensor's obligation but also the licensee's obligations. For example, the Huawei v. ZTE ruling explicitly stated that potential licensees should actively take steps in good faith to become a licensee. Whether such obligations have been performed is a matter of fact that needs to be investigated on a case by case basis. Also, all of the EU precedents involved the fact that patent holders sought a court injunctive order to prohibit the sale of infringing products. In each of such cases, there was an actual "exercise" of the patent rights by the patent holders. However, in this case, Qualcomm did not make claims of infringement against its competitors and actively exercise its patent rights, or seek an injunctive order. At the same time, the competitors' products were not excluded from sale due to Qualcomm's exercise of patent rights. This case is different from EU precedents in which there was a refusal to grant a license (i.e., to prohibit any alleged infringing products from being the market). Parties to this case should, based on the principles set out in the Huawei v. ZTE ruling, continue to negotiate in accordance with the FRAND principles or use an impartial third party (court) to resolve the dispute. There is no need to apply the competition law to intervene in this dispute at this stage.

4. An individual case of the competition law should be handled based on facts and analysis, and there is no so-called "international tendency"

The decision of an individual case regarding competition law should be based on the facts obtained during an investigation and use of correct and feasible analytical methods which make the conclusion persuasive. It appears from the decisions and indictment from the United States, China and Korea that the foundation and focus of each country is different.

In the Qualcomm case in the United States, the issue of "no license, no chips" addressed in the indictment issued by the Federal Trade Commission of the United States only related to "high level multi-mode chips", which only impacts the market of high-level mobile phones carrying CDMA and premium LTE processors. The indictment did not address processors not used in high-level mobile phones. The Decision of the Commission, however, fails to make such a distinction. Instead, the Decision of our Commission refers to general processors and competitors manufacturing such products. Actually, it is impossible to substitute different processors, and the production capacity of processors applying specific technology standards produced by a manufacturer cannot be substituted. The decisions and indictments of other countries mentioned that MediaTek's products were used in middle end and low end mobile phones. Apple Inc. also confirmed that MediaTek was not a supplier of Apple's high end mobile phones due to the quality of MediaTek's processors. However, the market share of MediaTek increases every year because MediaTek uses the turnkey solution and the strategy of high performance/cost ratio and because the main market of its products is Mainland China. It shows that the competitive harm and key points of the accusation that the two countries were concerned about are different and accordingly, it is reasonable that the two counties have different conclusions.

In Korea, Samsung is both a designer and manufacturer of chips (Samsung's chips are used in its own products and supplied to mobile phone brand owners) and owns the brand of mobile phones with the highest marketing share worldwide. Given the one-stop structure, Qualcomm's "no license, no chips" strategy impacts the licensing in the upstream and the manufacturing and consumption in the downstream and makes significant competitive harm to the Korean market. Hence, the Korea Fair Trade Commission attempted to establish a theory of cycling eco-system to affirm the foundation of Qualcomm's illegality.

In Taiwan, most of the companies in the wireless communication industry are technology followers and there is no international company, like Samsung, which combines the design, manufacturing and brand and also has an important position in the standard-setting organizations. The market of the Taiwan primary chip manufacturer, MediaTek, is in Mainland China and the manufacturers in relation to mobile phone brands are OEMs primarily for Apple. Thus, when evaluating the competitive harm that may be caused by Qualcomm's "no license, no chips" strategy, it is not appropriate for the Commission to model itself after the Korean Fair Trade Commission. Rather, the Commission should face Taiwan's current industry structure squarely and affirm the competitive harm to the Taiwan industry.

Regarding Qualcomm's case in China, the decision of the National Development and Reform Commission did not challenge Qualcomm's entire business model. Instead, given that the chip manufacturing industry was not fully developed in China and chips were supplied by manufacturers in other countries, but China is the biggest mobile phone consumption market in the world and has its own mobile phone brands such as Xiaomi, OPPO, VIVI and Huawei, the National Development and Reform Commission determined that Qualcomm's royalties were too high. Therefore, in consideration of end consumers' interests in addition to the fines, the most efficient corrective measure is to directly request Qualcomm to reduce its royalty.

Every country has its own industry structure. The impact that the same conduct would cause to the different markets is highly possible to be different. Hence, what a competition law enforcement agency should do when handling a case is to focus on the verification of the facts and a solid analytical method. Other than that, there is no so-called "international tendency".

Dissenting Opinion Commissioner: WEI, Hsin-Fang

This Dissenting Opinion is regarding Taiwan Fair Trade Commission ("Commission") Decision (Ref. No. Gong-Chu-Zi- 106094, the case of Qualcomm Incorporated ("Qualcomm") violating Article 9, Item 1, of Fair Trade Act because its relevant acts and its operation model injured competition in the baseband processor market. During the reviewing process of this case, my comments were not fully considered and I think there are essential deficiencies in the nature of the reasons and arguments of this Decision that impact the consideration of whether [Qualcomm] shall be punished. In order to express my opinion on this case thoroughly, based on the files accessible to me during the reviewing period and the contents of the Decision which is available to the public, I hereby provide my Dissenting Opinion as follows:

I. [The Decision] did not consider the impact of [Qualcomm's] actions on competition and consumer welfare using economic analysis and, thus, the effect of this Decision is protecting the "competitors" instead of "competition" which deviates from the intent of the Fair Trade Act.

Most people agree that, under the circumstances of a market economy, it is permitted for an enterprise to win over and replace its competitors with legal conducts. However, the question is which standard shall be used to decide whether such acts are legal or harmful to competition such that the relevant regulator must intervene or not intervene so as to not harm competition? For this case, the determination of punishing Qualcomm or not is a determination to avoid "false positives" or "false negatives"[1]/. Article 9, Item 1, of Fair Trade Act provides that an enterprise shall not "directly or indirectly prevent other enterprises from competing by unfair means" and this is a prohibitive clause to prevent an enterprise from abusing exclusivity. How should it be determined whether the conduct in question constitutes a "prevention of competition by unfair means" under this clause? In the European Union research report issued by several economist in 2005, from the economic analysis perspective, when applying the provision of exclusionary abuses (which was Article 82 of the "Treaty Establishing the European Community" at that

[1]/ Two types of errors may occur in the decision of a competition law enforcement agency: (1) wrongfully considering the act with the effect of facilitating competition as illegal. This type of error is a "false positive"; and (2) failing to prohibit acts that shall be punished, such as allowing an enterprise having a dominant position to abuse its market power. This type of error is a "false negative".

time, and is currently Article 102 of the "Treaty on the Functioning of the European Union"), the criteria shall be "the effects of the practice on consumers"[2]/, namely, whether the conduct in question can improve consumers' welfare, so as to avoid only considering the form and appearance of the conduct and confusing the protection of "competition" under the Fair Trade Act with the protection of "competitors". For purposes of competition law, the term "competition" means the competition among enterprises in responding to consumers' needs in terms of price, quality, quantity, diversity, etc. As time goes by, this becomes a process of choice by which more efficient companies replace the comparatively less efficient ones ultimately enhancing a consumer-orientated, more competitive and faster-growing national economy to achieve the goal of the competition law.

With respect to an enterprise's abuse of exclusivity, an economic analysis which emphasizes the effect of the conduct in question may accomplish two complementary purposes: first, the legal evaluation shall be the same for any conduct that has the same effect to the market and to consumers. By having the same standard for application of laws, we can avoid the legal effect that a dominant enterprise which engages in anti-competitive conduct in different forms with the same actual effect avoids control or obtains a lighter sanction (i.e. "false negative" type errors); second, because the same conduct may have different effects under different situations, i.e. a conduct may injure competition in certain circumstances but improve efficiency and innovation in other circumstances, the regulator must have thorough and adequate consideration so that the result of the law enforcement will not improperly hinder the strategies having effects of improving competition (i.e. "false positive" type errors). Therefore, the method of economic analysis requires a careful review of competition in each relevant market in order to correctly evaluate how a specific enterprise's strategy impacts consumers' welfare and the legitimacy of such act should not be determined by the form of such conduct (or even certain specific terms such as refusal to license, exclusive dealing, tying, royalty discount, etc.). A competition law enforcement agency should determine the competitive harm which would impact consumers' welfare in each case and whether there are compensating efficiencies to give to consumers[3]/. Such requires a reasonable

[2]/ Report by the EAGCP (The author's note: European Advisory Group on Competition Policy), "An economic approach to Article 82", July 2008, p. 8 http://ec.europa.eu/dgs/competition/economist/eagcp_july_21_05.pdf, last visited on October 28, 2017.

[3]/ European Commission, Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (herein after referred to as "Guidance"), OJ 2009 C 45/02, para. 28.

analysis supported by facts and evidence, that is, the cases of abusive exclusionary conduct should be determined based on a "rule of reason" analysis[4]/.

Article 4 of the Fair Trade Act provides that, "competition" means "any conduct of one enterprise to compete for trading opportunities in the same market with one or more enterprises through offering more favorable price, quantity, quality, service or any other terms". To explain in plain language, this means that suppliers make great effort to sell their products to the other side of the market, so the benefit gained by the other side of the market provides concrete evaluation criteria of the competition status in the market. In the market for end products, the benefit that the consumers may directly obtain is the best measure of competition status in the market. In the market for primary or intermediate products, in addition to direct consumers, the impact on end consumers shall also be observed, because the ultimate beneficiaries of competition in a vertically integrated industry are the end consumers.[5]/ For either the end products or intermediate products, the competition mechanism forces the suppliers on the economic side to respond to consumers' needs on the aspects of price, quality, quantity, diversity of choices, etc. If the strategy adopted by the enterprise can respond to such needs and improve consumers' welfare, then it might be a legal means of competition. If the competition law enforcement agency cannot hold on to this principle, it will very likely consider the "preservation of a particular market structure" (i.e. how many enterprises in the market are currently engaging in competition) as protecting competition. In other words, the regulator should not have the mindset that keeping existing enterprises in the market guarantees competition. The intervention of the regulator may only protect such enterprises from competition[6]/. The European Commission takes the view that the purpose of the regulations in connection with abuse of exclusivity is to protect competition, not to protect competitors. Hence, the core to be focused on when enforcing the laws is whether there is anti-competitive "foreclosure" which eventually harms consumers' welfare. Competitors in the market cannot be prevented from competing on the merits[7]/ with existing dominant enterprises. Competitors should compete using

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[4]/ Report by the EAGCP, "An economic approach to Article 82", *supra* note 2, p. 7.

[5]/ The European Commission is also of the opinion that, when establishing the illegality of abusive exclusionary conduct by dominant undertakings, the adverse effect on consumers' welfare shall be reviewed. This can rely on qualitative or, where possible and appropriate, quantitative evidence. The European Commission will take into account the welfare of the intermediate level consumers or end consumers, or consumers at both levels. Guidance, *supra* note 3, para. 19.

[6]/ Report by the EAGCP, "An economic approach to Article 82", *supra* note 2, pp. 8-9.

[7]/ Although the courts, enforcement agencies and research literature of

higher quality, novel products, timely innovations or other better performance with existing dominant enterprises to pursue the entrance to or expansion of the market, which is the so-called the true meaning of protection of competition.[8]/

Furthermore, so-called consumers' welfare has multi-aspects and multiple considerations. Aside from the effect of the subject conduct itself (such as the impact of Qualcomm's licensing model on its competitors, OEMs and end consumers), the impact on consumers' welfare from the regulator's intervention should also be evaluated at the same time (for example whether or not there would be negative impacts on Qualcomm or its competitors' incentive for innovation; whether it is more efficient if the technology followers adopt package licenses; whether charging royalty from competitors leads to increased chip prices of the competitors which is anti-competitive and may limit the OEMs' choices and is more disadvantageous to consumers for the long term; whether the cost will be higher because manufacturers who obtain the license portfolios need to carry out more patent analysis; whether the price will be higher if Qualcomm's rights are exhausted when selling chips which are integrated with a patent license when Qualcomm no longer distinguishes patent licensing and chips and the rights on the chips which consolidated these two parts have been exhausted). Aside from short term interests, the long term impact should also be taken into account (for example, lack of incentives may adversely affect innovation or enhancement of quality, lower willingness to participate in the standard-setting organizations, restrict improved technology from being adopted as the standard which would damage consumers' welfare as a whole, and make it difficult to acquire complete technology). In addition to reviewing the direct effect on the market involved in the investigation (such as the baseband processor market and licensing market in this case), the possible effect on the neighboring markets should

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various countries often use the term "competing on the merits", the substance of this term as understood by each country is different and, thus, the determination that the similar unilateral abusive conduct by enterprises might be different in different countries, OECD has issued a report and pointed out that all member states agree that in the principle the purpose of competition policy is to protect "competition" not the "competitor". Whether certain types of conduct from enterprises in a monopoly or dominant position is classified as legal "competing on the merits", i.e. how should the authorities recognize such conduct as impairing competition or improving competition, the use of economic analysis should be adopted. Different economic analysis models have been proposed, each has its own advantages and limits, but most of them involve consideration regarding production efficiency and consumer welfare. OECD, *COMPETITION ON THE MERITS*, DAF/COMP(2005)27, pp. 17-19 (2006).

[8]/ European Commission, DG Competition discussion paper on the application of Article 82 of the Treaty to exclusionary abuses, paras. 54-56. http://ec.europa.eu/competition/antitrust/art82/discpaper2005.pdf. last visited on October 28, 2017.

also be examined (such as chip manufacturing, the packaging and testing market. It should also to take into account that the products of OEMs for mobile phones are mainly for export not for domestic consumption). A comprehensive evaluation of the entire economy requires an economic analysis with enhancing consumers' welfare as a core principle of the competition law enforcement agency, and the competition law enforcement agency should not only consider industry policies. Even though it may not be easy to determine the long term or indirect effects due to the difficulty in obtaining evidence, and sometimes it is unavoidable for the determination to be subject to the regulator's subjectivity, such factors should not be ignored solely because they are difficult to be evaluated, and at a minimum, the factors that have been evaluated and the impact on consumers' welfare should be expressly explained in the Decision.[9]/

The contents of this Decision reflect that this Commission adopts a method of reviewing "formality", which focuses on comparison of gain and loss between Qualcomm and its competitors, and rarely mentions how the current business model of Qualcomm, either changed or unchanged, will impact consumers' welfare. On the basis of defining "baseband processor" market as a market for relevant products (see the language in Item I of the Decision), the Commission has "described" three major facts of Qualcomm's violation by "not licensing to its competitors", "no license, no chips" and "providing rebates on the condition of exclusive dealing arrangements". However, the Commission did not reasonably prove how the original dealing opportunities of the competitors were obstructed by not signing a licensing agreement with Qualcomm, causing the competitors to not be able to enter the market or to expand, and eventually reduce the consumers' choices. As mentioned earlier, when a rule of reason economic analysis is conducted, competitive harm should be established based on large amount of facts and evidence, and the presumption that the regulator should bear in mind is that market participants should compete with each other on the merits. Qualcomm's "anomalous" (but not definitely illegal) business model surely brought competition pressure to its peers, but are the consequences of Qualcomm's refusal to license, that such peers did not develop chips directly related to Qualcomm's licensing area and did not obtain advantageous positions when competing for counterparties (direct consumers) with Qualcomm? Can the competitor's failure to dedicate to innovation be simply attributed to Qualcomm's refusal to license? (See the Decision, p. 58) Or is it that, according to the performance on current technology ability and continuous

[9]/ Report by the EAGCP, "An economic approach to Article 82", *supra* note 2, p. 10.

innovation, Qualcomm always has excellent performance in mobile communications processors since 3G and so the brand owners still choose Qualcomm as their counterparty after considering many factors (surely considering Qualcomm's business model)? Apple Inc. testified that "…over the past 10 years [we] had evaluated the products of the competitors of the party who was found to have violated the competition law for many times, but none was adopted because they did not meet the technical standard…."[10]/ The Decision also states that one of the consequences of Qualcomm refusing to license to its competitors is that the chips of its competitors have no chance to be used on high-end mobile phones (see the Decision, p. 59). There seems to be a gap in perceptions between such argument and the actual practice.[11]/ Is the fact that high-end mobile phones all use Qualcomm's processors irrelevant to Qualcomm's excellence in fulfilling the needs of direct or indirect consumers? If the competitors do not have the real merits in improving consumers' welfare, then why should the regulator intervene in order to maintain

[10]/ See the Decision, p. 19.

[11]/ According to the description in the Federal Trade Commission's Complaint for Equitable Relief against Qualcomm, each network operator has implemented different standardized protocols. With the evolution of cellular communication standards from 2G(GSM, 2G-CDMA), 3G(UMTS, 3G-CDMA) to 4G(LTE), now global major network operators mostly use 4G(LTE) standard, so the built-in baseband chips in the mobile phones, especially the so-called smart phones, have to have the multi-mode processors which has connectivity across different generations of cellular networks in order to be functioned as a smart phone within the U.S. or globally. In addition, over time, competition among OEMs has developed across several handset tiers, including premium (sometimes further divided into "premium" and "high"), mid, and low tiers. Premium-tier smartphones, including flagship brands like Apple's iPhone and Samsung's Galaxy-S line, typically include advanced features and technologies. Qualcomm has been particularly dominant in the supply of baseband processors that comply with CDMA standards. For most of the past ten years, the only supplier of CDMA processors other than Qualcomm has been Via Technologies, a Taiwan-based semiconductor company. (In 2015, Intel Corporation acquired Via's CDMA business.) Via's CDMA processor sales have focused on processors used in lower-tier handsets. This is in part because Via has not offered multi-mode processors that combine CDMA functionality with UMTS or LTE functionality. MediaTek Inc. began to offer CDMA processors in 2015. MediaTek has not offered multi-mode CDMA processors suitable for use in flagship handsets. As to the competition of LTE processors in 4G era, since the introduction of the first LTE networks around 2010, LTE functionality has continually advanced, and the relevant standard-setting organizations have released a series of updated standards. Baseband processor manufacturers have had to improve features to keep up (i.e. advanced features and LTE functionality) in order to be used on premium-tier handset. Similar to CDMA standards, competition among manufacturers of LTE baseband processors thus occurs in tiers, including premium (sometimes further divided into "premium" and "high"), mid, and low tiers. Qualcomm has consistently been the dominant supplier of premium LTE processors. MediaTek, for instance, has lagged behind Qualcomm in LTE baseband processor sales, and has not supplied premium LTE processors for flagship handsets. Extracted from *Federal Trade Commission v. Qualcomm Incorporated*, Case 5:17-cv-00220, Document 1, Filed 01/17/17, pp. 6-11.

the existing position of certain enterprises? Why not leave the competition issue to the market itself so that the result of the operation of the market reveals the true value of consumers? In fact, the consumers are holding the end products such as mobile phones and tablets and not chips. The brand owners and OEMs of end products would even appoint the supplier if such supplier can provide the processors fulfilling consumer's preference and needs. If Qualcomm's products are not as good as those of its competitors in price, quality and other performance, would the brand owners and OEMs of end products continuously not use MediaTek's products simply because of the "no license, no chips" strategy? Or is there another possible explanation that Qualcomm's products are more likely to fulfill the quality requirements and so Qualcomm was chosen to satisfy selective consumers? Furthermore, even if Qualcomm enters into licensing agreements under which its rights are exhausted per its competitors' wish, the cost for chips of its competitors will certainly increase. In the current situation where no royalties are paid, the competitors are not chosen because their products do not meet the quality requirements. If taking into account the increase of price, will the competitors' competitiveness be even weaker?[12]/ In addition, the price that end consumers paid for mobile phones is decided by the brand owners and the chip is only part of the intermediate input and the royalty is only part of the cost for chip production. Thus, it is hard to say that end products being too expensive and unfavorable to consumers can be entirely and directly attributed to the patent licensing model. The Decision should have provided more descriptions and evidence for the conclusion on the factors considered in the market in issue and the relevant market. Due to the lack of clear explanations, the Decision appears to be protecting the competitors instead of protecting competition. Because the analytical method of this Decision is to confirm the existence of the subject conduct in form without further considering Qualcomm's possible defenses (such as necessity, efficiency, welfare to end consumers, etc.) and

[12]/ The Decision, p. 58, mentioned that "… from the baseband processor suppliers' point of view, the risk of infringement for royalties calculated by mobile phones is obviously not equivalent to the risk of infringement for chip suppliers. Qualcomm's refusal to license to its competitors is obviously increasing the cost of its competitors…". As we all know, the competitors were using Qualcomm's patents without paying royalties and competing with Qualcomm in the market. According to the view of the Decision, it does not allow Qualcomm to collect royalties at the stage of manufacturing mobile phones because such will increase the competitor's cost with an inappropriate percentage. Then, when should a patent holder collect [its royalties]? Also, what is the method of calculation which can ascertain that the charges collected during the chip stage will be lower than the total amount collected for the processing of mobile phones? The Decision did not provide arguments on these aspects, but based its arguments completely on the standpoint of Qualcomm's competitors and such was biased.

without including a comprehensive evaluation of the possible short term and long term effects of the subject conduct on the interests of companies in the same industry, downstream companies and end consumers, the Commission has adopts an illegal per se position when applying Article 9, Item 1 of the Fair Trade Act. It is highly in doubt as to whether this is consistent with the legislative intent of Taiwan's regulations prohibiting abuse of a monopoly position or the trends of the enforcement of competition laws in Europe and the United States.

Taking Item I of the main text of the Decision ("Entering into a rebate clause with a specific enterprise for exclusive dealing arrangements") as an example, the content of the analysis as provided in the Decision (see the Decision, p. 64) is mainly to confirm that Qualcomm indeed entered into an agreement with Apple Inc. to provide rebates on royalties to protect the exclusive use of Qualcomm chips. Immediately after that, the Decision stated that "…. This exclusive dealing clause is in fact a restriction on using the baseband processors provided by Qualcomm's competitors; as a result, end mobile devices all use Qualcomm's baseband processors. Although … [Apple Inc.] continued to evaluate potential baseband processor suppliers, not until … that [Apple Inc.] launched some mobile phones using the baseband processors of …. Such great amount of rebate is definitely the consideration that Qualcomm induced … to avoid using the chips provided by its competitors…". This statement lacks a substantive demonstration and link between the facts and the conclusion. There may be multiple reasons why Apple Inc. did not use the products of other suppliers, and at least one of the reasons is, as it admitted, that the quality of the products of other companies did not meet its requirements. It is hard to imagine that an enterprise like Apple Inc. would not consider maintaining the quality of iPhone and controlling all possible risks as its most important principle, and would rather be induced by Qualcomm's rebate and be willing to take the risk of defects in the quality of its products and damaging its reputation. In other words, if Qualcomm's products did not meet Apple Inc.'s quality requirements, even though higher rebates were provided, Apple would not use Qualcomm's processors in the iPhones. Also, it is an odd consideration that the purpose of choosing non-Qualcomm processors was to enhance the technology of other countries. This demonstrates that the Decision's accusation is based on the "form" and is not a conclusion based on reasonable analysis. It seems that so long as there are so called exclusive dealings and royalty rebates conducted by a monopolistic enterprise, it is "unfair" anti-competition. The legal consequences are decided by the type of conduct, and the subject conduct is considered as per se illegal. The Decision also stated that Qualcomm's conduct was purely for strengthening Qualcomm's exclusive position and “there were no economically justifiable reasons”. However, given that the Decision did not provide any economic analysis on why the conduct at issue is “unfair” anti-competition, how can it request or evaluate the economically justifiable reasons which might be raised by Qualcomm? Not long before the Decision, in September of this year (2017), the Court of Justice of the European Union issued a judgment in the litigation between Intel and the European Commission[13]/. The Advocate General rendered a legal opinion in October, 2016[14]/, which can be used as a direct reference in the handling of this case.

Intel is the standards-setting company and the manufacturer of central processing units (the “CPUs”) (or chipsets) for X86 CPU. X86 CPU is used in the “Windows” systems and the servers in desktops and notebooks. Intel’s position is like Qualcomm’s position in this case, having a dominant position in the product market. Intel implemented a strategy of giving payments or rebates to distributors along with a prohibition on purchasing its competitors’ products. This strategy attracted the computer brand companies, such as Dell, Hewlett-Packard Company (HP) and Acer Inc. to deal with Intel, which caused the filing of complaints by Intel’s major competitor, Advanced Micro Devices (“AMD”), to the European Commission. The European Commission made its decision in 2009, determining that Intel’s whole model violated Article 102 (previously Article 82) of the Treaty on the Functioning of the European Union[15]/. That decision held that Intel abused its monopoly position which was illegal given the fact that Intel, being a monopolistic company, used royalty rebates as a complementary measure to restrict purchases from competitors. To prove that Intel’s business model is an abuse of its market position, the European Commission adopted the as-efficient-competitor test (the “AEC” test)and came to the conclusion that Intel’s anti-competition conduct harmed consumers’ choices and was disadvantageous to innovation. As a result, Intel was fined in the amount of more than one billion Euros. In other words, the conduct of the other major player in the chip market is highly similar to Qualcomm’s conduct and also faced a severe challenge under competition law in other cases.

Intel disagreed with the decision of the European Commission and appealed to the

[13]/ Case C-413/14 P – Intel Corp. v Commission, Judgment of the Court (Grand Chamber) of 6 September 2017, ECLI:EU:C:2017:632.
[14]/ Opinion of Advocate General Wahl delivered on 20 October 2016, Case C-413/14 P – Intel Corp. v Commission, ECLI:EU:C:2016:788.
[15]/ COMP/37.990 Intel, The Commission Decision of 13 May 2009, http://ec.europa.eu/competition/antitrust/cases/dec_docs/37990/37990_3581_18.pdf, last visited on 6 Nov. 2017. Also see the Summary of Commission Decision on Case COMP/C-3/37.990 – Intel, OJ 2009 C 277/13.

General Court of the European Union to revoke the decision or at least reduce the amount of the fine. The General Court rejected Intel's appeal in June 2014[16]/. Intel then appealed again to the Court of Justice of the European Union, arguing that the judgment had many errors in applying the law. The first argument was that "the General Court erred in concluding that, such exclusive rebates are inherently capable of restricting competition and, thus, are anticompetitive without any need to consider either the relevant circumstances of the rebates in question or the likelihood that rebates might restrict competition" [17]/. In other words, the issue here is that whether the conditioning of royalty reductions on exclusive dealing obligations, similar to Qualcomm's conduct in nature, is illegal conduct, or should we conduct a complete economic analysis based on the nature of the subject conduct to determine the effect of anti-competition by the subject conduct?

Regarding this issue, the Court of Justice held that, even though the European Commission implemented the "AEC" test, the previous court should have examined Intel's arguments, including the error of the original test, and all the circumstances to determine whether the subject conduct is likely to restrict, or is capable of restricting, competition. However, the previous court failed to do so and, thus, the previous judgment was revoked by the Court of Justice and the case was returned to the General Court. This decision of the Court of Justice is the same as the opinion of the Advocate General, and some of the Advocate General's opinions are worth discussing.

First, in the introduction, the Advocate General Wahl emphasized that all competitors should face intense competition, and not every exit from the market is necessarily a sign of abusive conduct, but rather a sign of aggressive, yet healthy and permissible, competition. This is because, given its economic character, competition law aims, in the final analysis, to enhance efficiency. The importance placed on efficiency is also reflected in the case-law of the EU Courts. From that emphasis it naturally follows that dominance as such is not considered to be at variance with Article 102 of the Treaty on the Functioning of the European Union. Rather, only behavior which constitutes an expression of market power to the detriment of

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[16]/ Case T-286/09 – Intel v Commission, EU:T:2014:547, hereinafter referred to as the 'judgment under appeal'.

[17]/ Judgment under appeal, para. 99. "…the General Court erred in concluding that, unlike other rebates and pricing practices, such rebates are inherently capable of restricting competition and thus are anticompetitive without any need to consider either the relevant circumstances of the rebates in question or the likelihood that the rebates might restrict competition."

competition and, thus, to consumers is prohibited and accordingly sanctioned as an abuse of dominance. Therefore, the effect of anti-competition is most crucial. Irrespective of whether we are dealing with an enforcement shortcut such as that offered by the concept of "restriction by object", EU competition rules seek to capture behavior that has anticompetitive effects. To date, the form of a particular practice has not been deemed important[18]/.

The Advocate General Wahl also explained that royalty rebates, a business decision beneficial to counterparties, cannot definitely result in the foreclosure effect of anti-competition. A subjective intent to foreclose competitors does not translate into capability to restrict competition. It is "putting the cart before the horse" [19]/ that it is assumed when conducting analysis that the strategy under consideration was abusive and then based on such assumption, it is determined that such conduct is capable of restricting competition. Additionally, the Advocate General Wahl believed that other circumstances should also be taken into consideration, such as the market coverage and duration of the rebates, the performance of the competitors in the market and declining prices. The AEC test was necessary and should not be ignored as the previous court did[20]/.

The opinions of the Court of Justice of the European Union for the Intel case provide many perspectives for conceptualizing the issues, which could actually be a reference before the Decision was made. Although such opinions cannot be adopted entirely due to this case involving other factors such as licensing of standard essential patents, the Intel case at least is helpful to the economic analysis in this case. With respect to the evaluation of the effect of rebates terms, in addition to the concern over potential anti-competition, it is recognized in economic studies that it is possible that rebate terms may advance efficiency of competition, making the positive effect greater than the negative effect, and the major indicator to be examined is whether total output has increased or not[21]/. Although a change of the practice will necessarily increase the burden of the regulator, it is a necessary adjustment in order to avoid the over-intervention by the government making the market lose its own competition mechanism.

Finally, although Qualcomm performs the strategy of "not granting license to

[18]/ Opinion of Advocate General Wahl, *supra* note 14, paras. 41-43.
[19]/ *Ibid*, para. 128.
[20]/ *Ibid*, para. 172.
[21]/ For detailed analysis, please see Report by the EAGCP, "An economic approach to Article 82", *supra* note 2, pp. 35-38.

competitors", it is different from a normal situation where a patentee refuses to license. A normal refusal will make the opposite party completely unable to use the content of the patent, otherwise it would be a patent infringement. Competitors in this case who signed a contract of "non exhaustive, no claims against each other" with Qualcomm, however, can still use the patent to manufacture and sell chips without paying royalty[22]/ and can compete in the market with profits. It cannot be denied that it is possible for competitors to feel restricted when pursuing dealings of chips with counterparties under the circumstance of lack of exhaustive patent license agreement. However, the documents in the files shows that MediaTek, the competitor of Qualcomm, is still active in the WCDMA chip market which is 3G technology standard and held a leading position during 2013 to 2016 in both sales volume and sales amount. Although the market generally thinks that MediaTek's processors are used in middle or low level mobile phones, when we observe the mobile phone end product market as a whole, MediaTek and Qualcomm provide differentiated products for mobile phones of different levels, and satisfy different preferences and needs of consumers in the global market (the "geography" market defined in the Decision) and in Taiwan. Thus, Qualcomm did not prevent competitors from competition or reduce the competitive strength of the competitors or make the competitors less competitive by using its business model. It would be another issue as to whether it fulfills the substantive concept of the definition of a monopolistic enterprise under Article 7 of the Fair Trade Act, i.e. "having a dominant position to enable it to exclude competition".

II. <u>The definition of unilateral market causes a lack of logic in the link between construction of market power and abuse of exclusivity by a monopolistic enterprise</u>

Regarding the definition of a market, the Decision defines the product market as being "baseband processors using CDMA, WCDMA and LTE and various telecommunication standards" as a market and concludes that Qualcomm is a monopolistic enterprise in such market. Although the Decision refers to the "technology related market" (please see the forth line on page 53 of the Decision), according to Item I of the main text and the whole concept of the Decision, it is the only language in the Decision (such as the fourteenth line on page 49 of the Decision;

[22]/ Qualcomm has testified that, "… Qualcomm has not claimed patent infringement of any chip suppliers from 2006 till now; … . Thus, since 2010, no component supplier has ever paid royalties for chips to Qualcomm. … " See the Decision pp. 32-33.

the fourth line on page 51) and the Commission does not expressly recognize Qualcomm as being a monopolistic enterprise in the technology market. In other words, the Decision comes to the conclusion of three unlawful behaviors as referred to in the main text of the Decision based on the determination that Qualcomm is a monopolistic enterprise in the product market and states that Qualcomm's conduct under its "entire business model" harms the competition in the baseband chip market. My opinion is that such a definition of unilateral market cannot lead to the conclusion that Qualcomm has the power of a monopoly to prevent competitors from competition in the product market and that Article 9, Item 1 of the Fair Trade Act should apply.

Based on the theory of exhaustion of rights, in a sale of licensed products, the patent rights of the product are exhausted, i.e. generally the dealing includes the product and the patent rights attaching to the product. However, is it necessary for this case to additionally define a technology market? In theory, it should be decided by observing the connection between the technology and the product. If a specific technology is a production input of a product, the need to seek licensing to legally obtain this technology is called in economic science a "derived demand for inputs"[23]/. When price elasticity or demand for technology license is relatively low, such technology is likely to constitute a market, which is not different in concept from a normal product market. In other words, for a patent technology which is a production input, it should be examined by a hypothetical monopoly test. When royalties are raised to a level which exceeds the competitive level, but the demand decreases very little or the demand of being licensed still remains the same, it means that such technology is an irreplaceable input for producing a specific product. Further, if such technology is an irreplaceable technology or the switching cost is very high and the amount of royalty does not represent a high percentage of the production cost, it is possible that the technology market exists in this specific case[24]/. The patent technology in this case which is considered as standard and essential patents has similar traits, being unavoidable, irreplaceable and not easily transferred production inputs for manufacturing various baseband processors. Thus, the establishment of a technology related market should be considered as a premise to further correctly analyze the market position of the patentee and the effect of its conduct.

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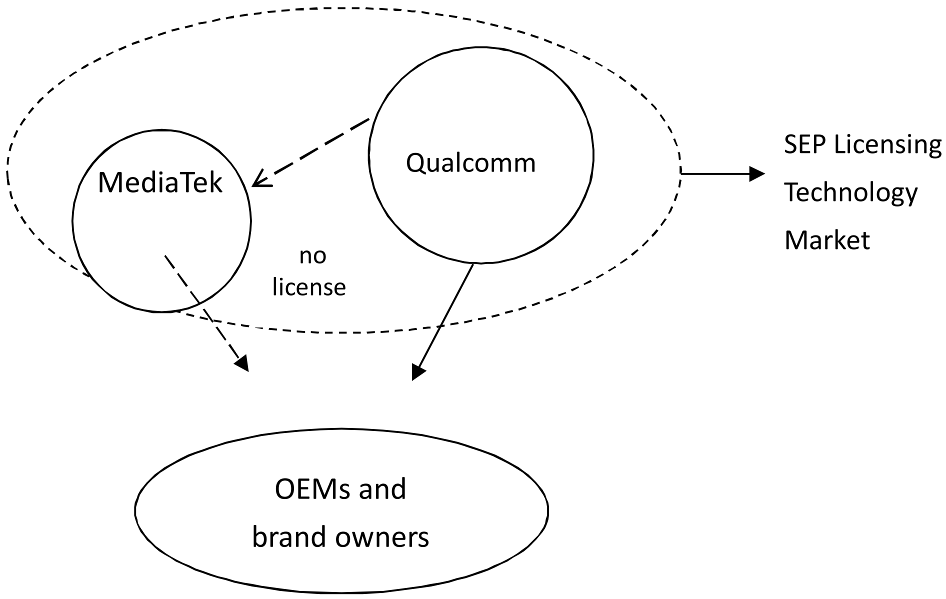
[23]/ Joshua A. Newberg, "Antitrust for the Economy of Ideas: The Logic of Technology Markets", 14(1) *Harvard Journal of Law and Technology*, p. 105 (2000).

[24]/ *Ibid*, pp. 104-107.

Qualcomm has both the patent licensing business and the product business. The Decision, however, recognizes Qualcomm as a monopolistic enterprise in the product market without defining a technology market. In the discussions of the Decision determining Qualcomm as a monopoly, it is stated that "…the technology market of standard-essential patents is irreplaceable…"[25/], but, considering the context of the Decision, it mainly relies on the data of revenue and production capacity to determine that Qualcomm has a monopoly position in the market of the said processors, and the descriptions of technology standards are only a supplement, not for defining a technology market which is independent and closely neighboring to the product market. As for the said product, competitors are not Qualcomm's counterparties and do not rely on Qualcomm's processor products and, thus, it is impossible for Qualcomm to use a strategy regarding product transactions to directly pin the competitors down. The technology licensing is the target that competitors intend to trade with Qualcomm; however, the Decision does not define the technology market and, therefore, does not recognize Qualcomm as a monopolistic enterprise in such market. So how can it come to the conclusion that Qualcomm's refusal to "license" to its competitors constitutes an illegal abuse of its monopoly position? This is confusing. As a result, the Decision concluded that "Qualcomm abuses its dominant position in the baseband processor market, due to its refusal to enter into licensing agreements with its competitors". Considering the structure that the Decision tries to establish, the reasoning should be that Qualcomm's use of the market power in the patent licensing market has been extended to the product market and there is a foreclosure effect in the product market (decreasing the willingness of OEMs to purchase the competitors' products). That is, a reasonable explanation is that "Qualcomm abuses its dominant position in the technology market to prevent Qualcomm's competitors from competing with it in the product market" (as shown in the chart below). Also, the Decision (see Item II.2 of the main text) requires Qualcomm to "suspend the terms in the … agreements with the competitors". It is obvious that it is impossible for Qualcomm and its competitors to sign a chip supply contract. The requests under Item II.1 of the main text are all about the terms in relation to the relevant patent contracts (although it is not called a "licensing") between Qualcomm and its competitors, which definitely fall within the scope of the technology market. The Decision does not recognize the existence of the technology market but, based on the regulations prohibiting abuse of monopoly (i.e. Article 9, Item 1 of the Fair Trade Law), orders Qualcomm not to conduct abusive exclusive behaviors, which is a logical contradiction.

[25/] See the Decision, pp. 50-51.



III. The reasoning that a breach of FRAND commitment by refusing to license competitors constitutes a violation of competition laws is an incorrect reason

Another basis on which the Commission found that Qualcomm's refusal to grant a license constituted a violation of the Fair Trade Act was that Qualcomm did not meet its FRAND commitment made to the relevant standard-setting organization. Specifically, as Qualcomm's patents were selected as essential patents, Qualcomm agreed to license such patents to any willing licensees on "fair, reasonable, and non-discriminatory" terms. However, Qualcomm breached its commitment. With respect to the intellectual property rights policy ("IPR Policy") of the European Telecommunication Standard Institute ("ETSI") which was the main reference of the Decision, in addition to section 6.1 of the ETSI IPR Policy, the FRAND related clause which was referred to in the Decision the most times, it is also noteworthy to pay attention to Paragraph 2 of the same section stating that "the above undertaking may be made subject to the condition that those who seek licenses agree to grant a reciprocal license[26]/". Also, section 3.2 of the ETSI IPR Policy provides that IPR holders, whether or not they are members of ETSI, should be adequately and fairly rewarded for the use of their IPRs[27]/. This shows that the standard-setting

[26]/ ETSI Intellectual Property Rights Policy. 6.1: …The above undertaking may be made subject to the condition that those who seek licenses agree to reciprocate…

[27]/ ETSI Intellectual Property Rights Policy. 3.2: IPR holders whether members of ETSI and their AFFILIATES or third parties, should be adequately and fairly rewarded for the use of their IPRs in the implementation of

organization emphasizes the balance of interests between licensors and licensees and, looking into the ETSI IPR Policy, there are no such concepts that the potential licensees should always be treated as the weaker party which needs special protection or that licensors should act in favor of licensees[28]/. Also, the ETSI neither verified the effectiveness or necessity of the patents which were considered to be adopted as standard technology nor provided for a clear definition of FRAND licensing terms. Thus, a negotiation between a licensor and a licensee with respect to a licensing agreement is a matter of freedom of contract. If there is any dispute arising out of a failure of such negotiation, arbitration or litigation should be the appropriate way to resolve such dispute. Patent holders are entitled to legally exercise their patent rights. Article 45 of the Fair Trade Act also provides that "no provision of this Act shall apply to any proper conduct in connection with the exercise of rights pursuant to the provisions of……the Patent Act or other Intellectual property laws." Thus, where there is a case involving SEP holders who have made a FRAND commitment, how should it be determined that the patent holders "improperly" exercise their rights and thus can be punished in accordance with the Fair Trade Act? This is one of the key issues in this case and should be thoroughly examined. In this regard, there are plenty precedents of the European Commission and courts of the EU members that can be referred to. The case regarding the smartphone wars involving information and communication technologies and various leading businesses (Google, Apple, Samsung, Microsoft, Huawei, and Cisco) and the litigation worldwide can serve as a valuable reference source.

There are two categories of cases with respect to patent law and competition law. The first category is that patent holders exercised their patents to apply to the courts of the EU members for an injunction to prevent competitors' allegedly infringing products from sale. The second category is that, the European Commission initiated an investigation into a SEP holder's application to a court for an injunction against its competitors and issued a sanction for an abuse of dominant position. Many cases brought to the courts of the EU members were brought to German courts. In practice, German courts have been inclined to protect patent holders and held a view that only in an exceptional circumstance, seeking an injunction by the patent holder would constitute an abuse of the dominant position. The Orange Book Standard case

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STANDARDS and TECHNICAL SPECIFICATIONS.

[28]/ Another standardization organization, the Institute of Electrical and Electronics Engineers ("IEEE"), includes a provision with the same concept in its IEEE-SA STANDARDS BOARD BYLAWS, please see: http://standards.ieee.org/develop/policies/bylaws/sect6-7.html#6, last visited on 4 Nov. 2017.

decided by the German Federal Court is the symbolic case in this respect[29]/. The ruling of such case provides that, unless there are the following circumstances, seeking an injunction by a patent holder to prevent a defendant from selling allegedly infringing product would not violate the competition law: (1) The defendant intending to implement the subject patent needs to first propose unconditional and binding licensing terms and favorable terms including royalties to the extent that, if the patent holder refuses to grant a license, such refusal constitutes unfair damages to the defendant or a discriminatory treatment (i.e., a situation where the patent holder is obliged to accept the proposed licensing terms), and (2) if the defendant has actually implemented the patent before reaching a licensing agreement, the defendant needs to provide its rights with respect to a bank account or other collateral as security so as to establish its capacity to pay royalties under the licensing agreement[30]/.

As opposed to the views of the German courts which have been inclined to protect licensors, in the Motorola case, the European Commission took a stricter position to review the patent holder's conduct[31]/. In such case, Motorola held essential patents with respect to General Packet Radio Service (GPRS) (2G cellular technology) adopted by the ETSI. Apple implemented various standards including GPRS in the first launch of iPhone in 2007. In 2011, Motorola sought a court injunction against Apple in Germany based on Apple's infringement of the patent rights to prevent iPhones from sale in Germany. In the course of the injunction proceedings, Apple had proposed licensing terms several times to Motorola based on the Orange Book Standard case, but Motorola refused the offer. After the German District Court granted an injunction, Apple proposed licensing terms a sixth time, which resulted in a suspension of such injunction, and both parties finally reached a settlement agreement. In February 2012, Apple requested the European Commission to investigate Motorola claiming that Motorola's breach of its FRAND commitments made to the ETSI violated the EU

[29]/ Judgment of the Bundesgerichtshof of 6 May 2009-Case KZR 39/06-Orange Book Standard. Reference is made to Nicolas Petit, "Injunctions for FRAND-pledged SEPs： The Quest for an Appropriate Test of Abuse under Article 102 TFEU", 9 European Competition Journal, p. 678, note 5 (2013). Orange Book Standard was also referred to in the TFTC precedent regarding technology licensing by three businesses including Philips. Although German Orange Book Standard case did not involve SEP, standards set by Philips and Sony for recordable CD were deemed as de facto standard and essential patents and the relevant patent holders also sought German court to issue an injunction.

[30]/ Opinion of Advocate General Wathelet on Case C-170/13 Huawei Technologies Co. Ltd v ZTE corp. and ZTE Deutschland Gmbh, ECLI:EU;C;2014;2391, para. 31.

[31]/ Commission Decision on Case AT. 39985 – MOTOROLA – Enforcement of GPRS Standard Essential Patents, C(2014) 2892 final, 29.04,2014.

competition law. In April, 2014, the European Commission held that Motorola violated Article 102 of the Treaty on the Functioning of the European Union. The reasons were that Motorola, as a business holding a dominant position in the relevant technology market, refused to respond to the offer proposed by Apple in accordance with the FRAND principles, that the result of the injunction had an adverse effect on competition which were: a temporary prohibition on the sale of Apple's phones; the inclusion of the terms unfavorable to Apple in the settlement agreement; an adverse impact on the developments of the relevant standards in the future, and Motorola did not provide persuasive arguments to justify its conduct. It is also noteworthy that in such case, the European Commission also explained in what circumstances patent holders who have made a FRAND commitment were permitted to seek an injunction to protect their rights: (1) the potential licensee has financial difficulties and is not able to pay the debts; (2) the court which has jurisdiction over the assets of the potential licensee cannot provide appropriate enforcement to obtain remedy; or (3) the potential licensee does not have a true intention to enter into FRAND-compliant licensing terms[32]/.

There is another European Commission case, namely, a Samsung case[33]/, in which the European Commission conducted an investigation to determine whether there was an abuse of the dominant position. In this case, the factual background is similar to that of the Motorola case, i.e., Samsung possessed essential patents of 3G UMTS (Universal Mobile Telecommunication System) and made a FRAND commitment to the ETSI, and notwithstanding such commitment, beginning from April, 2011, Samsung sought court injunctions against Apple in many EU member countries. In 2014, the case was closed by a "commitments decision" between Samsung and the European Commission in which Samsung agreed to comply with the conditions set out in the decision and not to pursue any injunction against any potential licensee in the European Economic Area for a five year period[34]/.

When a German court heard a dispute of the same nature between two Chinese enterprises, because different views were taken by the courts of the EU member countries and the European Commission in terms of law enforcement, the German

[32]/ Summary of Commission Decision on Case AT. 39985 - MOTOROLA - Enforcement of GPRS Standard Essential Patents, OJ 2014 C 344/6, para. 23.
[33]/ Summary of Commission Decision on Case AT. 39939 – Enforcement of UMTS standard essential patents, OJ 2014 C 350/8.
[34]/ Case COMP/C-3/39. 939-Samsung Electronics Enforcement of UMTS Standard Essential Patents, Commits Offered to the European Commission, 3 Feb, 2014, http://ec.europa.eu/competition/antitrust/cases/dec_docs/39939/39939_1502_5.pdf, last visited on 4 Nov. 2017.

court filed a request for a preliminary ruling with the European Court of Justice to seek clarification regarding the circumstance in which a patent holder's seeking a court injunction would constitute an abuse of a dominant position. This is the historical background of the decision issued by the European Court of Justice regarding the Huawei v.ZTE case which was referred to in pages 54 through 55 of this Decision[35]/. From this Huawei v. ZTE decision, there are several notable points: First, the decision in this case did not provide a substantive explanation regarding FRAND terms as this was not the subject matter for which the German court requested clarification[36]/. Second, the court decision was intended to clarify procedural issues including procedures for SEP holders to exercise their patent rights (e.g. informing infringers of the fact of the infringement and promptly proposing a FRAND compliant offer[37]/) as well as procedures required to be implemented for potential licensees to assert the FRAND defense (e.g. showing the willingness to enter into an agreement on the FRAND terms, expressly responding to the offer in good faith, proposing a counter offer, providing evidence of its financial conditions[38]/). In the course of negotiation, if both parties have complied with the above procedures, then the SEP holder's seeking an injunctive order to exercise its patent rights is a justifiable action and does not constitute an abuse of a dominant position in violation of the competition law, and the potential licensee may legitimately make the defense asserting that the patent holder abused its dominant position by breaching its FRAND commitment. If both parties fail to reach an agreement on the royalties, they can refer the issue to an independent third party to make a determination[39]/.

The purpose of repeatedly examining details of the EU practice is to provide relatively comprehensive information so as to facilitate a better understanding of the EU's FRAND related competition law precedents and a better evaluation as to whether the reference to the EU precedents in, and the use of such precedents as the base of, the Decision is appropriate.

In light of the history of how the European Union has dealt with SEP cases during the past ten years, there are several noteworthy points：first, the issue of whether an exercise of patent rights is improper is often raised in cases where a SEP holder petitions a court to issue an injunctive order; second, the purpose of seeking an injunctive order by the SEP holders is to prevent competitors' products from sale or

[35]/ Case C-170/13 Huawei Technologies Co. Ltd v ZTE Corp and ZTE Deutschland GmbH, ECLI:EU:C:2015:477.
[36]/ Opinion of Advocate General Wathelet, supra note 30, para. 38.
[37]/ Case C-170/13 Huawei v ZTE, supra note 35, paras. 61-64.
[38]/ Ibid, paras. 65-67.
[39]/ Ibid, para. 68.

coming to the market; third, the defense raised by competitors to assert that SEP holders improperly exercised their patent rights was, in all cases, that the SEP holder breached its FRAND commitment (i.e., in this type of case, the FRAND commitment was used as a defense by the accused infringers); forth, disputes as to whether the licensing was done in compliance with the FRAND commitment were primarily resolved by court judgments; fifth, the adoption of the licensing terms which substantively violated the FRAND commitment would not necessarily constitute a violation of Article 102 of the "Treaty on the Functioning of the European Union". The competition law enforcement agency should follow its normal processing practice to investigate, analyze and decide the relevant cases. For example, in the Motorola case, the European Commission examined each factor such as market definition, recognition of dominant position, the facts of the abuse, the anti-competitive effect on the market and the arguments submitted by the party who was found to have violated the competition law. In that case, exceptional circumstances, such as the necessity to establish standards in the information and communication industry, characteristics of the relevant SEPs and the legitimate expectation of third parties to be licensed based on the FRAND commitment made by the patent holders were also considered. What needs to be emphasized is that the European Commission still used Article 102 as its decision basis. Although the decision-making process focused on patent holders' FRAND commitment in terms of the balance of interest between two sides, the European Commission still reviewed elements provided in Article 102 to determine whether the competition law was violated due to a breach of the FRAND commitment. Such has nothing to do with the rules of the standard-setting organizations. This principle remained unchanged in the Huawei v. ZTE case.

Now I would like to review the accusation of "refusing to license to its competitors" in the Decision. The Decision tried to connect the fact that Qualcomm had made FRAND commitments with its refusal to license to its competitors, and then concluded that such "restricts the competition in baseband processor market". It appears that the Decision took a view that, if a patent holder breaches their FRAND commitment and refuses to grant a license, an abuse of market power can be found. Thus, after quoting the decision of the Huawei v. ZTE case by the European Union, it held that "if the SEP holders do not implement above procedures, there is an abuse of market power"[40]/. However, what a FRAND commitment involves is technology licensing, not a product transaction. In other words, the point at issue is whether Qualcomm refused to grant a license rather than its refusal to sell products. As

[40]/ The Decision, P. 55, line 10.

discussed in the preceding Item II, The Decision neither clearly defines the relevant technology market nor determines that Qualcomm was a monopoly in the technology market. As such, why are the regulations prohibiting an abuse of monopoly applied to refusal to grant a license to its competitors in a case where a company which is not determined as being a monopoly in the technology market?

Secondly, if Qualcomm's competitors wish to assert that the fact that Qualcomm only agreed to enter into license agreements under which (i) Qualcomm's patent rights are not exhausted, (ii) Qualcomm only agreed to not sue or claim infringement against each other, and (iii) Qualcomm required the provision of sensitive information to Qualcomm, etc., is not in compliance with FRAND terms and constitutes a violation of the Fair Trade Act, the Commission should refer to the Motorola case, use the approach generally applicable to anti-competition cases and examine this case in accordance with the requirements set out in Article 9, Item 1, of the Fair Trade Act. As I stated at the beginning of this Item, the obligations of FRAND commitments under the standard-setting organization rules is not to favor either the patentee or the licensee, but to treat both parties fairly. In addition, providing licensing in accordance with the FRAND terms is a commitment that a patentee made to the standard-setting organization, and its effect under contract law should be interpreted solely based on the governing law applicable to the rules of that organization[41]/. As to applying the FRAND commitment in the competition law context, the FRAND commitment itself does not increase or decrease the elements, standards or burden of proof provided by the Fair Trade Act. The FRAND terms can be merely treated as the minimum requirements of the patentee's conduct in its licensing activities and such fact needs to be considered when applying the Fair Trade Act. It does not amount to a legal element under the relevant law. It is a misunderstanding that, so long as the FRAND requirement is not met, an abuse of market power likely would arise. In the Huawei v. ZTE ruling, the so called FRAND compliant conduct that was examined was not only the licensor's obligation but also the licensee's obligations. For example, the Huawei v. ZTE ruling explicitly stated that potential licensees should actively take steps in good faith to become a licensee. Whether such obligations have been performed is a matter of fact that needs to be investigated on a case by case basis.

Also, it should be noted that all of the above referenced EU precedents involve a fact pattern where patent holders were seeking a court injunctive order to restrict the

[41]/ For example, "European Telecommunications Standards Institute" has set out the governing law of its intellectual property policy to be French law. See ETSI Intellectual Property Rights Policy, Article 12.

sale of infringing products. In each of such cases, there was an actual “exercise” of the patent rights by the patent holder, and the competitor asserted the violation of FRAND terms as a defense. Whether the patent holder’s exercise of its patent rights constituted an abuse was examined in such context. However, in this case, Qualcomm did not make claims of infringement against its competitors and actively exercise its patent rights, or seek an injunctive order. Also, the competitors’ products were not excluded from sale due to Qualcomm’s exercise of patent rights. Rather, the competitors have in fact used the relevant patents to manufacture products and continuously conduct effective competition in the product market. These are different from the fact pattern involved in the EU precedents and, thus, it is questionable as to whether we can directly apply such EU precedents to the present case. In this case, it merely involves the parties’ holding different views as to what a FRAND compliant license agreement should be and Qualcomm’s counterparties’ being unsatisfied with the existing license agreements (providing for the no exhaustion of patent rights terms and mutually not to sue terms), and, thus, asserting that such license agreement are not what a true license agreement should be. However, such agreements do not restrict the implementation of patent rights and do not restrict products from sale in the market. This case is obviously different from the EU precedents in which there was a refusal to grant a license (i.e., to prohibit any alleged infringing products from being the market). Parties to this case should, based on the principles set out in the Huawei v. ZTE decision, continue to negotiate in accordance with the FRAND principles or use an impartial third party (court) to resolve the dispute. There is no need to apply the competition law to intervene in this dispute at this stage. If the Commission wishes to take the view that due to its contents, the existing licensing agreement in this case is not an acceptable technology licensing agreement, then this Decision should include an explanation as to what the contents of this agreement should be in order for this agreement to be FRAND compliant. However, the Commission did not do so, and only cited the *Huawei v. ZTE* case in which there was no discussion of such issues. After comprehensive considerations of various aspects, I am of the opinion that the Decision did not establish a clear correlation between the FRAND licensing requirements and the regulation prohibiting monopoly abuse. In particular, I cannot concur with the Commission’s reasoning that, because Qualcomm breached its FRAND commitment, Qualcomm should be found to have illegally restricted the competition in the product market[42]/. The Decision jumps to the conclusion based on weak arguments. Thus, I cannot concur with the Decision.

[42]/ See the Decision, pp. 59 and 60.

IV. The competition case shall be reviewed according to the facts and analysis. There is no so-called "international trend"

Due to the abovementioned material defects in analysis of the case, I personally disagree with the conclusion of the Decision. Before the Decision was made, there were already high fines imposed by the competition authorities of China and Korea on the grounds that the Sanctioned Party of this case violated their domestic competition laws. The U. S. Federal Trade Commission also filed a complaint against the Sanctioned Party of this case for violating the U. S. antitrust laws. All of a sudden, it seems to be an international trend to punish the Sanction Party of this case. However, the decision of a competition case shall be reached based on the findings from the investigation and the application of correct and practicable research, analysis and argumentation so that the conclusion may be persuasive. Although there are precedents of other countries for reference, the differences between each other should still be noted instead of following them blindly. When looking at the decisions and complaints in the United States, China, and Korea, there are clear differences in terms of their basis and focuses among these country [decisions/complaint] . Let me further explain as follows:

First of all, let's talk about the main subject of the complaint filed in the United States. At present, smartphones particularly value LTE functionality (including continuously improving standards) which is developed for mass data transmission (using smartphones to download video or online games). However, 3G technology is still necessary for providing voice services[43]. Therefore, the dispute over "no license, no chipset policy" of the Qualcomm case in the United States in fact involved only the "multi-module high-end" chipset which affected the market of high-end handsets equipped with CDMA and premium LTE processors. As for the OEM manufacturers, the importance of obtaining such processors is increasing due to the fact that high-end handsets are expensive with higher profit. For a handset brand like Apple, achieving the highest technical specifications of the chipset is an important factor for Apple to maintain the high unit price, high quality and brand image of the iPhone. Qualcomm is the supplier that can meet such needs. Therefore, Qualcomm and Apple precisely reflect the interests of the supply side and demand side in the mobile communication industry in the United States. The complaint of the U. S. Federal Trade Commission only addressed the ""no license, no chipset" policy in the context of such [high-end] products while leaving alone processors that are not implemented in high-end handsets. In other words, for brands who are not limited to Qualcomm chipsets, they clearly will not be affected by Qualcomm's "no license no chipset" strategy given their different options; it is thus not proper to hastily conclude Qualcomm's business model will necessarily cause an exclusionary effect to all competitors. The Decision does not distinguish products that are affected by the "no license, no chipset" policy, but instead covers all processors and competitors manufacturing such products. However, different processors cannot be substituted for each other in fact, and the production capability of manufacturers making processors for use with specific technical standards cannot be easily switched to another. The decisions or indictments of other countries all state that that MediaTek's products are mainly implemented in mid-end and low-end handsets. Apple has also confirmed that due to the quality of MediaTek's processors, MediaTek failed to become the supplier of processors of Apple's high-end handsets. However, the statistics and opinions of the other industry competent authorities all found MediaTek's market share increasing year by year on the basis of its reference board solution and high cost-performance-ratio strategy, coupled with the fact that the major market for MediaTek's products is in China. These facts show that the focus of the TFTC on the harm to competition on this issue should have been different from that of the allegations from the U. S. Federal Trade Commission. Therefore, it is reasonable for the results for both Taiwan and the United States to differ on the final determination.

As for circumstances in Korea, in the 3G era, the number of SEPs owned by Samsung was 3.29% of the total, which became 11.0% in the 4G era and even had the potential to surpass Qualcomm. In addition, Samsung is a manufacturer of chipset design and production (for self-use and also supply to other handset manufacturers), and it also owns the world's largest market share of handsets. Under such integrated production structure, the harm to Korea's market competition as a result of Qualcomm's "no license no chipset" policy, rom the upstream licensing to downstream manufacturing and consumption, is extremely apparent. Samsung's handsets in the 3G era relied on Qualcomm's chipsets and still need Qualcomm's 3G patent portfolios in the 4G business. Qualcomm's separation of chipset sales and patent licensing affected Samsung in different stages as a chipset competitor and handset manufacturer at the same time, especially when the 4G-era Samsung is well positioned to compete with Qualcomm in patent market. If Qualcomm maintains its "Qualcomm tax" on its competitors' chipsets and continues to affect Samsung's chipset costs with the same intensity, it would be very unfavorable to consumers in directly and indirectly related markets. This was also why the the Korea Fair Trade Commission tried to build a "eco-system" theory to establish the factual basis of

Qualcomm's illegalities. On the contrary, frankly speaking, most of wireless communication related industries in our country are followers in terms of technology, with no one like Samsung, an international entity who has integrated semiconductor design, manufacturing and handset brands while also holding a considerable position in SSOs. In Taiwan, the market of the major chipset supplier MediaTek is in China and handset related manufacturers are Apple's OEM manufacturers. Therefore, when analyzing the possible harm to competition as a result of the "no license no chipset" policy, it is not suitable to follow the reasoning and conclusion of the Korea Fair Trade Commission in terms of both scope and extent. We should have turned our eyes to the existing industrial structure and confirm where exactly did the harm to competition in our country occurred. . As for the decision of China's National Development and Reform Commission in the Qualcomm case, it did not deal with the sanctioned party's overall business model, including the "no license no chipset" policy, but simply referred to the high royalties. After all, China has not built up its chipset manufacturing industries, and the chipsets are still mainly supplied by manufacturers from other countries, even as China has the world's largest handset consumer market, as well as handset manufacturers such as Xiaomi, OPPO, VIVO, Huawei, etc. Therefore, it took the interest of end consumers as the main consideration and requested direct price reduction as the most effective corrective measures in addition to the fines.

The competition competent authorities in different countries may easily reach different conclusions with respect to the impact on the market for the same actions if they start by conducting an economics analysis from the perspective of the harm to competition and consumer welfare, due to the different industry structures among countries. This is natural and reasonable, and only by doing so could there be real administration in accordance with the law. In handling individual cases, competition authorities should be focused only on the fact finding and robust reasoning and analysis; there is no other so-called "international trend".

Dissenting opinions Commissioner Guo Shu-Jen

A. The Patent Act grants the patentee a period of exclusive right to prevent others from the acts of making, selling, licensing and etc., under the purpose of encouraging innovation and technical disclosure, and promoting industrial development. The Fair Trade Act ("FTA") ensures free and fair competition to promote economic stability and prosperity. Therefore, the legislative purposes of the Patent Act and FTA are not conflicting. Article 45 of the FTA provides that "no provisions of this Act shall apply to any proper conduct in connection with the exercise of rights pursuant to the provisions of the Copyright Act, Trademark Act, Patent Act or other intellectual property laws." However, "proper" is an uncertain legal concept. When facing complicated patent licensing cases and determining whether a party's patent licensing is a proper conduct of exercising patent rights, the Commission shall take comprehensive consideration of the nature of patent system, effect on competition, industrial development, economic stability and prosperity and other factors in order to pursue fairness.

B. Qualcomm Incorporated (hereinafter referred to as "Qualcomm") owns a significant number of SEPs in the CDMA, WCDMA, and LTE mobile communications, whose patent licensing model in recent years is to sign a covenant not-to-sue with baseband processor manufacturers (hereinafter referred to as "chipset manufacturers"). Chipset manufacturers do not have to pay royalties for making and selling but the end product handset manufacturers enter into licensing agreement and pay royalties while using chips in the handset. The TFTC's decision No. Gong-Chu-Zi-106094 ("Decision") considered that the licensing model has violated FRAND commitments, and directly or indirectly interfered with chipset manufacturers from participating in the competition. According to the so-called FRAND commitments, the patent policy of SSOs, SEP holders must promise to license standard manufacturers on fair, reasonable, and non-discriminatory terms. Qualcomm entered into licensing agreement and obtain royalties from mobile communication end product manufacturers without forbidding the use of its SEPs from component manufacturers and others, which makes it necessary to discuss whether the licensing model violates FRAND commitments, remedies when commitments are violated, and to discuss whether the TFTC is the competent authority for determination. In addition, the Decision ordered Qualcomm to suspend and amend the licensing model in limited period, which means Qualcomm shall, under the principle of exhaustion, enter into licensing agreement with each manufacturer having needs of using

Qualcomm's SEPs. Is the new licensing model more efficient on transaction? Is the calculation of royalties more fair and reasonable? This licensing model is different from the ones implemented worldwide by Qualcomm in recent years and the calculation of royalties is different. Will our mobile communication industry (including chipset manufacturers and handset manufacturers) be in a more favorable or unfavorable position in the global fiercely competitive market? What are the effects to our industrial development? The above doubtful points are subject to professional economic and industrial analysis. The Decision significantly affected our mobile communication industry with such high amount of fines, which shall be done with firm assurance. I claimed the need to clarify questionable points before making a decision, but as this was not adopted. I could not obtain a firm assurance within limited time and information, therefore, for avoidance of judgment made in short time, I do not agree with the Decision.

C. Moreover, the Decision considers that handset manufacturers agree to enter into free of charge cross-license terms and lose opportunity of fair negotiation due to plight of demand for Qualcomm's chips in connection with Qualcomm's no license no chipset policy, which enhanced Qualcomm's competitiveness in chipset market, interfered with chipset competing companies from participating in the competition, and constituted a violation of Article 9, Paragraph 1 of the FTA, etc. Patent cross-license is common in technology industry. Regardless of whether the value of cross-license is assessed before Qualcomm collects royalties from handset manufacturers, and even Qualcomm's demand for free of charge cross-license is true, compared to compensating handset manufacturers' cross-license, the latter will provide more incentive for handset manufacturers to use Qualcomm's chipset and would reduce competitiveness of competing companies. However, the Commission considers that Qualcomm's demand on handset manufacturers to purchase its chipset for a free cross-license would interfere with competing chipset companies from participating in the competition, the reasoning of which is illogical and I also do not agree.

D. In fact, the core of the influence on our mobile communication industry competition lies in whether the proportion or amount of calculating royalties is fair and reasonable regardless of whether Qualcomm collects royalties based on handset price or on chipset. In other words, the core of this case is whether Qualcomm collects fees higher than the value of patent or adjusts the fees in exploiting its market dominance and causes an effect of restricting competition. However, it is hard to assess the value of patent, the maximization of which is a common business strategy in technology industry. Therefore, determining whether Qualcomm's royalties are fair or reasonable and whether it is a proper conduct of exercising patent rights is extremely complicated and difficult. Besides, the lack of professional economic and industrial analysis of many questionable points in this case and illogical reasoning again show that the investigation of this case is still insufficient to reach a decision. In order to resolve the dispute, the case shall be governed in accordance with the provisions of Article 28 of the FTA regarding suspension of an investigation or the provisions of Article 136 of the Administrative Procedure Act in light of administrative settlements, negotiating with Qualcomm for specific corrective measures benefiting the competitive order and industrial development so as to promote the economic stability and prosperity of our country.

Dissenting opinions Commissioner Hong Tsai-Lung

A. Foreword: the Commission examined Qualcomm case in the 1353th Commissioners' meeting (dated October 11, 2017) and adopted a decision by vote to impose Qualcomm a NT$23.4 billion fine and numbers of corrective measures (detailed in the Decision). <u>However, the case is considerably contestable not only in procedural aspects but also in the substantive sanction, with which I could not agree and the explanations are as follows.</u>

B. Three major defects in the process of Qualcomm case

a) Some commissioners' rights to review and to examine in this case are limited

This case is not a merger case. Therefore, there is no statutory time limit for the Commission to finish the examination. Under normal circumstances, the case shall be sorted unhurriedly, and considering the wide scope involved, more than 40 boxes of files, 2000 pages of research opinions, attachments and decision proposals, all of which, once put on the agenda, require an adequate and fair period of examination given to all commissioners as reasonably possible, however it is not the case in reality.

This case is examined in the Commissioners' meeting held on October 11, 2017. Except the chairperson, vice-chairperson and two commissioners who were aware of the case earlier, the remaining three commissioners including myself first reviewed the case on September 6, 2017. What is more, within a rather short review period, the commissioners were even restricted strictly in their reading hours (from 8 am to 6 pm, online log-in and workday only,) and were not allowed to print out the document (this part was loosened from September 21 after negotiation). Although these restrictions formally were not pointed, for some commissioners who were late in reviewing the case, their rights to review have been affected to a certain extent due to voluminous records and lack of time. The devaluation includes quality of approval or disapproval as well as the opportunity of entire commission to reach a general consensus.

Although I have declared that the review period was too hasty and there were issues of dispute that have yet to be clarified through reasonable examination procedure such as <u>a thorough investigation, detailed examination by all commissioners</u> and <u>a full discussion</u>, etc. However, this case was hastily passed by vote, which is hard to determine the decision was in conformity with due process.

b) No hearings, public hearings, or symposiums were held for the case

The industrial ecology of this case is complicated with numerous stakeholders (including industry and even government departments). Except technical fields such as smart phones and wireless communications, the intersection between technical standard patents and the competition law is quite new and controversial (a lot of gray areas). The investigation and examination requires more participation and brainstorming, however, there were no hearings, public hearings or symposiums held for the case until the end of examination.

In the past, when handling medium-sized or above business scale <u>merger or restriction of competition cases</u>, the Commission had rich experiences of holding hearings, public hearings, or symposiums (as detailed in Appendix 1: Selected hearings, public hearings and symposiums held by TFTC) inviting upstream, midstream, downstream industries, scholars, experts, and government agencies to attend to meeting. However, there weren't any in the Qualcomm case, which is not illegal but obviously inappropriate.

As an independent authority, the TFTC, on one hand has a highly protected status (right) because of its professionalism and trustworthiness, and on the other hand, the administrative sanctions it makes are crucial to the rights and interests of people (power). Its normative evaluations of major cases have indicative meaning as to policy. The self-demanding level of procedural justice and transparency (obligations) shall be even higher than general administrative authorities. Especially when the sanction was highly anticipated with a significant impact on domestic industry as this case, shall solicit actively opinions of industry, experts and scholars and communicate and coordinate with <u>other relevant departments of the Executive Yuan</u> in order to avoid the risks of making a decision behind closed doors and a disposal causing each party to lose.

Once the independent authority neglects the basic principles of democracy and the rule of law including respect, participation and transparency, and exercises power without awareness of self-restraint, the last victim must include the independence we all cherish.

c) The disposal of "Administrative settlements" to Qualcomm remains to be questionable

In the past 25 years since the establishment of the Commission, there have been numerous administrative settlements cases, including the Microsoft case, in which the disputes all involved whether the exercise of intellectual property right violated the FTA (as detailed in Appendix 2: Case summary of TFTC administrative settlements). The administrative settlements were based on Article 136 of the FTA (implemented on January 1, 1998),and according to "Fair Trade Commission Disposal Direction (Guidelines) on Handling Administrative Settlements" Paragraph 2 "Whenever the FTC cannot, upon the investigation conducted pursuant to the FTC authority and duties, clarify the facts or legal relations on which the administrative disposition is based, the FTC may enter into an administrative settlement with the enterprise contract to substitute for the administrative disposition to effectively achieve the administrative goal and resolve the dispute," and Paragraph 3 "the handing office shall submit the decision of whether to enter into a settlement contract and the key points and scope of the settlement contract to the Commissioners' Meeting for review and deliberation prior to the commencement of negotiation."

In fact, is TFTC (a competition law authority) suitable to over-intervene this Qualcomm case involving patent licensing and what impacts the Qualcomm's business model have on Taiwan? Is it rather "clear" in "factual and legal relations"? There have been disputes between departments and commissioners. In consideration of Qualcomm's administrative settlement contract offer officially submitted to TFTC before the commissioners' meeting on October 11, this case is a serious matter which shall be officially submitted to the commissioners' meeting for examination respecting whether to approve or not.

However, with regards to "an offer for administrative settlement submitted officially to TFTC by Qualcomm," some commissioners knew nothing before the commissioners' meeting held on October 11. In other words, these commissioners did not have opportunity to review the content of settlement and understand the pros and cons of the requests in settlement, let alone examination and persuasion of each other in accordance with the Commission's disposal directions in the commissioners' meeting.

As for the final paragraph, 7th point (2) of Decision of this case (No. Gong-Chu-Zi-106094), "there is conflict between elements of administrative settlement stipulated by administrative settlement contract and the Administrative Procedure Act, which has been taken into account by the Commission," the intention to evade the crucial point is obvious. After all, there is still great difference on legal binding force between the so-called "take into account" and "examine."

C. Two major doubtful points of reasoning: exclusion of "rule of reason" and "de-contextualization"

a) Exclusion of "rule of reason" implied that there was no reasonable factor existing in Qualcomm's business model

First of all, the Decision determined that Qualcomm violated Article 9 (monopolistic enterprises abuse market dominance), Paragraph 1 of the Fair Trade Act "directly or indirectly prevent any other enterprises from competing by unfair means." Specific accusation mainly includes 3 major conducts "refusal to license chipset to competitors," "no license no chipset policy," and "entering into exclusive transaction rebates provisions with certain companies."

However, the above accusation not only is Qualcomm's specific market behavior, but also its worldwide patent licensing and pricing model. Since the subject matter of decision is a set of long established patent licensing related business model which is known by industry and not denied by Qualcomm, directly determining without careful evaluation and analysis (including from market efficiency perspectives such as business and transaction cost) Qualcomm's patent licensing model as having "directly or indirectly prevent any other enterprises from competing by unfair means" in conformity with element of Article 9, Paragraph 1 of the Fair Trade Act after confirming Qualcomm's monopolistic position in the chipset related market obviously constitutes fallacy of "tautology" or "circular argument" as the Decision did.

In other words, even when determining "whether a monopolistic enterprise abuses market dominance," the legislative reasoning of the Fair Trade Act shall be taken into account concerning "abuse or not" or "by fair or unfair means" and apply adequately "rule of reason" as the basis for judgment.

The latest version "Antitrust Guidelines for the Licensing of Intellectual Property" published jointly by the United States Federal Trade Commission ("FTC") and the Antitrust Division of the Department of Justice ("DOJ") this year mentioned that in view of technological development and increasingly complicated business model of patent licensing in communication industry, systems such as "cross-licensing" and "patent pool" often function as lowering transaction costs and promoting market efficiency. A competition law authority shall be as cautious as possible when handling these kinds of cases.

This report even further pointed out that since patents are intellectual property rights which have the characteristics of being highly relevant to innovation and difficulties in recovering sunk research and development investment, it is suggested that more leniency shall be given when examining whether exercise of patent licensing violates the competition law in comparison to general property rights, including broadening application scope of “rule of reason”.

Taking the “free of charge cross-license” alleged by the Decision as an example, it is a typical one of insisting on no negotiation for illegal behaviors. The Decision accused Qualcomm of using its dominance in chipset market to compel domestic licensees to accept Qualcomm’s unfair licensing terms and conditions in order to obtain “free of charge cross-license” and “reinforce protection of Qualcomm’s chipset from patent infringement risks.” However, Qualcomm’s business model avoids disputes between Qualcomm’s downstream clients, which effectively reduces friction and transaction costs and helps maintain the overall market order. The Decision’s disregard of this also highlights the lack of support of thinking.

In addition, the same mistake was made in the accusation of “entering into exclusive transaction rebates provisions with certain companies” (loyalty rebate). In fact, the Court of Justice of the European Union released its decision in the Intel case this year demanding that there shall be discretion of “rule of reason” in determination of illegality, especially “whether the manufacturers with the same operational efficiency are therefore excluded” as premise of determining violation of competition law. However, no relevant test was done in the Decision.

Therefore, the first thing to ask shall be whether there is any <u>anticompetitive effect</u> from these “restrictions” Qualcomm is accused of, such as increasing price, decreasing quality of products or exclusion of existing or potential competitors, etc. Next, it must ascertain whether all these Qualcomm-related restrictions have nothing to do with <u>efficiency or promoting competition</u>. In general, it is only sufficient to directly determine that Qualcomm violates the laws if Qualcomm’s “restrictions” are anti-competitive and irrelevant with efficiency.

Unfortunately, there is no above investigation process in the Decision; in contrast, there are the following argumentations: "Qualcomm's refusal to license competitors largely impacted on high-end handset competition. Due to the difficulty in avoiding Qualcomm's SEP and disadvantage position in R&D and innovation regarding competitors' supply of high-end handset chipset, and infringement risks for handset manufacturers using competitors' chipset, Qualcomm holds an uncontested position in high-end handset chip market which may be proved by the ratio of more than 50%, even 80% to 100% of major high-end handsets equipped with Qualcomm's chipset."

In fact, Qualcomm has been a leader in mobile communication technology since 1990s, and the performance of its high-end chipset has been objectively evaluated in the market. As the main source of advantages shall be examined in detail, however, the Decision considers that Qualcomm's patent licensing conducts as "caus[ing] its high-end handset chipset an almost uncontested position in the market," which obviously reverses the role of cause and effect with such description and analysis.

Lastly, the logic of the accusation in the TFTC's Decision is basically to discuss the issue of "fairness" from the perspective of technology demanders or users without considering the motivation and interest of technology providers. Emphasis on technology demanders can speed up diffusion of technology, and emphasis on technology providers would enhance incentive for innovation, both of which shall be balanced, however, there is obviously no such thinking in the Decision.

b) The "de-contextualization" of the decision is without any "responsibility ethics"

There is no denying the fact that the biggest flaw of the Decision is to see only the high-profile and abstract accusations against Qualcomm's global business model without considering the TFTC's foothold and contextualization and consequence of Taiwan's industrial development, which also indicated the lack of reasonable proportion and relevant connection between the amount of the fine and the corrective measures imposed on Qualcomm.

There are at least 4 major categories of manufacturers in Taiwan directly doing business with Qualcomm: 1. Qualcomm's competitors in chipset market, 2. Handset related brand and OEM manufacturers, 3. Communication module and system manufacturers, 4. Semiconductor OEM manufacturers. In other words, this is a very fruitful industrial ecosystem with competition, cooperation and mutually beneficial relations, business opportunities, personnel training, and even technology absorption and diffusion.

Therefore, the Decision determined that the “total royalties of about NT$400 billion collected from domestic entities and the total amount of about NT$30 billion for purchasing baseband chipset from Qualcomm by domestic entities” were “illegal income,” and took relevant statistics as the basis for calculating the amount of fine regardless of the scope of the actual impact, which is extremely biased.

D. Conclusion: sanction of this case shall be replaced by settlements

There are still different opinions regarding how competition law authority should intervene in patent licensing disputes, such as whether the violation of obligations of FRAND (fair, reasonable, non-discriminatory) licensing terms and conditions necessarily violates the competition law (the FTA), such disputes fall under the scope of unfair competition or restrictive competition, which is worth further investigation. However, at least the disposal procedure of this case is deficient with questionable argumentation, with which it is hard to agree.

Moreover, if Qualcomm’s global patent licensing model over the years has faltered, it is more likely to be settled after the lawsuit between Qualcomm and Apple comes to an end rather than the decision of the Commission. Under such circumstance, the Decision of the Commission directly declared Qualcomm’s patent licensing model illegal and requested correction, once Qualcomm fails to amend its model by then, the Commission shall follow up until “Qualcomm stops, amends its actions or takes necessary measures.” The relevant consequences are in line with the interest of Taiwan or not worth pondering.

More importantly, the business relations between many manufacturers, including upstream, midstream and downstream manufacturers in relevant industries such as handset, communications and semiconductor, etc., and Qualcomm are complicated, in which there are both market competition and technology transfer and cooperation. Thus, imposing a single-solution fine and corrective measures may not truly meet the needs of Taiwan’s industries especially when considering Taiwan’s future industrial development, overall arrangement and other factors, the best solution for this case shall still be settlement.

Appendix 1:

Selected hearings, public hearings, symposiums held by TFTC

Organizer	Case	Type of case	Date	Hearings
The 2nd department (before reorganization)	Complaints against domestic cement enterprises for concerted action	Restrictive competition	October 17, 2005	"Alleged engagements of domestic cement enterprises in concerted actions" hearing
Organizer	Case	Type of case	Date	Public hearings
Department of Manufacturing Industry Competition	ASE Group and Siliconware Precision Industries Co., Ltd. filed a merger notification regarding their intention to merge	Merger	November 3, 2016	"ASE Group and Siliconware Precision Industries Co., Ltd. filed a merger notification regarding their intention to merge" public hearing
Department of Service Industry Competition	Chunghwa Telecom Co., Ltd, Taiwan Mobile Co., Ltd, Asia Pacific Telecom Co., Ltd, Vibo Telecom Co., Ltd, EasyCard Investment Holdings Co., Ltd, Far EasTone Telecommunication Co., Ltd. filed a merger notification regarding their intention to set up a joint venture to operate a Trust Service Management (TSM) platform	Merger	January 3, 2013	"Chunghwa Telecom Co., Ltd, Taiwan Mobile Co., Ltd, Asia Pacific Telecom Co., Ltd, Vibo Telecom Co., Ltd, EasyCard Investment Holdings Co., Ltd, Far EasTone Telecommunication Co., Ltd. filed a merger notification regarding their intention to set up a joint venture to operate a Trust

				Service Management (TSM) platform" public hearing
Department of Service Industry Competition	Global Professional Investment Limited and other conglomerates filed a merger notification regarding their intention to acquire all shares of a subsidiary of Hong Kong-based Next Media Co., Ltd.	Merger	November 29, 2012	"Media M&A and Merger Control" public hearing
The 1st department (before reorganization)	CnYes Co., Ltd was complained for its violation of Article 24 of the FTA by exploiting other's efforts	Unfair competition	April 12, 2006	"Relevant issues on application of Copyright Act and the FTA in regards to plagiarizing news reported by competing websites and application of Administrative Penalty Act in regards to illegal actions, etc." public hearing
The 2nd department (before reorganization)	Uni-President Enterprises Co., Ltd, Weilih Food Industrial Co., Ltd, etc., filed a merger notification to the Commission regarding their intention to merge	Merger	August 28, 2008	"Fast food industry merger related issues" public hearing
The 2nd	Microsoft Taiwan and	Restrictive	May 9, 2002	"Relevant issues on

department (before reorganization)	relevant affiliates were complained for their violation of the FTA by using monopolistic dominance in software market and obtaining huge profits by unreasonable pricing	competition		application of intellectual property right in software market and application of the FTA" public hearing
The 1st department (before reorganization)	Taiwan Stock Exchange Corporation was complained for its violation of the FTA by its current criteria of trading information user fees	Restrictive competition	March 15, 2002	"Rationality of current criteria of stock exchange trading information user fees" public hearing
The 1st department (before reorganization)	Presidential Chain Store Corporation was complained for its violation of the provisions of the FTA by monopolizing in-store collection service of telecom related bill payment	Restrictive competition	October 1, 1999	"Whether chain store corporation exclusively collects telecom related bill payment violates the provisions of the FTA" public hearing
The 3rd department (before reorganization)	Nan Shan Co., Ltd. complained that Meng Development Company and En Ping Co., Ltd. violated Article 20, 21, and 24 of the FTA by counterfeiting and selling "Capsela," a product of which the complainant was the	Unfair competition	September 24, 1996	"The application of the FTA on shapes and appearance of domestically unpatented products whose patent right in other countries has expired" public hearing

	exclusive agent.			
Organizer	Case	Type of case	Date	Symposium
Department of Manufacturing Industry Competition	ASE Group and Siliconware Precision Industries Co., Ltd. filed a merger notification regarding their intention to merge	Merger	February 23, 2016	"ASE Group and Siliconware Precision Industries Co., Ltd. filed a merger notification regarding their intention to merge " competition impact assessment symposium
Department of Service Industry Competition	Morgan Stanley Private Equity Asia IV, L.L.C. filed with the Commission a merger notification regarding its intention to merge with An Shun Development Co., Ltd., Bo Kang Development Co., Ltd., and its affiliates (including China Network System Co., Ltd., Global Digital Media Co., Ltd., and 12 cable TV services including Ji Long (transliteration) Cable TV)	Merger	December 9, 2015	"Morgan Stanley Private Equity Asia IV, L.L.C. filed with the Commission a merger notification regarding its intention to merge with An Shun Development Co., Ltd., Bo Kang Development Co., Ltd., and its affiliates (including China Network System Co., Ltd., Global Digital Media Co., Ltd., and 12 cable TV services including Ji Long (transliteration) Cable TV)" Symposium
Department of Service Industry	Taiwan Taxi Co., Ltd. filed two merger	Merger	December	"Taiwan Taxi Co., Ltd. filed two

Competition	notifications respectively regarding its intended merger with Fanya (transliteration) Taxi Co., Ltd., and with Long Xing (transliteration) Taxi Co., Ltd., Long Dian (transliteration) Taxi Co., Ltd., and Huang Xing (transliteration) Taxi Co., Ltd.		25, 2014	merger notifications respectively regarding its intended merger with Fanya (transliteration) Taxi Co., Ltd., and with Long Xing (transliteration) Taxi Co., Ltd., Long Dian (transliteration) Taxi Co., Ltd., and Huang Xing (transliteration) Taxi Co., Ltd." Symposium
Department of Manufacturing Industry Competition	Proactive investigation into the market competition effect of auto parts (accessories) provided by automobile sales industry to maintenance and repair (including independent maintenance plant)	Restrictive competition	December 24, 2014	"Domestic automobile after-sales maintenance market status and competition" Symposium
Department of Service Industry Competition	Dafeng TV Ltd. filed a merger notification regarding its intention to acquire 100% of shares of DigiTai TV Ltd.	Merger	August 14, 2014	"Dafeng TV Ltd. filed a merger notification regarding its intention to acquire 100% of shares of DigiTai TV Ltd." Symposium

Department of Service Industry Competition	Financial Information Service Co., Ltd, National Credit Card Center of ROC and Taiwan Payments Clearing System Development Foundation filed a merger notification regarding their intention to jointly manage a payment service provider TSM platform.	Merger	June 19, 2014	"3 entities including Financial Information Service Co., Ltd, etc., filed a merger notification regarding their intention to set up a joint venture to operate PSP TSM platform" Symposium
Department of Service Industry Competition	Microsoft Corporation filed a extraterritorial merger notification regarding the its attention to merger with Nokia Corporation	Merger	February 11, 2014	"Merger between Microsoft and Nokia" Symposium
Department of Service Industry Competition	Proactive investigation into whether Taiwan High Speed Rail Corporation is monopolistic enterprise, and abuses dominant position increase improperly the price which violated the provisions of the FTA	Restrictive competition	November 15, 2013	"The relationship between High Speed Rail price increase and the FTA" Symposium
Department of Service Industry Competition	Chunghwa Telecom Co., Ltd., and New Century InfoComm Tech Co., Ltd. filed a complaint against	Restrictive competition	January 25, 2011	"Research and discuss relevant disputes regarding E.164 internet phone service and

	each other for violation of the FTA			local network phone service" Symposium

Appendix 2:

Case summary of TFTC administrative settlements

Organizer	Case	Type of case	Date	Decision
The 2nd department (before reorganization)	Intel Corporation was complained for its violation of the FTA by patent licensing conducts	Restrictive competition Unfair competition	July 10, 1996	Administrative settlement
The 2nd department (before reorganization)	The Taipei Rapid Transit Corporation filed a complaint against Matra Transport Corporation of France for its violation of the FTA by refusing to provide maintenance work and restricting subcontractors from providing maintenance work	Restrictive competition Unfair competition	November 5, 1997	Administrative settlement
The 2nd	San Yang	Restrictive	January 7,	Administrative

department (before reorganization)	Industry Co., Ltd. was complained for its violation of the FTA by encouraging locomotive parts satellite manufacturers to refuse to supply goods to competing entities and spreading false information	competition	1998	settlement
The 2nd department (before reorganization)	The RCA Thomson Licensing Corporation was complained for its violation of the FTA by improperly collecting royalties	Restrictive competition	January 21, 1998	Administrative settlement
The 2nd department (before reorganization)	Microsoft Taiwan and relevant affiliates were complained for their violation of the FTA by using monopolistic dominance in software	Restrictive competition	October 31, 2002	Administrative settlement

	market and obtaining huge profits by unreasonable pricing			