

Abuse of dominance in the technology sector: The Travails of Qualcomm in Asia, the EU and the US

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Agenda

- Qualcomm's business model?
- What are its business practices that cause antitrust scrutiny?
- Which jurisdictions have investigated Qualcomm and what have they done?
 - China
 - Korea
 - Taiwan
 - EU
 - USA
- Similarities and differences of treatment
- Conclusions

Qualcomm's business model

- Qualcomm is one of the world's leading technology companies
- For many years, Qualcomm has derived its revenues from two sources:
 - the manufacturer and selling of chips that are installed in most of the world's smartphones, and
 - collecting royalties from device makers for the use of its patented telecommunications technologies that are adopted as industry standards so becoming standard essential patents (SEPs) subject to fair, reasonable non-discriminatory (FRAND) supply obligations.
- Consequently, Qualcomm has become a toll collector for almost every smartphone and wireless device manufactured around the world.
- As a sole toll collector, effectively a monopolist in many technology markets, Qualcomm has been a price-maker, setting the price of the royalties its customers must pay.
- High operating margins and strong earnings growth over the last two decades which have helped its stock price soar; monopoly can be profitable! But Qualcomm remains a market-leading innovator.
- Qualcomm's business model has come under pressure in recent years by both customers and regulators.

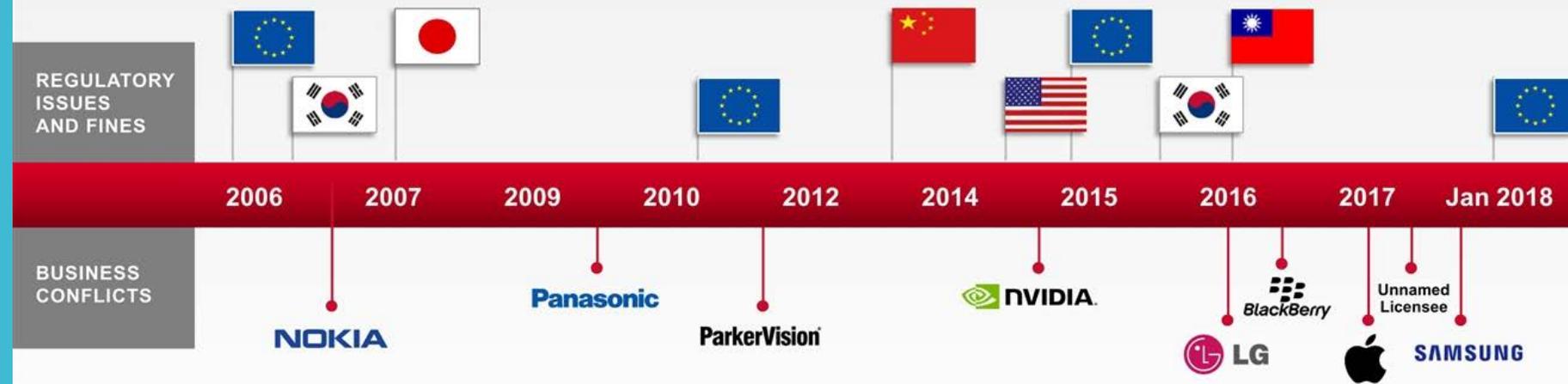
Qualcomm: litigation timeline

Qualcomm's Business Model Has Been Broken for a Long Time

Governments view Qualcomm's practices as **anti-competitive**

~\$4B In fines in the last three years ⁽¹⁾

Major licensing customers have **halted payments**



1) Includes NDRC fine of \$975M, KFTC fine of \$927M, TFTC fine of \$778M and European Commission fine of \$1.2B

What are its business practices that cause antitrust scrutiny?

- In Asia and USA – aimed at device manufactures
 - Unjustified bundling
 - Excessive pricing
 - Imposition of unreasonable trading conditions
 - Refusals to supply
- In EU – aimed at rival chip suppliers
 - Exclusivity discounts
 - Predatory pricing

Which jurisdictions have investigated Qualcomm and what have they done?

China

- Qualcomm has substantial business in China
 - sale of chip sets and
 - licencing patented SEP technologies to Chinese mobile phone manufacturers
- Following complaints from Qualcomm customers the National Reform and Development Commission (NDRC) launched an investigation in 2013.
- Alleged anticompetitive conduct included:
 - Bundling SEPs, opaque pricing practices demanding payment for expired wireless SEPs;
 - Tying by requiring free reciprocal licenses from Chinese licensees for non-SEP patents;
 - Tying the licencing of wireless SEPs with licenses for non-wireless SEPs; and
 - Imposing unreasonable terms in relation to the sale of baseband chips.
 - Resulting in excessive pricing of chip sets SEP licences

Market definition and dominance

- The NDRC issued a decision on 10 February 2015.
- Analysis of dominance
- Article 19(1) of the AML provides that a company can be presumed to have a dominant market position if its market share accounts for more than 50 percent of the relevant market.
- The NDRC found that Qualcomm held a 100 percent market share in every **licensing market** where it owned SEPs and that there was no competition in that SEP licensing market and was dominant.
- NDRC found that Qualcomm held a dominant position CDMA, WCDMA, and LTE **baseband chip markets**.
- Based on an industry report, the NDRC concluded that Qualcomm's market shares in these markets each exceeded 50 percent, giving rise to a presumption of dominance under Article 19. (Analytically weak conclusion – evidence?)
- The “relevant” geographic market was considered as global.

Abuses of dominance

- Standard **patent license** granted licensees the right to use all Qualcomm's patents, but did not identify which patents were included or whether the bundled patents all remained valid for the period of the license.
- Qualcomm would add new patents to the bundle over time and it would not notify licensees as to the nature and utility to smartphone producers of those added patents, or when existing patents had expired.
- This lack of transparency was seen by the NDRC as objectionable, and as amounting to **excessive pricing** and so an abuse of dominance.
- **Bundling of SEP with non-SEPs** was a separate abuse.
- The last abuse found was the demand by Qualcomm that the sale of base band chips that Chinese buyers grant a free reciprocal license to their non-SEP portfolio and agree to a 'no challenge' clause. NDRC found this to be the **imposition of unreasonable trading conditions**.

Penalties and remedies

- Provide patent lists to parties seeking licenses to its SEPs for manufacturers of smartphones in China, and not charge for expired patents;
- Not require royalty-free grant-back licenses of the licensees' non-SEPs against the will of manufacturers of smartphones in China;
- Not force licensees to grant back patents without reasonable payment of fees;
- Not use a royalty base of the entire wholesale net selling price of the device while also adopting a relatively high royalty rate, for smartphones sold for use within China;
- Refrain from bundling the sale of non-SEPs with SEPs in licenses to smartphone manufacturers in China, without reasonable causes; and
- Refrain from imposing unfair conditions on the sale of baseband chips to smartphone manufacturers in
- Fine of 8 percent of Qualcomm's annual revenue within the territory of China for 2013 US\$975m.

Qualcomm's future conduct in China

- Qualcomm later agreed a rectification plan with NDRC:
- Qualcomm licenses to Chinese-issued SEPs separately from licenses to its other patents and will **provide patent lists** during the negotiating process; **TRANSPARENCY**
- Qualcomm will negotiate cross-licenses with Chinese licensees in good faith and provide **fair compensation for such rights**; **PRICING**
- Qualcomm will charge royalties for 3G and 4G Chinese SEPs for branded smartphones sold for use in China based on a royalty base of 65 percent of the net selling price of the smartphone (not 100%) and royalty rates of 5 percent for 3G devices and 3.5 percent for 4G phones; **Significant reduction of royalty rates**
- Qualcomm will provide existing licensees an opportunity to take the new terms for sales of branded devices for use in China as of January 1, 2015; **Retrospection of new terms** and
- Qualcomm will not condition the sale of baseband chips on the chip customer signing a license agreement with terms that the NDRC finds to be unreasonable, or on the customer agreeing not to challenge unreasonable terms in the license agreement. **Monitoring of license conditions**

Problems with the decision

- Parts of the decision are broadly drawn and lack clear definitions and analytical methodology
- Are the geographic scope of the remedies limited to Chinese patents only or do they apply globally?
- Intrusive nature of behavioral remedies
- No appeal by Qualcomm and acceptance of a wide-ranging remedial agreement – why?
- Is the antitrust decision been tainted with industrial policy elements so as to obtain preferential terms for Chinese patent licensees and buyers of base-band chips?
- Note: China Manufacturing 2025 Policy adopted in 2015

South Korea Qualcomm I

- Qualcomm offered various types of **loyalty rebates** on
 - SEP royalty
 - selling price of chips,
 - BOTH conditioned upon the level of chips purchases to all three Korean mobile phone manufacturers.
- In 2009, the KFTC sanctioned Qualcomm on the grounds that its loyalty rebates constituted abuse of dominant position.
- In 2013, the Seoul High Court affirmed the KFTC's decision.
- As of 2017, still under appeal.

KOREA QUALCOMM II

- QUALCOMM HAD patents for modem chipsets that connect mobile phones to wireless networks: CDMA, WCDMA, and Long Term Evolution (LTE).
- In January 2016, KFTC categorized Qualcomm's licensing practice into three types of conducts:
 - (1) Refused to grant license to chipsets manufacturers; instead of license agreement, giving a covenant not to sue on the condition that chipsets manufacturers should sell chips only to Qualcomm's licensees (cell phone manufacturers),
 - (2) Refused to sell chipsets to mobile phone manufacturers unless buyers conclude the SEP license agreement with Qualcomm,
 - (3) Unilateral determination of SEP royalty and asking mobile phone manufacturers to grant their patents to Qualcomm without royalty.
- KFTC defined relevant market as the SEPs holder's own licensing market, therefore any SEP holder is a monopolist with 100 percent market share and had 50%+ market share in chip set markets, so presumed dominant.
- Breach of FRAND was an attempt to monopolize and an anticompetitive effect

KFTC Remedies

- In January 2017, after rejecting Qualcomm's proposal for consent decision, the KFTC fined Qualcomm USD854m as Qualcomm's conducts constituted breach of the "fair" and "reasonable" terms in its FRAND commitment, and therefore constituted
- abuse of dominance
- unfair trade practice
- KFTC also ordered Qualcomm to agree licenses on FRAND terms
- KFTC remedy applies even to the licensing of patents not registered or enforceable in Korea.
- "KFTC has prohibited conduct in the US that is allowed or encouraged there!", (portfolio licensing) Judge Ginsburg at OECD 2017.
- KFTC decision also states that if a subsequent foreign court judgment or antitrust agency ruling comes into conflict with the KFTC's requirements, the KFTC will review its corrective measures.
- Is the remedy too broad in extraterritorial effect?
- Appeal pending

Taiwan

- On 20 October 2017, TFTC issued a decision against Qualcomm
- Refusal to sell chips to Taiwanese mobile handset makers that did not agree to its patent-licensing terms.
- Providing Apple with an loyalty rebate as a SEP royalty discount in exchange for the exclusive use of Qualcomm's modem chips.
- Fine USD773m
- Three dissenting Commissioners
- Criticism of due process failure, failed to show harm through economic evidence to competition or consumers and protecting competitors not consumers

Settlement

- Appeal was lodged in October 2017,
- In August 2018, a settlement was agreed:
- Fine reduced to USD89m
- Qualcomm has agreed to certain process-related commitments confirming principles of good-faith and fairness in negotiation of agreements with handset licensees to Qualcomm's cellular standard-essential patents.
- provide reports every six months to Taiwanese officials for five years to show it is negotiating in good faith with handset makers in patent-licensing deals.
- offer patent licenses to rival chipmakers such as Intel and MediaTek on fair terms before seeking to enforce its patent rights against them in court
- Qualcomm will continue to be allowed to charge a royalty based on the selling price of a handset
- Qualcomm will invest \$700 million over the next five years and boost research activities in Taiwan
- FTC Commissioner Hong Tsai-Lung told reporters [that] a lengthy legal process **"will have a very negative impact on Taiwan's development, so that is why our stand has changed following an internal collective decision."**
- Mediatek said the Commission's decision failed to protect a fair competitive environment as Qualcomm was not required to adjust its business model of charging a royalty fee. (Cf.PRC)

EU

- On 24 January 2018, DGComp fined Qualcomm USD1.16Billion for abuse of dominance in the LTE bas band chip market, 4.9% of 2017 global profit.
- In 2011, Qualcomm agreed with Apple to make significant payments to Apple on condition that the company would exclusively use Qualcomm chipsets in its "iPhone" and "iPad" devices. In 2013, the term of the agreement was extended to the end of 2016.
- Further, Qualcomm would cease these payments, if Apple commercially launched a device with a chipset supplied by a rival.
- For most of the time the agreement was in place, Apple would also have had to return to Qualcomm a large part of the payments it had received in the past, if it decided to switch suppliers.
- This exclusive supply agreement by a dominant firm meant that the market was foreclosed to competitors, so preventing competition in the market for LTE base band chips.
- On termination of the agreement Apple did begin to buy chips from Intel

EU litigation

- Qualcomm held a dominant position in the global market for LTE baseband chipsets over the period investigated (i.e. between at least 2011 and 2016) supplying over 90%
- High barriers to entry to the LTE chip market including research and development expenditure required and various barriers related to Qualcomm's intellectual property rights.
- Qualcomm has abused this market dominance by preventing rivals from competing in the market.
- No efficiency justifications
- An appeal has been lodged
- In 2015, DGComp issued a statement of objections accusing Qualcomm of abusing its market power to chip maker Icera between 2009 and 2011 with regard to predatory pricing
- On 19 July 2018, an amended statement of objections was issued by DGComp accusing Qualcomm of predatory pricing of chipsets to exclude Nvidia Corp and British phone software maker Icera from the market.
- Decision awaited.

USA

- Private litigation by Apple in respect of Qualcomm patent licencing practices
- In January 2017, FTC issued antitrust proceedings in Federal Court accuses Qualcomm of violating antitrust laws by employing abusive patent licensing tactics.
- Filed during the last week of the Obama administration over the objections of Republican Commissioner Maureen Ohlhausen.
- The case can be withdrawn by a majority of commissioners, but Qualcomm competitors such as Intel Corp. and Samsung Electronics want it to continue.
- A June 2017 motion to dismiss by Qualcomm was rejected by the trial judge. Set for trial January 2019.
- DoJ has not filed any patent-based antitrust claims
- Under antitrust law, a patent owner's unilateral refusal to offer a license, even if the patent is essential to a standard, is "per se legal," MakanDelrahim, Assistrant AG Antitrust "other areas of the law may be more appropriate for such disputes".

- Major issues to be litigated:
 - Refusal to license competitors- do acceptance of FRAND/SEP obligations require the patent owner to license horizontal competitors(chip makers) or only downstream users (phone makers)?
 - No License, no chips – refusal to supply, patent doctrine of exhaustion of rights and tying chip sales to required acquisition of bundle of other patent rights. Qualcomm says they are needed to make a smart phone, so chips + rights form an essential package. But does this reduce demand for competitors chips by making Qualcomm chips less expensive buy charging a higher price for the bundled rights?
 - Portfolio licencing – pro-efficiency arguments. Bundling is ok if individual patents can also be licensed. Allegation that Qualcomm is in fact refusing to license individual patents.
 - Excessive pricing for patent royalties as the relative importance of Qualcomm patents has declined by royalty calculation mode unchanged but the value of individual patents is different.

Similarities and differences in treatment

- In China and Taiwan the primary focus of enforcement has been to benefit domestic downstream mobile phone manufactures by reducing overall royalty payments, improving access to SEPs and obtaining reciprocal payments for domestic patent holders and to obtain more FDI
- China's patent licencing remedies focused exclusively on benefitting local phone producers (and maybe consumers) and patent practices within China.
- Korea's patent licencing remedies were seen to affect global patent licencing practices and (perhaps) over-reach in extraterritorial effects.
- EU activities are more concerned with exclusionary conduct preventing chip competitors entering the market
- The FTC suite (if it proceeds to trial) will have major global implications for patent licensing practices

Conclusions