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Intellectual property management, litigation, and licensing services



Is there a Crisis in the Standard
Essential Patent Ecosystem?

October 2018

Are SEP Royalties Vastly Too High?

A 2014 paper by an in-house lawyer at Intel and 2 long-time Apple outside counsel sums the total of all published rack rates at over \$120

For a \$400 smartphone the total royalty load would be 30% - of which more than 90% is attributable to SEPs

Were these conclusions true it might indeed indicate an intense over-valuation of SEPs that may be holding back innovation and new market entrants

**The Smartphone Royalty Stack:
Surveying Royalty Demands for the Components Within Modern Smartphones**

Ann Armstrong, Joseph J. Mueller, and Timothy D. Syrett¹

[WORKING PAPER²]

Technology	Potential Royalty Demands
Cellular Baseband Chip (Standardized)	\$54
Wi-Fi/802.11	\$50
AAC	\$0.20
MP3	\$0.95
H.264	\$10.60
Operating system software (Microsoft or Android)	\$5-8
Total (approx.)	\$121-124

Words Have Consequences

Commissioner Vestager of the European Commission, in a 2016 speech seemed to accept the 30% rate without caveat

Does the urgency and nature of the EC's actions re: SEP licensing originate in the concern that SEP owners are using injunctions to force obscenely high royalties on manufacturers?



SPEECH | 21 November 2016

Protecting consumers from exploitation

Chillin' Competition Conference, Brussels, 21 November 2016

"Check against delivery"

Standard-essential patents

Another occasion when it has been necessary to act against exploitation is the case of standard-essential patents.

Patents and standards are very important in the world of mobile devices. One recent study shows that 120 dollars of the cost of each smartphone comes from paying royalties for the patents it contains.

Royalties Actually Received (2014/16) 4% - 5%

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What Aggregate Royalty Do Manufacturers
of Mobile Phones Pay to License
Standard-Essential Patents?

*J. Gregory Sidak**

insight in 2015 and found no evidence to support the existence of an excessive aggregate royalty. My replication of Mallinson's analysis confirms his conclusion. Using publicly available information, I find that SEP holders collected aggregate royalties in 2013 and 2014 that were between 4 and 5 percent of global handset revenues.

Keith Mallinson, WiseHarbor, on cumulative mobile-SEP royalties. For IP Finance, 19th August 2015

Cumulative mobile-SEP royalty payments no more than around 5% of mobile handset revenues

Figure 1: Mobile SEP Licensing Fee Revenues and Royalty Yields on Global Handset Market

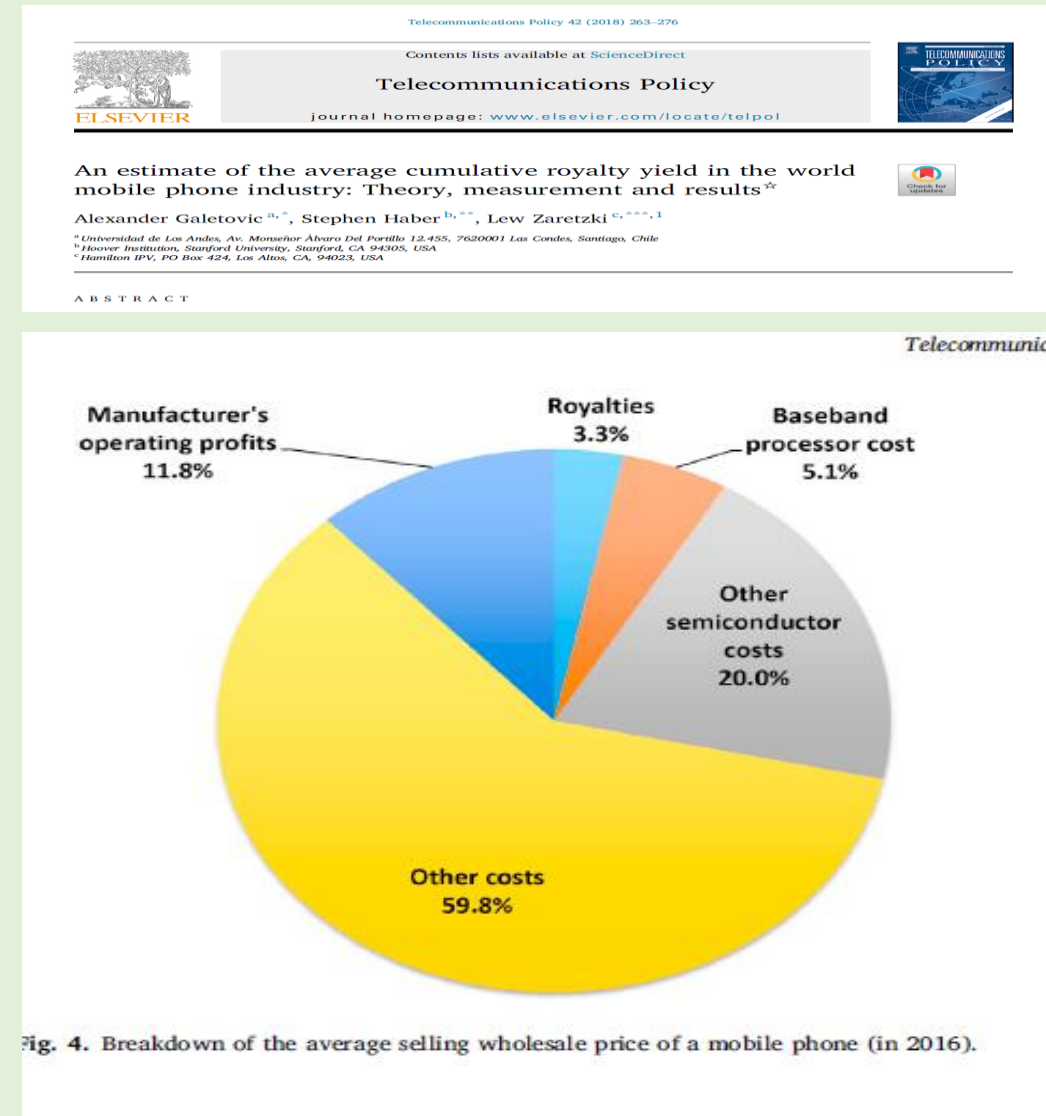
	2014	
	Revenues	Yield*
Major SEP owners with licensing programs: Alcatel-Lucent, Ericsson, Nokia, InterDigital, Qualcomm	\$10.6 billion	2.6%
Patent Pools: SIPRO (WCDMA), Via Licensing (LTE), Sisvel (LTE)	<\$4 billion	<1%
Others: including Apple, Huawei, RIM, Samsung, LG	<\$6 billion	<1.5%
Cumulative maximum: fees and yield for mobile SEPs	~\$20 billion	~5%

* Yields are total licensing fee revenues including lump sums and running royalties as a percentage of \$410 billion in total global handset revenues

Royalties Received (2016): 3.3% - 5.6%

- In a 2018 study Galetovic, Haber, Zaretski identify, with varying accuracy, 39 potential licensors in the smartphone value chain
- Only 29 charged royalties in 2016, for a total of \$14.2bb (with individual licenses between \$1.6mm - \$7.7bb)
- There were \$425.1 billion in mobile phone sales in 2016
- The average cumulative royalty yield in 2016 was 3.3 percent or \$7.20 per phone.
- Restricted to smartphones the rate is 5.6%

<https://reader.elsevier.com/reader/sd/C9A9AE218F9D47D512C7C714D14778D3AD84F1666507999D5DBEEC92C7BDEABC4244AAB1F6B7F4B12977B1CE01386266>



For All SEP-Related Arguments: *Cui Bono*

- Fairfield Research a/k/a Goodman Myers (Nokia)

<http://frlicense.com/LTE%20Final%20Report.pdf>

- Cyber Creative Institute (Japanese Industry/Govt)

<http://www.cybersoken.com/en/about/>

- Mark Lemley (Google)

<https://www.theverge.com/2012/8/27/3271438/google-discloses-paid-bloggers-and-journalists-says-Stanford>

- Gregory Sidak (Qualcomm, Ericsson)

<https://www.criterioneconomics.com/docs/emvr-entire-market-value-rule-proper-royalty-base-for-patent-damages.pdf>

- Fair Standards Alliance (Apple, Google, Intel and Auto Mfgs.)

<https://fair-standards.org/members/>

- IP Europe Alliance (Ericsson, Nokia, Orange, French Brevets)

<https://www.iptalks.eu/>

- Unified Patents (Google)

<https://www.cnet.com/news/unified-patents-backed-by-google-takes-fight-to-patent-trolls/>