



Hold-up v. hold-out



Recommended reading

- Bowman Heiden and Justus Baron, 'A Policy Governance Framework for SEP Licensing: Assessing Private Versus Public Market Interventions', June 2021, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3872493
- Alexander Galetovic & Stephen Haber, **The Fallacies of patent hold-up theory**, *Journal of Competition Law & Economics*, Volume 13, Issue 1, March 2017, Pages 1–44, https://doi.org/10.1093/joclec/nhx006
- Bowman Heiden & Nicolas Petit, **Patent 'Trespass' and the Royalty Gap: Exploring the Nature and Impact of Patent Holdout** (June 6, 2017). 34 Santa Clara High Tech. L.J. 179 (2018), Santa Clara Computer and High Technology Law Journal, Vol. 34, No. 2, 2018, https://ssrn.com/abstract=2981577
- Vincent Angwenyi, Hold-up, Hold-out and F/Rand: The Quest for Balance. GRUR Int. 2017, 105
- Anne-Layne Farrar, OECD, IP & Standard Setting, Patent hold-up and royalty stacking theory and evidence: Where do
 we stand after 15 years of history?
 https://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WD%282014%2984&doclanguage=en
- 4iP Council, **SEP related research: key findings**, https://www.4ipcouncil.com/research/sep-related-research-key-findings-by-4ip-council

5G Development





This figure shows Ericsson, Samsung and Qualcomm taking the top spots when an essentiality filter is applied

Count of raw disclosures to 5G-only technical specifications or projects by company group, filtered to 1 October 2018 by declaration date, using a European Telecommunications Standards Institute (ETSI) download from April 2019. Essentiality scores from *Unwired Planet* have been applied.

UK Supreme Court – *UP v Huawei et al.*

26. August 2020 - Case No. [2020] UKSC 37



Para. 60: "(...) Operators in the telecommunications industry or their assignees may hold portfolios of hundreds or thousands of patents which may be relevant to a standard. The parties accept that SEP owners and implementers cannot feasibly test the validity and infringement of all of the patents involved in a standard which are in a sizeable portfolio. An implementer has an interest in taking its product to the market as soon as reasonably possible after a standard has been established and to do so needs authorisation to use all patented technology which is comprised in the standard. The implementer does not know which patents are valid and infringed by using the standard but needs authority from the outset to use the technology covered by such patents. Similarly, the owner who declares a SEP or SEPs does not know at this time which, if any, of its alleged SEPs are valid and are or will be infringed by use pursuant to the developing standard. The practical solution therefore is for the SEP owner to offer to license its portfolio of declared SEPs. That is why it is common practice in the telecommunications industry for operators to agree global licences of a portfolio of patents, without knowing precisely how many of the licensed patents are valid or infringed. It is a sensible way of dealing with unavoidable uncertainty. (...) The IPR Policy was agreed against that background and the undertaking required from the SEP owner likewise needs to be interpreted against that background."

Automotive: Estimated revenue by 2030



\$1,500,000,000,000

(30% added revenue)

thanks to cellular standards connectivity

Source:

Automotive revolution – perspective Towards 2030, McKinsey & Company 1. Jan.2016





Ericsson



Employees worldwide

101,300

27,400 in R&D

42 BSEK in R&D

4 BEUR in R&D

60,000 granted patents

232 BSEK in sales

more than 180 countries

22,6 BEUR

