



INNOVATION COUNCIL IP INSIGHTS

Patent Pools: Driving Technology Innovation and Diffusion

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“Innovation is not about solo genius, it’s about collective genius.”¹

Innovation Council informs policymaking by sharing the perspectives of organizations bringing technology solutions to society². For all types of organizations – whether large and small innovative companies, technology transfer offices (TTOs), and/or public-private partnerships – filing patents can be an important step in the journey of bringing an invention to market. Sometimes, for innovation in a given space to reach its full potential, it’s necessary to share the value embodied in those patents with other stakeholders. In this context, the voluntary patent pool is a unique tool for advancing technological innovation and access.

A patent pool is a “contractual arrangement whereby multiple companies agree to jointly license and exploit their existing and future patents (and related know-how) connected to a specific technology”.³ The patents in this type of arrangement are often complemented by associated know-how. In light of this, the European Commission has referred to such arrangements as “technology pools”, emphasizing that they typically involve more than just patent rights.⁴ For the sake of clarity, we will limit this paper to the concept of a “voluntary patent pool.”

At Innovation Council, we endorse voluntary patent pools, which can enhance efficiency at the same time as they improve innovation ecosystems by facilitating voluntary collaborations and vertical integrations. Our diverse members all develop and bring innovative technologies to society. They rely on patents and other IP rights to protect, share, and commercialize their solutions. Often, their solutions integrate innovations from others and/or are produced through collaborative R&D and manufacturing. Their work can be facilitated by open standards and also by voluntary patent pooling.

1 Ted talk – [How to Manage for Collective Creativity](#) – Linda Hill, 2019.

2 For further details, see: <https://innovationcouncil.org>.

3 This definition of a patent pool, which is the same as for a patent bundling agreement, comes from legal analysis of technology in international contracts of industrial cooperation by [Mohammad Hossein Shekarchizadeh](#).

4 See [Communication from the Commission](#) (Guidelines on the application of Article 101 of the Treaty on the Functioning of the European Union to technology transfer agreements, Recitals 244 to 248 of Regulation 316/2014).

Our members actively engage in patent pools, as licensor, licensee and administrator. Their insights as to the practical operation and effectiveness of these arrangements have been incorporated in this policy note.

Voluntary patent pooling in cellular technology

In the cellular technology sector, patent pools aggregate patents that are essential to standards like 5G and Wi-Fi. Such voluntary pools offer significant pro-competitive advantages such as: (a) reduced licensing costs, (b) enhanced transparency and predictability for technology implementers, and (c) easier access to critical technologies, particularly benefiting SMEs. It is worth highlighting that the EU Commission's [Support Study for the Evaluation of the TTBER](#), published last year, acknowledged these types of pro-competitive effects of patent pools.

[Avanci](#) is one well-known patent pool in this space. It licenses essential wireless technologies including 4G and 5G to automotive manufacturers. Avanci operates a simplified, efficient platform that enables licensees (car makers) to access a broad portfolio of standard-essential patents (contributed by cellular technology patent holders) through a single negotiation and licensing agreement. Acting as an independent intermediary, Avanci works with actors on both sides of the licensing equation to establish fair licensing terms that are aligned with market principles.

Avanci operates independently from both licensors and licensees, ensuring neutrality and preventing the exchange of commercially sensitive information. This independence fosters fair mediation between diverse stakeholder interests, maintaining competition safeguards and promoting market confidence.

This patent pool underlines the positive impacts of voluntary patent pooling such as reduction of transaction costs, more transparency in licensing terms, and simplified access to essential technologies for a broad range of automotive companies, including SMEs. Avanci received a favorable [Business Review Letter](#) (BRL) in 2020 from the Antitrust Division of the U.S. Department of Justice. The BRL evaluated the proposed platform for the joint licensing of SEPs related to 5G telecommunications technologies – created for use in vehicles which planned expansion to cover IoT applications – and concluded that the Avanci pool was unlikely to pose a threat to competition.

Patent Pools and EU Competition Rules

The Technology Transfer Block Exemption Regulation (TTBER) was established by the European Commission to promote innovation while ensuring fair competition within the internal market. It provides limited exemptions from EU competition rules. The TTBER relates to Article 101 of the Treaty on the Functioning of the European Union (TFEU), which prohibits anti-competitive agreements (Article 101(1)) but allows for certain exemptions in cases where such agreements may generate economic and technological benefits (Article 101(3)). The TTBER has been in force since 2014 and is set to expire in April 2026.

While Avanci's pool has not been reviewed by EU competition authorities, the EU Support Study for the Evaluation of the TTBER does cite Avanci's work⁵. The study highlights the platform-based approach adopted by Avanci as a recent innovation, calling it a positive market response to the integration of patent pools within the TTBER framework.

As part of the ongoing update of the TTBER, the European Commission launched a [call for evidence and consultation](#). Patent pools are already considered to be eligible for a presumption

⁵ See [Support Study for the Evaluation of the TTBER \(2024\)](#), page 319.

of compatibility with competition rules (the so-called safe harbor) under the TTBER Guidelines⁶, provided they meet specific pro-competitive conditions such as open participation, inclusion of essential patents, and licensing on FRAND terms.

In revising the TTBER and its Guidelines, the Commission is now reassessing the treatment of patent pools. The consultation centers in part on the question as to whether the current safe harbor conditions are effective in preventing potential anti-competitive effects. Certain stakeholders have questioned whether the existing framework remains adequate, particularly in light of the increasing complexity of technology markets and the growing importance of agreements related to digitalization and data.

The Commission is considering:

- **Revising the safe harbor criteria** to ensure that they apply only to genuinely pro-competitive patent pools.
- Providing **clearer guidance** on the assessment and governance of patent pools.

In the context of this consultation, the European Commission is also seeking information as to whether guidance is needed on licensing negotiation groups (LNGs) and competition law. LNGs are collaborative arrangements where multiple companies or stakeholders join forces to negotiate licenses collectively, particularly for SEPs. Since they entail collaboration between companies that may be competitors, LNGs could give rise to concerns under EU competition law, particularly Article 101 of the TFEU. Because of this, and in light of questions about the motivation of those pushing for LNG exemptions, we believe they should not be exempted under the updated TTBER.

Licensing Negotiation Groups (LNGs) 101

LNGs are collaborative arrangements where multiple companies or stakeholders join forces to negotiate licenses collectively, particularly for SEPs.

LNGs have been put forward in EU policy debates as a way to create more balance in SEP negotiations, by increasing bargaining power of SEP licensees. Advocates argue that collective bargaining by implementers could reduce transaction costs, increase transparency, and secure more consistent and accessible licensing terms. They claim this would benefit smaller market players in particular.

In reality, LNGs raise serious and untested competition concerns. They could potentially give rise to buyers' cartels, enable coordinated hold-out, artificially depress royalty rates, and facilitate anti-competitive conduct. The European Commission's own SEP Expert Group has underscored the need for such models to undergo close scrutiny by competition authorities.⁷ Also, LNGs risk undermining the Huawei v. ZTE⁸ framework by making it more difficult for SEP holders to enforce their rights against unwilling licensees.

There is a risk that certain advocates of LNGs are driven primarily not by principles of fairness, but rather by the objective of pushing licensing terms below FRAND standards, in line with their commercial objectives.

6 The TTBER applies strictly to bilateral agreements meaning arrangements between two parties. Since patent pools typically involve multiple parties, they are not directly covered by the TTBER's exemption. To bridge this gap, the TTBER Guidelines offer a soft safe harbour for patent pools ([point 261](#)).

7 [Group of Experts on Licensing and Valuation of Standard Essential Patents – Contribution to the Debate on SEPs](#) (2021) page 169.

8 CJEU, Case C-170/13 Huawei v ZTE, ECLI:EU:C:2015:477.

The upcoming revisions to the TTBER and its Guidelines could weaken certain aspects of the EU innovation ecosystem. Specifically, we advise against the European Commission granting any exemption for LNGs, given the competition concerns associated with their operation. We also advocate for the Commission avoiding the introduction of any provisions that make it harder to create or operate voluntary patent pools. Such measures could cause companies to revert exclusively to bilateral licensing models, thus obviating the important efficiency gains and positive impact on innovation and technology dissemination that are delivered by patent pools. Safeguarding the operation of voluntary patent pools is a matter of relevance to innovators and technology users beyond the cellular technology sector. Across fields of technology, patent pools can be relied upon to drive broader diffusion of new technology solutions. One example is the Medicines Patent Pool.

The Medicines Patent Pool (MPP) is a public health initiative founded in 2010, with the goal of increasing access to life-saving medicines in low- and middle-income countries. It does this by negotiating voluntary licensing agreements with patent holders then delivering licenses to technology users, notably medicines manufacturers. Essentially, the MPP works as a licensing platform to facilitate access to affordable, quality-assured treatments for diseases such as HIV, hepatitis C, tuberculosis, and COVID-19. The MPP promotes generic competition by licensing patents to multiple manufacturers. It encourages innovation through transparent and collaborative licensing frameworks and respect for IP. In the 15 years since it was founded, the MPP has had a significant global impact, accelerating the availability of medicines by concluding licensing arrangements for more than 30 products, covering more than 140 countries.

To summarize, voluntary patent pools can be effective instruments simultaneously supporting innovation and driving greater access to new technologies. Across sectors, they can provide a pragmatic, collaborative framework that balances the interests of innovators, technology users, and the broader society. Because contributors of technology are often also technology users, balance is an important feature of patent pools. We consider it important that policymakers around the world preserve and promote these voluntary and pro-competitive mechanisms. Doing so will help innovation to thrive, through respect for IP, technology sharing, collective ingenuity and shared value.