October 27, 2025

The Honorable Charles E. Grassley
Chairman
Senate Committee on the Judiciary
Washington, District of Columbia 20510

The Honorable Richard J. Durbin
Ranking Member
Senate Committee on the Judiciary
Washington, District of Columbia 20510

Dear Chair Grassley and Ranking Member Durbin:

Thank you for the opportunity to provide a statement for the record for the Committee's October 28, 2025, hearing titled "Pressure Cooker: Competition Issues in the Seed & Fertilizer Industries." ACT | The App Association (the App Association) is the leading trade group representing small businesses in the app economy. Today, the App Association represents an ecosystem valued at approximately $1.8 trillion in the United States and responsible for 6.1 million American jobs.[1] Our members are innovators that create the software bringing your smart devices to life. They also make all the connected devices that are revolutionizing sectors such as healthcare, manufacturing, and increasingly agriculture, helping farmers and suppliers harness data to improve yield, sustainability, and efficiency. They propel the data-evolution of these industries and compete with each other and larger firms in a variety of ways, including on privacy and security protections.

The United States has long maintained the world's strongest intellectual property (IP) system due to its emphasis on developing mechanisms that support innovation and foster competition and technological progress. As the Committee considers competition issues facing the U.S. agriculture sector, the App Association writes to reinforce the importance of the voluntary fair, reasonable, and non-discriminatory (FRAND) licensing commitment made by standard-essential patent (SEP) holders and its role in technical standards to enable competition and innovation across industries that increasingly leverage standardized interoperability and safety technologies, and that directly benefit consumers.

Precision Agriculture and the Role of Standards in Innovation

Modern agriculture is rapidly evolving into a connected ecosystem powered by internet of things (IoT) devices, ranging from soil moisture sensors and fertilizer dispensers to drones and satellite-linked tractors.[2] These connected devices generate and exchange vast amounts of data that allow for precision in resource use and real-time decision making.

At the heart of this transformation are connectivity and interoperability standards, the technical frameworks that enable devices, platforms, and analytics tools from different manufacturers to work together seamlessly. Standards like Wi-Fi, Bluetooth, 4G, and 5G underpin these systems, ensuring that IoT solutions deployed across fields and farms can share information securely and efficiently. These open, voluntary standards have been the foundation of innovation across industries. They allow small developers to create interoperable technologies that "plug in" to existing equipment and platforms,

[1] ACT | The App Association, *State of the U.S. App Economy: 2023*, https://actonline.org/wp-content/uploads/APP-Economy-Report-FINAL-1.pdf
[2] Digi International, *IoT in Agriculture: 10 Use Cases for Smart Farming Technologies*, https://www.digi.com/blog/post/iot-in-agriculture.

driving competition, lowering costs, and fostering new business models. For agriculture, these standards are what enable a farmer to combine soil analytics from one provider, fertilizer tracking from another, and weather modeling from a third, unlocking efficiency gains.

As this Committee examines competition in agriculture, it is increasingly important to recognize that connectivity and data standards are now a core part of agricultural competitiveness. The same Wi-Fi, Bluetooth, 4G, and 5G standards that power consumer technologies also form the backbone of precision agriculture. Ensuring that innovators can build IoT tools on top of these standards without facing abusive or discriminatory licensing practices is critical to enabling fair competition and continued innovation across America's farms and supply chains. These same technical standards, whether used in connected tractors or smartphones, provide an alternative path to modern invention that differs from the exclusivity of non-essential patents.

Because the goal of establishing technical standards is to create an efficient and interoperable foundation that can be used by any industry participant, SEP holders understand and agree that, due to the asymmetrical advantage they have over any user of the standard, they must provide FRAND licenses to all and therefore provide an assurance of the same at the time they contribute patented technology to a standardization process. While the FRAND promise should prevent anticompetitive SUP abuses by licensors, when that promise is not kept, the impacts on innovation are devastating. In practice, abusive SEP holders disregard their FRAND commitments through by exploiting vague and/or ambiguous standard setting organization (SSO) intellectual property rights policies and other forms of legal gamesmanship in order to obtain supra-FRAND licensing terms on SEPs, harming countless good faith innovators and distorting the pro-competitive nature of the standards system writ large.

Notably, it has become increasingly evident that foreign SEP holders, especially Chinese companies, have developed strategies to manipulate their position in technical standards through SEP licensing practices that extract billions of dollars out of the U.S. economy. These practices harm American businesses and consumers by disrupting mature supply chains and discouraging American competitiveness in critical technologies. Companies such as Huawei, Nokia, Ericsson, and Abu Dhabi-backed Fortress Investment Group continue to use the U.S. courts, the U.S. International Trade Commission (ITC), and foreign courts against U.S. businesses that are locked-in to key technical standards. Similarly, these entities have used foreign courts, including Chinese, Brazilian, Colombian, German, and the newly established European Union Unified Patent Court (UPC) to harm U.S. companies. Some of these foreign companies stack their SEPs for key technical standards in foreign patent pools in an attempt to shield pool members from their individual FRAND promises and disincentivize pool members from licensing outside the highly inflated pool royalty rate.

SEP licensing abuse is often supported by third-party litigation funding (TPLF), a mechanism used to abuse the patent process in the United States and internationally against U.S. companies. Non-practicing entities (NPEs), which are entities that acquire patents or patent rights but do not practice the patented inventions, initiate a majority of the abusive and frivolous patent infringement suits in the United States,[3] and many NPE suits are financially backed by unnamed investors hidden through

[3] Love, Brian J. and Lefouili, Yassine and Helmers, Christian, *Do Standard-Essential Patent Owners Behave Opportunistically? Evidence from U.S. District Court Dockets* (November 8, 2020), 17, https://www.tse-fr.eu/sites/default/files/TSE/documents/doc/wp/2020/wp_tse_1160.pdf.

shell corporations or wealth funds that may have a real interest in the outcome of litigation.[4] TPLF has affected critical U.S. technology industries, including telecommunication, automotives, and semiconductors. Funders may be individual entities seeking economic gain or competing countries strategically undermining essential U.S. industries and U.S. national security. For example, Abu Dhabi-backed Fortress Investment Group has been identified numerous times as an undisclosed funder of patent holders initiating frivolous disputes in the United States.[5]

These tactics have enabled (and emboldened) foreign SEP holders to systematically abuse their dominant market position as a gatekeeper to the use of the standard to attain supra-FRAND terms (a practice known as "hold-up"[6]).

Small and medium-sized businesses are disproportionately harmed by abusive practices in technical standards

The lack of transparency and clarity in SEP licensing practices provides foreign SEP holders with an opportunity to extract revenue out of the U.S. economy. Small and medium-sized businesses (SMBs) often operate with minimal information and resources when negotiating a FRAND-encumbered SEP license, and it is common for SEP holders to require potential licensees to sign overly restrictive non-disclosure agreements (NDAs), withhold basic information about their deemed essential patent, and require a license under unreasonable term and excessive fees. A comprehensive survey conducted by Charles River Associates found that more than two-thirds of U.S. businesses are concerned that SEP holders behave opportunistically to impose non-FRAND terms.[7] Effectively, SEP abuses leave a SMB with two options: leave the market after significant research and development (R&D) cost has been invested in production, or agree to non-FRAND terms that require passing on costs to their consumers. Notably, in mature supply chains, such as those in the agricultural sector, SMBs often rely on their upstream suppliers to conclude fair agreements and negotiate SEP licenses, and to indemnify against SEP liabilities; SEP licensor abuses can, and do, disrupt these supply chains.

American SMBs require strong FRAND licensing policies and enforcement to protect their ability to advance critical industries with advanced products. To address demonstrated SEP licensor abuses and protect American innovation in key sectors like agriculture, U.S. policymakers should advance a framework consistent with the following:

1. **The FRAND commitment means all can license –** A holder of a FRAND-committed SEP must license that SEP to all companies, organizations, and individuals who use or wish to use the standard on FRAND terms.

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[4] *See In re Nimitz Technologies LLC*, No. 23-103 (Fed. Cir. 2022); *see also* https://www.unifiedpatents.com/insights/2023/2/21/litigation-investment-entities-the-investors-behind-the-curtain.

[5] Bloomberg Law, *Fortress's Billions Quietly Power America's Biggest Legal Fights*, https://news.bloomberglaw.com/business-and-practice/fortress-billions-quietly-power-americas-biggest-legal-fights.

[6] Lemley, Mark A. and Shapiro, Carl, Patent Holdup and Royalty Stacking. 85 Texas Law Review 1991 (2007).

[7] Charles River Associates, *SEP Licensing in the United States: Understanding the Impact on U.S. Business*, https://www.crai.com/insights-events/publications/sep-licensing-in-the-united-states-understanding-the-impact-on-us-business/.

2. **Prohibitive orders on FRAND-committed SEPs should only be allowed in rare circumstances –** Prohibitive orders (including federal district court injunctions and U.S. International Trade Commission exclusion orders) should not be sought by SEP holders or allowed for FRAND-committed SEPs except in rare circumstances where monetary remedies are not available.
3. **FRAND royalties –** A reasonable rate for a valid, infringed, and enforceable FRAND-committed SEP should be based on the value of the actual patented invention itself to the smallest saleable patent practicing unit, which is separate from purported value due to that patent's inclusion in the standard, hypothetical downstream uses, or other factors unrelated to invention's value.
4. **FRAND-committed SEPs should respect patent territoriality** – Patents are creatures of national law, and courts should respect the jurisdiction of foreign patent laws to avoid overreach with respect to SEP remedies. Absent agreement by both parties, no court should impose global licensing terms on pain of a national injunction.
5. **The FRAND commitment prohibits harmful tying practices –** While some licensees may wish to get broader licenses, a SEP holder that has made a FRAND commitment cannot require licensees to take or grant licenses to other patents not essential to the standard, invalid, unenforceable, and/or not infringed.
6. **The FRAND commitment follows the transfer of a SEP –** As many jurisdictions have recognized, if a FRAND-committed SEP is transferred, the FRAND commitments follow the SEP in that and all subsequent transfers.

Conclusion

Protecting the ability for American small businesses to use critical technical standards is essential to advancing American-led industries, as well as protecting the U.S. economic and national security interests. As agriculture becomes increasingly dependent on IoT connectivity standards to drive sustainability and productivity, a pro-competitive approach to SEP licensing will ensure that American farmers and small technology developers can continue to innovate on a level playing field.

Thank you for your attention to this critical matter. I look forward to supporting the Committee's efforts to address these pressing issues.

Sincerely,

Morgan Reed
President
ACT | The App Association