Save Our Standards Coalition Response to the White House Office of Science and Technology Policy's Request for Information

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I. Introduction

Save Our Standards (SOS) is a broad-based coalition of innovators, small businesses, business associations, academics, and consumer groups. SOS is dedicated to promoting policies that allow all innovators to thrive through pro-competitive practices that reinforce fair, reasonable and non-discriminatory licensing terms for patents that are voluntarily contributed and essential to industry standards. SOS appreciates the opportunity to respond to the June 20, 2025, Request for Information on the National Strategic Plan for Advanced Manufacturing from the White House Office of Science and Technology Policy (Docket No. 2025-11379 (90 FR 26335)) regarding advanced manufacturing.

SOS members are deeply engaged in U.S.-based manufacturing and have a strong interest in seeing its continued growth. For example, the Alliance for Automotive Innovation represents the full auto industry--including manufacturers producing most vehicles sold in the U.S., equipment suppliers, battery producers, technology companies, and autonomous vehicle developers. The automotive industry is the nation's largest manufacturing sector, representing approximately 5% of the country's GDP, responsible for supporting nearly 10 million jobs and driving $1 trillion in annual economic activity.

We prioritize an ecosystem that uses voluntarily developed industry standards to support American economic growth and innovation. Balanced policies for the licensing of standard-essential patents (SEPs) are critical to this mission. When patent holders voluntarily participate in developing industry standards, they agree to license their patents that may be essential to the standard on fair, reasonable, and non-discriminatory (FRAND) terms.[1] FRAND commitments are intended to create a level playing field and ensure that industry standards are available for use by all interested parties while providing fair compensation to SEP holders.

However, SEP holders' ability to readily obtain injunctions and other exclusionary relief in certain courts and administrative bodies poses a critical challenge to U.S. economic and innovation leadership in advanced manufacturing and standardization. Unfortunately, some SEP holders leverage the threat of injunctions and exclusionary relief that can shut a business out of the market entirely to pressure licensees into accepting their demand for excessive, non-FRAND royalties. In doing so, SEP holders renege on their voluntarily given FRAND commitments. This threat chills incentives to adopt industry standards and to manufacture products in the United States.

The United States should be a leader in supporting U.S. advanced manufacturing by taking steps domestically and abroad that promote SEP licensing on a level playing field. While the private sector appropriately leads most U.S. standards development efforts, the U.S. government can help reduce risks to American manufacturers being disadvantaged by SEP monetizers. Many SEP monetizers have no interest in strengthening American advanced manufacturing or even U.S. national or economic security.

[1] For the purposes of this submission, SOS refers to "standards" as technical specifications the use of which is voluntary and are produced in standards developing organizations through established processes for standards setting.

SOS provides narrative responses to OSTP's questions, noting in subheadings the specific questions that are being addressed.

II. U.S. Standardization Efforts Should Be Led by the Private Sector with Appropriate Government Support (Q1.b, Q4, Q5, Q9)

The U.S. government's approach to standards should promote the use of standards that can help grow U.S. industry and manufacturing. The United States should continue its current strategy for standard setting: encouraging, engaging in, and backing private sector-led efforts that are voluntary and consensus-driven.

The U.S. approach differs sharply from many other countries where the government oversees or directs standardization priorities and may back particular technologies or favored entities in standards development. Such a government-directed approach ultimately hinders innovation in comparison to letting the free market decide the best outcomes.

In the interest of advancing U.S. manufacturing and industry, the U.S. government should work with the U.S. private sector and other countries to guard against unhelpful government interference in standard setting, push back against efforts by governments to direct standardization activities, and support U.S. private-sector leadership in standards.

I. The Availability of Injunctions and Other Exclusionary Relief Poses the Biggest Risk to the Potential Benefits of Industry Standards (Q1.b, Q5.b, Q9.a)

The availability of injunctions and exclusion orders in certain jurisdictions around the world and at the U.S. International Trade Commission ("ITC") enables SEP abuse. OSTP should leverage studies from other technologies such as cellular and wireless connectivity where SEP abuse has been an issue to study and detail how SEP abuse will adversely impact the adoption and use of technical standards for domestic advanced manufacturing. OSTP should advocate for sensible and balanced licensing policies to address the SEP injunction problem.

a. The FRAND Commitment is Intended to Eliminate SEP Abuse

Standards facilitate interoperability, which can enable any company no matter its size to develop products leveraging the benefits of widespread use that result from an accepted standard. This use of standards supports domestic manufacturers, because they can use standardized functionality without needing to start from scratch and create their own solutions. When done right, standardization allows companies (including small and medium sized enterprises ("SMEs")) to focus on developing innovative and differentiating products and technologies beyond what is in the standard.

Standard setting requires proper safeguards to avoid anticompetitive risks that arise when competitors collaborate about what technologies to include in a standard. A critical safeguard is that the standards developing organizations ("SDOs") typically require patent holders that voluntarily participate in standardization to irrevocably commit to license their SEPs on FRAND terms. The FRAND commitment is intended to ensure that all interested parties can exercise the standard. In exchange for committing to license on FRAND terms and forsaking their exclusionary rights, SEP owners gain the opportunity to benefit through licensing SEPs for a widely adopted standard. But despite the FRAND commitment, SEP hold-up—where a SEP

holder exerts pressure on product manufacturers to extract excessive royalties that are above FRAND—continues to threaten the adoption and success of standards.[2]

b. FRAND Licensing Too Often Fails to Deliver in Practice

i. The Dangers of SEP Injunctions and Other Exclusionary Relief

As one example some SEP owners exploit the availability of exclusion orders from the ITC as leverage to pursue above-FRAND royalties. While an ITC exclusion order is not supposed to issue without consideration of its potential impact on the "public interest" under 19 U.S.C. § 1337, concerns about SEP hold-up have received little attention in practice. Notably, the ITC's readiness to consider issuing exclusion orders for SEP infringement stands in contrast to the practice in U.S. district courts, where the Supreme Court's *eBay* decision requires a balancing of the specific interests involved in a patent litigation to determine the appropriate remedy.[3]

The ready availability of injunctions is also a considerable problem for U.S. industry in many jurisdictions around the world. Germany, in particular, has been a magnet for FRAND disputes because of the size of the consumer market which makes the threat of an injunction there particularly costly, and the willingness of German courts to grant injunctions.[4] When analyzing whether to issue a SEP injunction, German courts have adopted a one-sided approach where the licensee bears the burden of demonstrating purposeful cooperation in licensing negotiations and without regard to whether the SEP holder made a FRAND offer or behaved reasonably.[5]

This extremely lenient standard for issuing SEP injunctions has led to manufacturers facing significant risk of being shut out of selling products in Germany. For example, in 2022, Ford was left with no choice but to agree to licensing terms from the Avanci patent pool soon after IP Bridge (an Avanci patent pool member and patent assertion entity, colloquially referred to as a patent troll) obtained an injunction from a Munich court. The injunction was based on a single SEP that had minimal bearing on vehicular operation, in a product, i.e. the vehicle, that incorporates hundreds of standards and thousands of technologies. If the injunction had taken effect, it would not only have stopped sales, but also would have required Ford to recall and destroy all unsold vehicles equipped with the relevant cellular technology.[6]

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[2] *See* UK Intellectual Property Office, *SEPs Questionnaire for SME, Small-Cap and Mid-Cap Businesses: Summary of Responses*, Question 29 (July 5, 2023), https://tinyurl.com/24wpc586 (in response to a recent survey of SMEs conducted by the UK Intellectual Property Office, all respondents who had been involved in licensing disputes were concerned by the threat of an injunction.

[3] *eBay Inc. v. MercExchange, L.L.C.*, 547 U.S. 388 (2006) (Thomas, J.); *Apple Inc. v. Motorola, Inc.*, 757 F.3d 1286, 1331 (Fed. Cir. 2014), *overruled in part on other grounds by Williamson v. Citrix Online, LLC*, 792 F.3d 1339 (Fed. Cir. 2015).

[4] John Hayes & Assaf Zimring, *Injunctions in Litigation Involving SEPs*, GRUR Patent 6/2024 at 240 (finding that of 171 litigation involving SEPs where an injunction was requested between 2010 to 2023, 122 of them were in Germany of which 90 were at least partially granted).

[5] Judgment 83, Federal Court of Justice, Judgment of 5 May 2020 – KZR 36/17, BGH GRUR 2020, 961 – FRAND-Einwand (*Sisvel v. Haier*) (May 5, 2020), unofficial English translation, https://media.bardehle.com/contentdocuments/ip_reports/20200505-BARDEHLE-PAGENBERG-Sisvel-Haier_judgment-KZR-3617_EN_.pdf; *see also, e.g.*, *Nokia v. Oppo, Munich Regional Court 21st Civil Chamber*, Mar. 23, 2022, No. 21 O 8879 et al.; Mathieu Klos, *Munich Regional Court Takes New Approach to FRAND*, JUVE PATENT (Mar. 28, 2022), https://www.juve-patent.com/news-and-stories/cases/munich-regional-court-takes-new-approach-to-frand.

[6] Joff Wild, *Ford Takes Avanci License in Wake of German Injunction*, IAM (May 31, 2022), https://www.iammedia.com/article/ford-avanci-licence-germany-injunction.

One study estimated that if the injunction had lasted for a year, it would have cost Ford over $7.6 billion in revenue and would have impacted over 7,000 members of Ford's global workforce (whether through temporary or permanent layoffs or reduced working hours).[7] Further, the study estimated that a one-year injunction would have been responsible for over $3.3 billion in additional economic impact to Ford's upstream suppliers.[8] In total, Ford faced costs 200 times higher from an injunction than from paying the demanded Avanci royalty.[9] Given those costs, Ford had little choice but to agree to the demand, regardless of whether it was above FRAND.

Efforts to seek injunctions, particularly by patent assertion entities, are often driven by undisclosed litigation funding sources, who seek to leverage the threat of injunctions to force SEP licensees into paying royalty rates that far exceed FRAND rates. These campaigns targeting American companies at the ITC and in foreign courts provide an avenue for foreign adversaries to not only financially benefit from critical domestic industries, but also to strategically weaken them and potentially gain access to the proprietary technology of American companies. These foreign adversaries are able to do so in secret given the lack of disclosure obligations for litigation funding.[10]

ii. The Impact of Changes to Inter Partes Review on SEP Licensing

Another unbalanced dynamic in the patent system that can harm the adoption of standardized technologies by American manufacturers are the changes the U.S. Patent and Trademark Office ("USPTO") has made to the Inter Partes Review ("IPR") process, an administrative proceeding created under the America Invents Act to provide an efficient, expert, and cost-effective path to addressing invalid patents. For more than a decade, IPR permitted American businesses to have their invalidity defense heard before the USPTO's Patent Trial and Appeal Board ("PTAB"). The program – entirely funded by the party bringing the validity challenge – worked well to avoid the years of litigation that would otherwise be required to assess patent validity, mitigate the risk of discovery by foreign adversaries into trade secrets, and streamline disputes so that any district court litigation that followed would not waste taxpayer resources. Unfortunately, in the last year access to the IPR program has been severely restricted, and rules have been proposed that would formalize the harmful changes. These changes mean that SEP holders, including foreign competitors seeking to impact advanced manufacturing in the United States, can insulate invalid patents from being efficiently reviewed at the PTAB, and use those patents to go after American businesses for their use of standardized technology. This leaves American manufacturing vulnerable to unnecessary patent abuses that the IPR process would otherwise address.

[7] Hendrik Fügemann et al., *Economic Impact Assessment of Automatic Injunctions, Microeconomic Study 1: Economic Impact of an Injunction on a Company's Financial Position,* Copenhagen Economics, at 6-8 (Dec. 17, 2024) (estimates in Euros were converted to dollars); *see also* Hayes & Zimring, *supra* note 11, at 243 ("The cost to Ford of a year-long injunction in Germany is more than an order of magnitude greater than the annual cost to license the Avanci pool, aptly illustrating the substantial negotiating leverage gained by licensors that are granted injunctions.").

[8] Fügemann et al., *supra* note 14, at 6-7.

[9] *Id*. at 9.

[10] Mark A. Behrens, *Third-Party Litigation Funding: A Call for Disclosure and Other Reforms to Address the Stealthy Financial Product that is Transforming the Civil Justice System*, 34 Cornell J.L.&Pol'y 15-18 (2024).

iii. If Manufacturers Cannot Count on the FRAND Commitment, They Have Less Incentive to Use Standards

The risk of SEP abuse and excessive, above-FRAND royalties disincentivizes standards adoption.[11] When companies decide to incorporate standardized technology in their products, they must make significant investments in design and production that locks them into using that technology.[12] They will be less likely to make such investments knowing that it exposes them to opportunistic hold-up by SEP licensors, rather than allowing them to enjoy the potential benefits of standardization. When incentives to use standards fall and there is a decrease in standardization, consumers suffer because interoperability declines, prices rise, and there might be fewer consumer choices.

The widespread availability of injunctive relief and exclusion orders (e.g., in Germany, the Unified Patent Court, Brazil, Colombia, and at the U.S. ITC) and the high costs of SEP litigation significantly impacts companies, including small and medium enterprises ("SMEs"). For example, a recent European Commission study reported that 82% of SMEs agreed that "they do not have resources to negotiate with SEP holders or engage in court proceedings," and 80% stated they lack "strategies to defend themselves in SEP negotiations."[13] Recognizing the severity of this problem, the Indian government has proposed that a government agency assist Indian manufacturers with negotiating SEP licenses.

The United States also faces SEP abuse problems. A study of U.S. litigation tactics involving SEPs revealed "opportunistic behavior by the SEP enforcer in approximately 77% of patent-party level SEP assertions."[14] In its 2015 Business Review letter responding to IEEE's proposed update to the IEEE-SA Patent Policy, the Department of Justice observed that "litigated cases demonstrate the potential for hold up when owners of RAND-encumbered standards-essential patents make royalty demands significantly above the adjudicated RAND rate."[15] As examples, the Department of Justice cited *In re Innovatio IP Ventures, LLC Patent Litigation*,[16] where the SEP holder pursued royalties that were 169 times higher than the court

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[11] Standards generally provide benefits because they promote interoperability and compatibility of products and services from different companies. Accordingly, the technology covered by SEPs acquires much of its value because of the process of standardization. In determining what technology to standardize, SDOs typically have a variety of options to solve a given technical challenge, and, at the end of the day, one solution must be chosen over others. Accordingly, the inclusion of technology in a standard does not necessarily mean that it is superior to all other alternatives in all respects. In fact, in "nearly all cases," there are competing alternatives that offer equivalent performance (Expert Report of Friedhelm Hillebrand ¶ 11, *Nokia Corp. v. Qualcomm Inc.*, No. 2330-VCS (Del. Ch. May 22, 2008). That means SEPs do not necessarily represent "the best or the only option" and instead gain importance because in the process of settling on a single approach they become "necessary to comply with the standard." (*Ericsson, Inc. v. D-Link Sys., Inc.*, 773 F.3d 1201, 1233 (Fed. Cir. 2014).

[12] Joseph Farrell et al., *Standard Setting, Patents and Hold-up*, 74 Antitrust L.J. 603, 607 (2007).

[13] European Commission, Commission Staff Working Document – Impact Assessment Report ("Impact Assessment Report"), at 16–17, 36 (April 27, 2023), https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13109-Intellectual-property-new-framework-for-standard-essential-patents_en.

[14] Brian J. Love et al., *Do Standard-Essential Patent Owners Behave Opportunistically? Evidence from U.S. District Court Dockets*, at 22 (Feb. 7, 2023), https://ssrn.com/abstract=3727085.

[15] U.S. Department of Justice Antitrust Division Business Review Letter to IEEE-Standards Association, at 7 n.28 (Feb.2, 2015), https://www.justice.gov/sites/default/files/opa/press-releases/attachments/2015/02/02/ieee_business_review_letter.pdf

[16] No. 11-C-9308, 2013 WL 5593609, at *43 (N.D. Ill. Oct. 3, 2013).

found to be RAND, and *Microsoft Corp. v. Motorola, Inc.*,[17] where Motorola's demand was 172–231 times what the court found to be RAND.[18]

SEP abuse concerns are causing some companies to consider forgoing the adoption of certain standards. In its SME study, the European Commission concluded that "SEP uncertainty is delaying technology adoption, hindering innovation and engaging resources that could be productively used."[19] As an example, one respondent reported it was "reconsidering whether to include cellular functionality in its future accessories or products".[20] In a parallel study, the UK's Intellectual Property Office found that all of the SMEs that responded reported that "the threat of a court-imposed injunction" was a concern for their business when negotiating a SEP license.[21]

As described more below, the U.S. government should encourage and promote similar studies to better understand how SEP abuse problems threaten domestic industry and may throttle U.S. advanced manufacturing. As the Ford example discussed previously demonstrates, U.S. industry also faces harms from foreign injunction policies. These problems are likely to be particularly acute in technologies that use advanced wireless communications and video monitoring technologies, where the risks of investment are high, and which are critical to many advanced manufacturing technologies.

iv. SEP Abuse Undermines the Standard-Setting Process

Allowing SEP holders to shirk their voluntarily offered FRAND commitments and use the threat of injunctions or other exclusionary relief causes harm beyond standards adoption and advanced manufacturing. It also undermines the integrity of the standard-setting process. The ability to obtain above-FRAND royalties creates incentives for amassing SEPs rather than engaging in good-faith development of high-quality standards. One strategy that certain SEP holders have used is to look for opportunities to get patents included in the standard by tracking how a standard is developing and patenting accordingly without making meaningful contributions. Described as "just-in-time patenting," these SEP owners "apply for patents of low technical merit just before a standardization meeting, and then send the patents' inventors to the meeting to negotiate this patented technology into the standard."[22] Such strategies lower the quality of standards and pack it with unnecessary patents that can lead to higher licensing costs. This strategy can chill standards adoption, which in turn reduces consumer choice while increasing prices for developers, manufacturers, and consumers alike.

II. OSTP Can Assist in Reducing SEP Hold-Up

OSTP has an important role to play in helping combat SEP abuse and the dangers that it poses to development of advanced manufacturing in the United States, including through information gathering and advocacy and supporting U.S. private sector engagement in standard setting.

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[17] No. C10-1823, 2013 WL 2111217, at *100 (W.D. Wash. Apr. 25, 2013).
[18] Letter from Renata B. Hesse, Acting Assistant Att'y Gen., DOJ, to Michael A. Lindsay, Esq., Doresey & Whitney LLP, re Business Review Letter, at 4 n.17, 7 (Feb. 2, 2015), https://www.justice.gov/atr/page/file/1386871/download.
[19] Impact Assessment Report, *supra* note 20, at 70.
[20] *Id*.
[21] *SEPs Questionnaire for SME, Small-Cap and Mid-Cap Businesses: Summary of Responses, supra* note 3.
[22] B. Kang & R. Bekkers, *Just-in-Time Patents and the Development of Standards*, 44 Rsch. Pol'y 1948, 1948 (2015).

a. OSTP Can Study Hold-Up and Engage in Advocacy (Q5, Q9.b)

U.S. industry must have confidence that the SEP licensors' voluntarily offered FRAND commitment will be enforced and the ability to use the standards will not be limited before deciding to make investments in products that incorporate standardized technologies. Such confidence, in turn, will encourage domestic manufacturing and production.

OSTP can help create an environment that mitigates SEP abuse in several ways by studying how SEP licensing affects standardization, industry, and manufacturing. OSTP should work with U.S. manufacturers to undertake comprehensive studies that would inform U.S. government policy on how to make standards more accessible to companies to benefit the growth of advanced manufacturing in the U.S.

The OSTP should continue its support for industry-led standardization, educate policymakers throughout the government about the imperative of balanced SEP licensing policies for American competitiveness and their impacts, and encourage other key stakeholders like standards bodies, industry and foreign counterparts to adopt similar positions to ensure U.S. SEP interests move forward with clarity.

b. OSTP Can Continue to Provide Support to Private-Sector Use of Standards (Q4, Q5, Q7, Q9)

Market needs are the best input for prioritizing standards development efforts. U.S. government support of early-stage research can be an important ingredient in U.S. leadership in innovation and advanced manufacturing relating to standards.

The U.S. government should promote U.S. private sector leadership in standardization efforts. It can do so by having agencies with voting privileges that participate in SDOs support U.S. manufacturing industry representatives who are competing for SDO leadership roles, such as in standards organizations like the Third Generation Partnership Project (3GPP) and the Joint Technical Committees of the International Organization for Standardization and the International Electrotechncial Commission (ISO-IEC/JTC).

This type of support will require closer communication between the government agencies and U.S. companies that participate in standardization. In addition, potential virtual Centers of Excellence could serve as public-private partnerships where extensive input from academia, industry, and think-tanks work alongside OSTP. Similarly, U.S. manufacturers could provide input and serve as a sounding board for OSTP in evaluating important science and technology aspects of trade policy to ensure they incorporate balanced SEP and FRAND-licensing provisions. One of those policies is promoting the smallest saleable patent practicing unit ("SSPPU")—the component that provides standardized functionality—as the starting point for a licensing royalty base. Basing royalties on the SSPPU ensures that SEP royalties are reasonable and non-discriminatory and avoids capturing value from other technologies and the manufacturer's innovation[23].

[23] See *Golden Bridge Tech. v. Apple Inc.*, Case No. 5:12-cv-04882-PSG, 2014 WL 2194501, at *6 (N.D. Cal. May 18, 2014) ("[I]n any case involving multi-component products, patentees may not calculate damages based on sales of the entire product, as opposed to the smallest saleable patent-practicing unit ['SSPPU'], without showing that the demand for the entire product is attributable to the patented feature.").

One further challenge for U.S. companies that the government can help to overcome is providing better visibility into the role that U.S. industry plays across various standardization efforts. OSTP could support NIST in maintaining a publicly accessible dashboard of the ongoing standardization efforts related to advanced manufacturing and tracking U.S. government experts' participation in such standardization efforts.

We urge OSTP to champion U.S. manufacturing by partnering with the private sector and adopting an approach that seeks input from U.S. manufacturers. OSTP should urge foreign governments to limit injunctions on SEPs to limited and exceptional cases, and to adopt a SEP-FRAND licensing policy framework that is fair and balanced.

c. OSTP Can Urge the USPTO to Restore Access to the IPR Process

The IPR process is one of the best defenses an American business has against foreign SEP abuses. We urge OSTP to support the restored access to the IPR process so that challenges to invalid patents can once again move forward based on their merits. We also urge OSTP to request the withdrawal of the USPTO's proposed IPR rules which would formalize the harmful changes the USPTO has already made. Doing so will ensure that advanced manufacturing and its usage of standardized technology in the U.S. is not unfairly impacted by abusive patent litigation brought with invalid SEPs.