October 17, 2022

BY OVERNIGHT MAIL AND E-MAIL

Assistant Attorney General Jonathan Kanter
U.S. Department of Justice
Antitrust Division
950 Pennsylvania Ave., NW
Washington, DC 20530

Re: Avanci Business Review Letter

Dear Assistant Attorney General Kanter:

We, 28 former government enforcement officials, professors, and public interest advocates, write to urge you to reconsider the Avanci business review letter the Antitrust Division issued in July 2020. Letter from Makan Delrahim to Mark H. Hamer (July 28, 2020) (“Letter”). The letter relied on questionable assumptions when issued, and the passage of time has laid bare the incentives for the pool and licensors (including patent trolls) to act in lockstep to the detriment of automobile manufacturers, component suppliers, and American consumers. We believe reconsideration is necessary because the letter undermines bipartisan consensus on standard setting, relies on questionable positions, expresses concerns that real-world events have corroborated, compounds supply-chain problems, and threatens even more foreboding future harms as 5G is more fully deployed.

Undermining standard-setting consensus

First, the principles underlying the letter defy longstanding legal and economic consensus regarding the antitrust treatment of patents on technology essential to an industry standard (“standard-essential patents” or “SEPs”). Officials in Republican and Democratic administrations have consistently agreed that abusive SEP licensing practices can harm innovation, competition, and consumers.

For example, a unanimous report issued by the Department of Justice (“DOJ”) and Federal Trade Commission (“FTC”) recognized that licensors “may be able to hold up firms wishing to implement the standard by setting higher royalties and less favorable licensing terms than [they] could have done before the standard was set.” DOJ AND FTC, ANTITRUST ENFORCEMENT AND INTELLECTUAL PROP. RIGHTS: PROMOTING INNOVATION AND COMPETITION 7 (2007) (“DOJ/FTC REPORT”). Similarly, the FTC unanimously found that SEP owners’ exercise of their power to block implementation of a standard produces “higher prices” and “discourage[s] standard setting activities and collaboration, which can delay innovation.” FTC, THE EVOLVING IP MARKETPLACE: ALIGNING PATENT NOTICE AND REMEDIES WITH COMPETITION 234 (2011) (“FTC REPORT”).
In ignoring these risks, the Avanci letter fails to consider how the pool could exacerbate them. This approach reflects—and endorses—former Assistant Attorney General Makan Delrahim’s out-of-the-mainstream position that “patent hold-up is not an antitrust problem.” Makan Delrahim, The “New Madison” Approach to Antitrust and Intellectual Property Law, Mar. 16, 2018. Guidance premised on this view has increased prices, restricted competition, and impeded innovation in the industries affected by Avanci’s licensing practices: automotive vehicles and components that enable their wireless connectivity, such as telematics control units (“TCUs”) and baseband processors (chips used in wireless transmission). At the same time, it extends to any high-tech industry in which SEP pooling arrangements arise.

Reliance on questionable positions

Second, the letter relies on several questionable positions. The letter blessed the pool’s reimbursement of litigation costs even though it conceded that this could “incentivize more licensors to sue” and that they could “assert their essential patents when they otherwise would not have done so (perhaps due to the questionable strength of their declared SEPs).” Letter, at 11. The letter also conceded that “non-infringing manufacturers” could be forced to “settle and take a . . . license.” Id. at 12. As discussed below, this is exactly what has happened.

The letter also claims that any competitive harm from Avanci’s refusal to license suppliers is mitigated by members’ ability to license suppliers individually outside the pool. Letter, at 16, 21. But the pool is actually set up to prevent this. To qualify for reimbursement, litigation must result in a pool license benefiting all members. Id. at 6 (“licensors that sue for patent infringement of an essential patent may request reimbursement of costs if the litigation results in a Platform license”); id. at 11 (“The licensing support and reimbursement provisions reward licensors when their enforcement efforts result in a [license] that benefits all contributors to the Platform.”).

In contrast, “the licensor will forfeit any points awarded for litigation support and reimbursement of costs if it enters into a bilateral license that does not increase licensing revenue for the Platform.” Id. at 11 n.75. In fact, individual licensors entering into bilateral licenses bear the burden of preventing overpayment. Id. at 5

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2 The letter’s favorable review of Avanci’s refusal to license suppliers also relies, incongruously, on prior reviews of pools that offered licenses to all users of the relevant standard. Compare Letter, at 20 with Letter from Thomas O. Barnett to William F. Dolan & Geoffrey Oliver at 10 (Oct. 21, 2008) (license available for any “operation of and research related to products compliant with the Gen-2 standard”) and Letter from Ky P. Ewing to Joel I. Klein at 14 (Dec. 14, 1999) (license available to any company that “desires to license a patent essential for the manufacture of 3G products”).
(“Licensors must ‘resolve the effect of any overlapping license with a [l]icensee’ . . .
by bilaterally negotiating offsetting payments, providing ‘credit or other consideration
directly to a licensee’ . . . or notifying ‘Avanci to issue a deduction or credit to a licensee[.]’
). In short, the pool’s incentives lead to the “[c]ompetitive concerns” the letter acknowledges of “pool lici
sors collectively agree[ing] not to license outside the pool.” Id. at 17.

The letter also does not consider how Avanci’s refusals violate pool members’ commitments
to license on fair, reasonable, and non-discriminatory (“FRAND”) terms. Id. at 21. As the letter
acknowledges, the SEPs in the Avanci pool “are subject to FRAND commitments.” Id. at 20. But as the letter ignores, refusals to license “violate[e] the FRAND obligation to license to all qualified users on nondiscriminatory terms,” as such refusals lead to “reduced competition in the
downstream market for devices or processes that employ the patent at issue.”

Nor does the letter assess the competitive harms and inefficiencies of such refusals. Basing license fees on complex end-products (such as vehicles) rather than the components that provide the patented functionality (such as chips or TCUs) may allow SEP owners “to obtain a higher rate simply because a device offers more features” unrelated to the standard, thereby “inflating the amount by unfairly taxing unrelated innovation.” In addition, requiring end-product manufacturers to negotiate SEP licenses increases inefficiency because upstream suppliers are likely to better understand the technology and because OEMs then “are forced to retain . . . engineering resources duplicative of their suppliers to properly evaluate and value the SEPs.” This is especially true for car manufacturers that “assemble as many as 30,000 components sourced from various suppliers” and “lack[] knowledge” regarding whether each of the components infringes patents.

**Concerns corroborated by real-world events**

Third, real world events have corroborated concerns about Avanci’s pooling arrangement. Although the letter concerns a pool of patents deemed essential to the 5G standard, Avanci currently administers a “similar” pool involving SEPs for previous iterations of the standard (2G, 3G, and 4G). Letter, at 3. This pool is so similar that Avanci cited the DOJ’s letter regarding the 5G pool to defend against

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antitrust claims arising from its administration of the earlier pool. Notice of Suppl. Auth. for Def., at 1, *Cont’l Auto. Sys., Inc. v. Avanci LLC*, No. 3:19-cv-02933M (N.D. Tex. July 29, 2020), ECF No. 302. Given their structural similarities, these pools are likely to produce comparable competitive effects, assuming Avanci’s licensing practices do not stamp out innovation and competition in the industry by the time 5G is as ubiquitous as its predecessors.

Avanci’s administration of the 2G/3G/4G pool has already resulted in harm to competition and consumers. The main driver of these harms has been collusive litigation encouraged by Avanci’s litigation-cost reimbursement and the massive settlement pressure it has imposed on individual vehicle manufacturers. In 2019, three Avanci members filed 19 lawsuits against Daimler in Germany. The next year, five Avanci members filed lawsuits against Tesla in the United States, Japan, and Germany. In 2022, seven Avanci members filed (and immediately dismissed) numerous lawsuits against Ford in multiple jurisdictions in the United States (Delaware and Texas) and Germany (Munich and Frankfurt). In some cases, the parties publicly announced that the cases were resolved because vehicle manufacturers agreed to Avanci licenses. But even when Avanci licenses were not publicly announced, the timing of pool members’ dismissals indicate settlements involving pool licenses. Absent the Avanci pool, members would be competing for licensees, not negotiating through and receiving litigation support from the same entity, allowing them to coordinate litigation strategy to maximize collective pressure.

The letter theorizes that Avanci’s reimbursement of litigation costs would not harm competition even if it encouraged litigation because it might also promote the removal of invalid patents from the pool. Letter, at 11. Real-world events have disproved that theory: litigation does not lead to validity determinations when licensors seek injunctions, as Avanci’s members have done. For example, a court banned Ford from selling standard-compliant cars in Germany; days later, Avanci announced that Ford had taken a license. The letter does not consider that injunctions before validity determinations force companies to take their products off

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7 Id. at 441–42.
8 Id.
the market—and risk going out of business—long before any invalidity (or infringement) determinations are made.

The letter also does not consider the enormous and asymmetric burden of proving invalidity. Licensors know (or can readily determine) which patents they can assert and why they are (or are not) vulnerable to validity challenges. In contrast, the companies they sue have no such knowledge or access. These companies may find that gathering the information they need to assess invalidity is more expensive and time-consuming than taking a license to questionable patents. And if this sounds like the business model behind patent assertion entities13 (“PAEs”), including many notorious “patent trolls,”14 that’s no surprise. At least some of the licensors bringing these suits have that reputation and even admit to doing as much. For example, the CEO of Conversant, in relation to a different pool, boasted that “[t]he fact that we could sue and could push people into a pool license is hugely beneficial.”15 The list of PAEs and patent trolls suing car manufacturers16 reads like a who’s-who of the robustly-criticized business model:

- “Nokia-fed Avanci-aligned patent troll” Conversant17;

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13 Patent assertion entities (PAEs) are “businesses that acquire patents from third parties and seek to generate revenue by asserting them against alleged infringers.” FTC, PATENT ASSERTION ENTITY ACTIVITY: AN FTC STUDY 1 (2016).

14 Trolls are “those entities that bully the market by asserting, or threatening to assert, invalid or bogus patent portfolios to industry players that do not have the resources to defend themselves or for which it does not make economic sense to fight back in court.” The Blog for Sisvel Licensing Programs: VP9-AV1 Q&A, SISVEL, July 11, 2019, https://www.sisvel.com/blog/audio-video-coding-decoding/vp9-av1-q-a.

15 See Lloyd, supra note 11.


• IP Bridge, formed “to use government funding and patent law as a weapon . . . to protect domestic industry”\textsuperscript{18} by “buy[ing] up dormant patents from Japanese companies and licens[ing] them”\textsuperscript{19};

• L2, a subsidiary of Longhorn IIP, a “privately owned IP management and patent portfolio licensing company”\textsuperscript{20};

• “IP monetization & technology investment firm” MiiCs\textsuperscript{21};

• Nokia, “still feeding off . . . a catalog of thousands of wireless communications patents” retained “after [its] mobile-phone business suffered a fatal blow” a decade ago\textsuperscript{22};

• “Patent troll Optis,” playing a role in “massively increas[ing] license fees for standards-essential patents”\textsuperscript{23};

• “Europe’s most notorious patent troll” Sisvel\textsuperscript{24};

• Korea’s Sol IP, “an intellectual property licensing company”\textsuperscript{25}; and

• Unwired Planet, “focused exclusively on . . . licensing and . . . enforcement” of “its patent portfolio”\textsuperscript{26}.

The success that Avanci’s members have had in coercing vehicle manufacturers into pool licenses is striking because it represents a deviation from standard industry practice. As the letter recognizes, “suppliers in the automotive industry typically take a license to any intellectual property necessary to produce a particular component,” and Avanci’s approach is “different” because it requires vehicle manufacturers to take licenses instead of their suppliers. Letter, at 21.


\textsuperscript{21} MiiCs, Monetizing Innovation, https://www.miicspartners.com/.


\textsuperscript{24} Sisvel brings Patent Wild West into Germany, IPEG, https://www.ipeg.com/sisvel-brings-patent-wild-west-into-germany/.

\textsuperscript{25} SOL IP, LLC v. AT&T Mobility, Inc., Compl., No. 2:18-cv-00526 (E.D. Tex., Dec. 3, 2018), ECF No. 1, at 3.

letter theorizes that independent licenses might mitigate any harm caused by Avanci’s approach, but members of Avanci’s existing pool have refused to grant such licenses even when requested. One TCU manufacturer, Continental, sued Avanci after trying and failing to get a license from the pool or individual members. Compl., at 42–43, *Cont’l Auto. Sys., Inc. v. Avanci LLC*, No. 3:19cv02933M (N.D. Tex. May 10, 2019), ECF No. 1 (“Cont’l Compl.”). Pool members’ refusal to enter into bilateral licenses shows that structural features of Avanci’s program, particularly its reimbursement of the costs of litigation that results in pool licenses, have the same practical effects as facially anticompetitive provisions like prohibitions on bilateral licensing.\(^{27}\)

Continental’s suit also raises a claim the letter ignores: that Avanci’s refusal to license suppliers violates its members’ FRAND commitments and causes competitive harm. This is particularly important given that courts have held that Continental’s unlicensed status prevents it from establishing the standing required to challenge FRAND violations and obtain redress of harm they cause. *Cont’l Auto. Sys., Inc. v. Avanci, L.L.C.*, No. 20-11032, 2022 WL 2205469 (5th Cir. June 21, 2022) *(en banc)* (affirming *Cont’l Auto. Sys., Inc. v. Avanci, LLC*, 485 F. Supp. 3d 712 (N.D. Tex. 2020)).

These allegations of harm must not be taken lightly. Continental contends that the Avanci pool is “raising royalty costs to implementers, including TCU manufacturers,” and harming consumers “who must bear those higher costs either in higher prices, or reduced innovation and functionality in TCUs and cars that incorporate them.” Cont. Compl., at 37. At the time of these allegations, Avanci was charging vehicle manufacturers $15 per car. This amount is substantial compared to the price of the components that enable wireless connectivity—baseband processors and TCUs—which sell for less than $20 and $100, respectively. *Id.* at 4. Adding $15 to these manufacturers’ costs per unit drastically changes their profit margins, necessitating changes to the price, quality, or quantity of components they produce.

Avanci is charging even more now that litigation by pool members has increased its ranks of vehicle-manufacturer licensees. Shortly after announcing Ford’s license, Avanci raised its license rates from $15 to $20 per car.\(^{28}\) At $20, permission to use Avanci’s SEPs in a car with wireless connectivity costs more than an entire baseband processor and at least 20% of an entire TCU, which are central components to a car with wireless connectivity. There has been no change to the decades-old standards to which Avanci’s license pertains that could justify any fee increase, let alone such a significant one. The only change has been to the number

\(^{27}\) See Jurata & Luken, *supra* note 5, at 441.

\(^{28}\) Avanci, *Avanci 4G rate for new licenses to increase from September 1, 2022*, July 12, 2022, [https://www.avanci.com/2022/07/12/avanci-4g-rate-for-new-licenses-to-increase-from-september-1-2022/](https://www.avanci.com/2022/07/12/avanci-4g-rate-for-new-licenses-to-increase-from-september-1-2022/).
of vehicle manufacturers that have taken Avanci licenses, many of whom did so to avoid preliminary injunctions, both potential and actual.

Reconsideration of the Avanci pool is necessary now that we know what it will likely do in practice: encourage collusive litigation leading to settlements empowering Avanci to extract larger sums from vehicle manufacturers rather than validity determinations leading to the removal of invalid patents from its pool. And in fact, as more manufacturers are forced into settlements, the remaining ones will undoubtedly be painted as “unwilling licensees.” The agencies have warned of the “competitive concern” from “decisions on licensing outside a pool” being “part of a concerted attempt by the pool’s licensors to hinder the ability of others . . . to offer a competitive product.” DOJ/FTC REPORT, at 80. That is what is happening here.

Compounding supply-chain issues

*Fourth*, the global supply chain crisis has made the automotive industry and consumers even more vulnerable to the risks of harm the Avanci pool needlessly creates. The COVID-19 pandemic sparked a catastrophic shortage in semiconductor chips on which the connected automotive industry depends, and Russia’s invasion of Ukraine aggravated that shortage. The supply chain’s instability is ongoing and continues to increase prices, depress supply, and disrupt manufacturing of automotive components, particularly semiconductor chips. In “the modern history of the automotive industry,” there have “never” been such supply-chain issues.

The crisis in the supply chain for connected automotive components creates the type of situation the FTC unanimously recognized as harmful—one in which “an entire industry” has become susceptible to “particularly acute” risks of holdup. FTC REPORT, at 28. Put simply, the automotive industry is already struggling with increased input and transaction costs, decreased supply, and uncertainty regarding the components providing the technological capabilities Avanci’s patents cover. The last things the industry needs are exactly what is threatened by the Avanci pool: higher transaction, input, and litigation costs (for vehicle manufacturers) and operational uncertainty (for unlicensed component suppliers).

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Threatening even more foreboding future harms

As concerning as the consequences outlined above are, the future is even more foreboding. Avanci is poised to take its partnership with patent trolls across the entire “Internet of Things” landscape, harming suppliers of components for farming equipment, household appliances, and medical and other devices.\textsuperscript{33} 5G and the patents essential to it implicate the entire ecosystem of technologies that depend on networks and data, including “public cloud providers, content delivery networks, . . . micro datacenters, Internet exchanges, . . . security providers, . . . automation software, . . . [a]nd of course, semiconductors, [which] are the building blocks of all these devices and services.”\textsuperscript{34}

Avanci can deter companies from manufacturing chips altogether or drive them to do so in other countries where U.S. patents have no force but laws against unfair competition do.\textsuperscript{35} It can give members competing in related markets, such as Qualcomm, advantages that allow them to dominate or monopolize emerging markets for connected vehicle technology.\textsuperscript{36} And it can stifle 5G innovation as suppliers unable to obtain licenses cannot develop 5G-specific components that could be combined with earlier-generation components to provide greater functionality or compatibility.

While the letter remains in effect, its guidance will deviate from mainstream bipartisan antitrust approaches, detract from efforts to reinvigorate antitrust policy, and undermine attempts to enforce the law through private litigation. It will also obstruct the Biden administration’s efforts to promote innovation and competition, particularly in industries involving automobiles and their

\textsuperscript{33} Joff Wild, \textit{Major Avanci hire signals serious push into new licensing areas}, INTELLECTUAL ASSET MGMT, Aug. 1, 2020, \url{https://www.iam-media.com/article/avanci-hire-new-sectors-iot} (noting “clear indication that Avanci is now very serious about moving into new areas” and that “nothing is off the table in terms of industry sector or program[ ] structuring”). In fact, Avanci is already promoting its 5G licensing program to manufacturers of “5G products, whether connected vehicles or any other IoT device.” \textit{AVANCI, 5G Powering the IoT}, \url{https://www.avanci.com/5g/} (last visited Sept. 18, 2022).


\textsuperscript{35} Sehwan Choi, \textit{Analysing recent developments in Qualcomm’s SEP licensing practice}, MANAGINGIP, Sept. 17, 2020, \url{https://www.managingip.com/article/2a5cxj5tg7am7shl24j5s/analysing-recent-developments-in-qualcomms-sep-licensing-practice} (explaining that Seoul High Court found that “Qualcomm violated its obligation to negotiate FRAND licenses” by refusing to license them “to rival chipset suppliers”).

\textsuperscript{36} Jim McGregor & Tirias Research, \textit{Qualcomm Completes Auto Software Stack With Arriver Acquisition}, FORBES, Apr. 4, 2022, \url{https://www.forbes.com/sites/tiriasresearch/2022/04/04/qualcomm-completes-auto-software-stack-with-arriver-acquisition/?sh=7c3c99b47e99} (“In this race to provide a complete hardware and software platform, Qualcomm is competing with solutions from the likes of Intel/Mobileye, NXP, Nvidia, and Renesas, as well as in-house systems like Tesla’s.”).
components, and encourage the abuse of granted patents and standard-setting processes.

We applaud the steps you have already taken to reexamine policies relating to SEPs, and urge you to reassess the Avanci pool, revising it to conform with longstanding bipartisan principles or, at a minimum, reclassifying it as advocacy. Thank you for your consideration of these views.

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37 U.S. DEP’T OF COMMERCE, Biden Administration Releases Implementation Strategy for $50 Billion CHIPS for America Program, Sept. 6, 2022, https://www.commerce.gov/news/press-releases/2022/09/biden-administration-releases-implementation-strategy-50-billion-chips (“The CHIPS incentives program will increase domestic production of semiconductors across a range of nodes including chips used in defense and in critical commercial sectors such as automobiles[,]”).

38 Exec. Order No. 14036, Promoting Competition in the American Economy, July 9, 2021 (“To avoid the potential for anticompetitive extension of market power beyond the scope of granted patents, and to protect standard-setting processes from abuse, the Attorney General and the Secretary of Commerce are encouraged to consider whether to revise their position on the intersection of the intellectual property and antitrust laws[,]”).


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