COMMENTS SUBMITTED TO THE U.S. PATENT AND TRADEMARK OFFICE


Submitted by
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Dear Director Vidal:

I thank the Department of Commerce (DOC) and the U.S. Patent and Trademark Office (PTO) for the opportunity to provide comments on U.S. engagement in standards for critical and emerging technologies.

By way of background, I am an attorney and legal scholar with over thirty years’ experience in the field of technical standardization and associated intellectual property (IP) issues. I have served as the legal advisor to numerous standards development organizations (SDOs) in the United States and Europe, including twenty years as principal legal counsel to the Internet Engineering Task Force (IETF). I have served as a member of the American National Standards Institute (ANSI) IPR Policy Committee and have led several of its subcommittees. My academic writing includes multiple books and articles on standardization and IP, including the two-volume Cambridge Handbook of Technical Standardization Law (2017, 2019). My scholarship on standardization and IP has received awards from the IEEE and the Standards Engineering Society, as well as numerous academic accolades, and in 2022 I was honored to receive the Rossman Memorial Award from the Patent and Trademark Office Society.

The questions posed by the DOC and the PTO raise numerous important issues of U.S. standardization policy and practice. I am pleased to offer my responses to some of these questions below.
1. Do the intellectual property rights policies of foreign jurisdictions threaten any of U.S. leadership in international standard setting, U.S. participation in international standard setting, and/or the growth of U.S. SMEs that rely on the ability to readily license standard essential patents?

U.S. companies and institutions, particularly SMEs, benefit from an open and transparent standardization environment that allows technical experts to collaborate on the development of standards that enable a wide range of products to interoperate in a safe, reliable and efficient manner. History and experience have shown that the most successful standards are those that reflect the greatest international cooperation and do not unduly favor particular national interests. Yet a number of national and regional policies threaten to disrupt the collaborative nature of standardization and the ability of manufacturers to produce and sell standardized products. These include the following:

a. **The Injunction Gap.** In the United States and other common law countries, permanent injunctions in patent cases are typically granted only after a trial in which the infringement and validity of the asserted patent(s) have been established. In other countries, such as Germany, the adjudication of patent infringement and validity is bifurcated, meaning that these issues are adjudicated by different tribunals. As a result, a court determining patent infringement may issue a permanent injunction months or years before the validity of the patent is adjudicated, resulting in a period known as the “injunction gap”.

The threat of an injunction granted on a potentially invalid patent gives the patent holder undue leverage in negotiating a license to the asserted patent – a license that is often required to be worldwide. As a result, the royalties that the patent holder may obtain from the licensee are likely to be higher than otherwise would be justified absent the injunction threat and thus higher than the “fair and reasonable” levels mandated by many SDO policies. What’s more, these royalties, which are assessed by the German court, become applicable to patents around the world without the benefit of adjudication in the countries where those patents are issued (e.g., the United States). All of these effects reduce the efficiency, and increase the cost, of the standardization system and those companies that depend on it.

This threat is far from theoretical. In a highly publicized 2022 case, Japanese patent assertion entity Godo Kaisha IPBridge 1 sued Ford Motor Company in Germany for infringing a single patent allegedly covering the 4G LTE wireless communication standard (EP2294737). Finding infringement, the Munich Regional Court enjoined Ford from making

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1 See Peter Georg Picht & Anna-Lena Karczewski, Germany, in INJUNCTIONS IN PATENT LAW: TRANS-ATLANTIC DIALOGUES ON FLEXIBILITY AND TAILORING 142, 149 (Jorge L. Contreras & Martin Husovec eds., 2022) (noting criticism); Katrin Cremers et al., Invalid but Infringed? An Analysis of the Bifurcated Patent Litigation System, 131 J. ECON. BEHAVIOR & ORG. 218, 234 (2016) (finding a median gap of 14 months in German cases in which the asserted patent was later invalidated by a German court and a median gap of 34 months when the asserted patent was later invalidated by the European Patent Office).
or selling infringing vehicles in Germany and ordering the recall and destruction of all infringing vehicles already on the market. Less than two weeks later, Ford settled the action by obtaining a worldwide license from SEP pool manager Avanci.

Germany is not the only country in which a bifurcated litigation system has resulted in the entry of injunctions before the validity of patents has been adjudicated. Another such country is Brazil, the sixth largest mobile phone market in the world. Brazil has been the site of numerous SEP infringement actions, most resulting in the rapid issuance of a preliminary injunction against a manufacturer. For example, such a preliminary injunction was issued in late 2022 against Apple in a 5G SEP lawsuit initiated by Ericsson; the parties settled their global litigation three days later.

In these cases and more like them, U.S. companies are being disadvantaged by procedural rules that permit injunctions to be issued before the validity of patents has been adjudicated, thereby pressuring defendants into premature and potentially excessive settlements.

b. Global FRAND Rate Setting by National Courts. A closely related issue arises from the willingness of courts in some countries (notably the UK and China) to assess FRAND royalty rates for all of a plaintiff’s SEPs around the world, rather than only the national SEPs asserted in those courts. In such cases, the alleged infringer is required to accept the global FRAND rate determined by the court or suffer an injunction against the sale of infringing products in the issuing country. If the manufacturer’s sales in that country are significant, it experiences pressure to accept the court’s global rate in order to avoid the entry of such an injunction. Then, once the manufacturer enters into a licensing agreement embodying the global rate determined by the court, its other suits around the world become moot and further rate determinations in other countries do not proceed.

The first case in which this pattern emerged was Unwired Planet v. Huawei, in which the UK High Court (Patents) assessed FRAND royalty rates for the plaintiff’s global SEP portfolio,

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2 In 2020, Ford sold approximately 131,000 cars in Germany. The fact that a German court enjoined the sale of automobiles on the basis of infringing (allegedly) a single patent covering a feature of its 4G connectivity also demonstrates that the German courts, at least in some instances, have not seriously applied principles of “proportionality” to the issuance of patent injunctions—which is now required under Germany statutory law. See Picht & Karczewski, supra note 1, at 158-62.


6 Even though a national court typically lacks the authority to adjudicate damages with respect to the infringement of foreign patents, the fact that a FRAND commitment is often a contractual undertaking gives the court jurisdiction to determine, as a contractual matter, a rate for all of the SEPs that would be licensed.
even though the allegations of infringement only concerned two UK SEPs.\textsuperscript{7} More recently, in *Optis v. Apple*, a UK court insisted that Apple undertake to accept the court’s global FRAND rate before it was determined or else suffer an injunction against UK sales.\textsuperscript{8} Despite initial resistance, Apple eventually agreed to this undertaking given the threat of the court’s injunction.

In China, courts have also indicated their willingness to set global FRAND rates. For example, in *Oppo v. Sharp*, the Shenzhen Intermediate People’s Court indicated that its determination of a global FRAND rate could improve efficiency and avoid litigation in multiple jurisdictions.\textsuperscript{9} Likewise, in 2020, Samsung petitioned the Wuhan Intermediate People’s Court to determine a global FRAND royalty rate for SEPs held by Ericsson.\textsuperscript{10} The case was settled before that rate determination could be completed.

Cases like these have affected more than the parties involved. They enable opportunism and negotiation leverage among the far greater number of SEP holders and manufacturers that operate in standardized industries, many of which are U.S. firms of all sizes.\textsuperscript{11}

In addition, as I have previously written,\textsuperscript{12} the willingness of national courts to set global FRAND rates can lead to two forms of jurisdictional "race". First is a “race to the bottom” among jurisdictions — a well-documented phenomenon in which jurisdictions intentionally adapt their rules, procedures and substantive outlook to attract litigants. Second, differences among jurisdictions are likely to encourage parties to initiate litigation in the jurisdiction most favorable to their positions as quickly as possible, often to foreclose a later suit in a less favorable jurisdiction. This situation is referred to as a “race to judgment” or a “race to the courthouse,” which may prematurely drive parties to litigation rather than negotiation or settlement. These races have also seen the emergence of tactics to block one court from reaching judgment before another – the so-called anti-suit, anti-

\textsuperscript{8} Optis Cellular Technology LLC v. Apple Retail UK Limited, [2021] EWHC 2564 (Pat), ¶ 212.
\textsuperscript{11} U.S. courts have set global FRAND rates, but only when both parties have requested that they do so. Thus, in 2012, the court in Motorola v. Microsoft determined a FRAND rate for Motorola’s global portfolios of SEPs covering two standards based on worldwide licensing evidence introduced by both parties. And in TCL v. Ericsson, a district court determined global FRAND rates for Ericsson’s SEP portfolio after the parties requested that the court make a global rate determination. But in most U.S. FRAND determination cases, courts have limited their rate assessments to asserted U.S. patents. See Memorandum Opinion, Order, and Recommendations at *2, *15, Optis Wireless Tech., LLC v. Huawei Device Co. Ltd., No. 2:17-cv-123-JRG-RSP, 2018 WL 476054 (E.D. Tex. Jan. 18, 2018) (reasoning that setting a global FRAND rate would be akin to adjudicating a foreign patent infringement claim, an action that “is almost always an abuse of discretion”).
anti-suit and anti-anti-suit injunctions that have been issued in the U.S., Europe, China and India. These jurisdictional conflicts have strained international relations, leading, among other things, to a complaint against China at the World Trade Organization. The result of such conflict is likely to be reduced cooperation on the international standardization stage, resulting in more fragmented technology and fewer global opportunities for American companies abroad.

2. If responding affirmatively to question 1, what can the Department of Commerce do to mitigate the effects of any adverse foreign policies relating to intellectual property rights and standards? Please clearly identify any such adverse foreign policies with specificity.

I have previously written at length about the detrimental impact that the foreign judicial rules and practices described in Question 1 have on the global standardization ecosystem and participants in that system, and have proposed several approaches that could address these issues:

a. **Judicial Stand-Down.** The first, and most modest, step that could be taken to address the jurisdictional conflict arising from global FRAND disputes is for courts around the world, unless otherwise requested by the parties, to limit voluntarily their FRAND rate determinations to the national patents before them and to refrain from setting rates for patents outside their jurisdictions. Such restraint would serve international comity and reduce jurisdictional competition for parties engaged in FRAND disputes. While the U.S. government has no express authority over the courts of other jurisdictions, the DOC and the PTO could help to coordinate international consensus on this approach through conventional diplomatic channels (i.e., the Department of State) as well as the UN-based World Intellectual Property Organization (WIPO).

b. **International Injunction Reform.** The DOC and the PTO can also seek to promote international reform efforts to curb the rapid issuance of patent injunctions prior to adjudication of patent validity in countries such as Germany and Brazil. As noted above, the “injunction gap” in these countries distorts the FRAND licensing landscape and gives undue negotiation leverage to patent holders in those countries. One possible route to this reform is an amendment to the WTO’s Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS Agreement). Such an amendment could specify that injunctive relief in patent cases should not be issued until at least a preliminary adjudication has been completed regarding the validity of the asserted patent(s). While treaty amendments are admittedly difficult to conclude, it is worth noting that in June 2022, a WTO ministerial

14 Contreras, Judicial Restraint, supra note 12 (discussing proposal and potential avenues toward achieving it).
decision was made to waive certain provisions of the TRIPS Agreement in connection with the production of COVID-19 vaccines, and discussion of the extension and expansion of this waiver is ongoing at WTO. These discussions offer a potential avenue for the introduction of additional intellectual property reforms.

c. **Antisuit Injunctions.** In 2012, the U.S. District Court for the Western District of Washington issued an antisuit injunction (ASI) preventing Motorola from enforcing an injunction that it obtained against Microsoft in Germany. This case led to a succession of ASIs issued by U.S. courts to prevent the enforcement of injunctions issued by courts around the world when those injunctions would interfere with U.S. jurisdiction and adjudication of cases. The DOC and the PTO can actively support the issuance of ASIs by U.S. courts to combat inappropriate foreign injunctions by intervening in cases through amicus briefs and statements of interest supporting such relief.

d. **Limiting Effect of Foreign Rate Setting.** Another way to avoid the effect of foreign judicial determination of FRAND royalty rates is to enact legislation in the U.S. that would prohibit recognition of these foreign-set rates and instead require that FRAND rates for U.S. patents be set by U.S. courts or other adjudicatory bodies. Such a legislative proposal titled the “Standard Essential Royalty Act” (SERA) was made in 2022, though it no longer appears to be actively under discussion. The DOC and the PTO can assist with the enactment of legislation seeking to limit the effect of foreign-set FRAND rates by participating in Congressional hearings and advising Congress on the advisability of such legislation.

e. **Global Rate-Setting Arbitration.** Ultimately, the most efficient and beneficial solution for the standardization ecosystem and all of its participants will be the determination of FRAND royalty rates for particular standards via a transparent, consistent and comprehensive global rate-setting procedure in which all relevant parties – SEP holders and product manufacturers – participate. I proposed such a procedure in 2019, modeling it on the Copyright Royalty Board, which determines aggregate and specific rates for music and televised broadcasts, among other things. The European Commission has recently proposed such a rate-setting tribunal to be situated within the EU Intellectual Property Office (EUIPO), but as I have pointed out to the Commission, the non-binding and confidential nature of those proceedings significantly limits their usefulness both to the parties and the broader market. The DOC and the PTO could play a leading role in helping

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16 Ministerial Decision On the TRIPS Agreement, WT/MIN/22/30 (Jun. 17, 2022).
to flesh out such a proposal and potentially hosting such a rate-setting body, or at least providing expertise to it (much as the EUIPO is envisioned in the EC’s recent proposal).

3. What more can other entities do, such as standards development organizations, industry or consumer associations, academia, or U.S. businesses to help improve American leadership, participation in international standard setting, and/or increased participation of small to medium-sized enterprises that rely on the ability to readily license standard essential patents?

These entities can support the initiatives and proposals mentioned in response to Question 2 in order to promote standardization and participation by U.S. businesses including SMEs.

4. Are current fair, reasonable, and non-discriminatory (FRAND) licensing practices adequate to sustain U.S. innovation and global competitiveness? Are there other international models which would better serve U.S. innovation in the future?

As discussed above, FRAND licensing has become problematic and often fails to benefit U.S. companies. Notwithstanding rhetoric to the contrary, U.S. companies are, by and large, net licensees in markets for standardized products and do not, on the whole, benefit from high FRAND royalty rates or aggressive licensing practices.

For example, the large majority of patents covering standards such as 5G are held by non-U.S. entities. An October 2023 analysis by LexisNexis/IPLytics shows that only 10 of the top 50 holders of 5G patents are U.S. companies, with the remainder from China (12), Japan (7), Taiwan (6), Korea (6), Europe (8) and Canada (1).21 Based on these figures, it is clear that stronger patent rules, aggressive licensing practices and higher FRAND royalty rates are likely to benefit foreign companies far more than U.S. companies.

Moreover, of the 10 U.S. companies on this list, 4 are patent assertion entities (PAEs) that acquired their patents principally from Asian and European companies.22 As such, only 6 of the top 50 holders of 5G SEPs are U.S. companies conducting research and acquiring patents on this technology. Of these 6, 4 (Alphabet, Apple, Cisco and Intel) are product and service vendors that earn the large majority of their revenue from product and service sales (what I have termed “Product-Centric” companies). Only 2 of these U.S. companies (Qualcomm and InterDigital) are known to view SEP licensing as primary business models (“Patent-Centric” companies). Based on public figures, the combined 2022 gross revenue for the 2 U.S. Patent-Centric companies on this list amounts to approximately $45 billion. Yet the combined 2022 gross revenue for the 4 U.S. Product-Centric companies on this list amount to approximately $789 billion. When combined with the gross revenue of companies like Ford Motor Co. (2022 revenue $158 billion) that have recently been the victims of aggressive FRAND licensing practices (see Question 1, Response a), it becomes

22 Id. at 13.
clear that a much larger segment of the U.S. economy benefits from lower FRAND royalty rates and lenient licensing practices than high royalty rates and aggressive licensing practices. As such, the U.S. government should focus its efforts on reducing FRAND licensing burdens both within the U.S. and abroad.

To this end, the DOC and the PTO should consider greater support and promotion of royalty-free standards, which have proven exceptionally robust. Pervasive standards such as USB, Bluetooth, HTML, HTTP and Internet Protocol (IP) are all royalty-free and enable worldwide competition on a level playing field without the transaction costs and litigation risks seen with standards licensed on a FRAND basis.23

5. Are there specific U.S. intellectual property laws or policies that inhibit participation in standards development?

Today, U.S. law offers a favorable environment for the development and licensing of technical standards. However, proposals are occasionally made to change U.S. law in a manner that would damage this ecosystem. For example, one recent report indicates that interest has emerged in the U.S. Senate to reverse the Supreme Court’s seminal decision in eBay v. MercExchange, 547 U.S. 388 (2006).24 Such legislation could introduce a presumption that the holders of patents, including SEPs, are entitled to an injunction upon a finding of infringement even if they have indicated, by making a FRAND commitment, that they are willing to license their patents on monetary terms. A legal change like this would move the U.S. closer to countries like Germany in terms of injunction law and could have serious repercussions for the manufacturers of standardized products in the U.S.

6. Are there specific U.S. intellectual property laws or policies that inhibit growth of SMEs that rely on licensing and implementing standards?

Please see Response to Question 5.

7. Which, if any, actions would be advisable for the Department of Commerce to further explore regarding the interplay of intellectual property and standards, including but not limited to:

a. educational guidance to SMEs to become more involved in standards;

Continuing education regarding standards, standardization and related intellectual property issues would undoubtedly be beneficial.

b. recommendations for standards development organizations regarding intellectual property policies and enforcement thereof;

Standards development organizations (SDOs) should do much more to clarify their policies surrounding FRAND licensing. Among the issues that SDOs could clarify are the following:

a. Whether the SDO’s FRAND commitment requires a SEP holder to grant a license to all applicants, or whether it may withhold licenses from potential licensees at certain levels of the supply chain (so-called “level discrimination”);  

b. Whether, and to what degree, SEP holders may seek injunctive relief against prospective licensees;

c. Whether arbitration of FRAND rates is required before a SEP holder initiates litigation against a potential licensee;

d. What penalties are imposed for the failure to disclose SEPs to the SDO as required by its policies (e.g., automatic royalty-free licensing of the undisclosed SEPs).

c. a database of judicially determined or otherwise voluntarily-made-public licensing rates for technologies covered by a FRAND commitment; and

One of the key impediments to fair and balanced FRAND licensing negotiation is the lack of transparency of FRAND licensing rates in several important markets. To address this issue, the collection and public disclosure of FRAND rates would be helpful. However, limiting this collection to judicial determinations (which are already in the public domain) and voluntary disclosures (which are likely to be skewed) will not yield significant benefits. Instead, legislation should be enacted requiring the public disclosure of FRAND

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25 One SDO, the IEEE Standards Association, has clarified its policies to address at least some of these questions despite the ongoing objections of some participants. See Michael A. Lindsay & Konstantinos Karachalios, Updating a Patent Policy: The IEEE Experience, CPI ANTITRUST CHRONICLE 1 (2015).


27 Notably, the Avanci licensing platform uses a set of published licensing rates for 2G/3G/4G/5G SEPs in the automotive and other fields. This approach is transparent and worthy of emulation in other markets. See Jorge L. Contreras & Richard J. Gilbert, Non-Discrimination: FRAND’s Last Stand?, CPI ANTITRUST CHRON. (2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3753827 (proposing the disclosure of standardized FRAND licensing rates).

28 Herein lies another problem with the European Commission’s SEP proposal. The SEP registry that it would create would not include non-public FRAND licensing information.
licensing agreements (including royalty rates) by any party seeking to license or enforce SEPs in the United States.\textsuperscript{29}

\textit{d. other voluntary and/or public disclosures?}

Please see Response to Question 7.c.

\textbf{8. How can the Department of Commerce reinforce the importance of IP-based incentives for participation in international technology standards development, especially around critical and emerging technologies?}

As noted in the Response to Question 4, the U.S. economy will, on balance, benefit from less stringent enforcement of SEPs and lower FRAND licensing rates. It is not clear that enhancing ‘IP-based incentives’ will benefit U.S. companies rather than foreign companies that hold the large majority of SEPs covering key technical standards.

\textbf{9. What can the Department of Commerce do to mitigate emergence or facilitate the resolution of FRAND licensing disputes? Can requiring further transparency concerning patent ownership make standard essential patent (SEP) licensing more efficient? What are other impediments to reaching a FRAND license that the Department of Commerce could address through policy or regulation?}

Please see Responses to Questions 2 and 4.

\textbf{10. Are there steps that the Department of Commerce can take regarding intellectual property rights policy that will help advance U.S. leadership in standards development and implementation for critical and emerging technologies?}

Please see Responses to Questions 2 and 4.

\textsuperscript{29} The typical objection to proposals like this is that such agreements contain confidential information of the parties. Yet they need not. The agreements utilized by patent pools are typically uniform and standardized, and other SEP licensing agreements can follow suit. In fact, eliminating special (and confidential) deals for particular SEP licensees would also move the industry toward greater compliance with the non-discrimination prong of the FRAND commitment, another positive result. See Contreras & Gilbert, supra note 27.
11. Do policy solutions that would require SEP holders to agree collectively on rates or have parties rely on joint negotiation to reach FRAND license agreements with SEP holders create legal risks? Are there other concerns with these solutions?

No. As I have discussed at length in my writing, the collective agreement of stakeholders on aggregate FRAND royalty rates applicable to particular standards would greatly benefit the standardization ecosystem and help courts and arbitrators more accurately determine FRAND royalty rates for particular SEPs and product implementations. The U.S. Department of Justice Antitrust Division and the Federal Trade Commission have previously confirmed the procompetitive potential of such an approach, as I summarized in a recent article:

“The U.S. antitrust enforcement agencies have ... indicated that ex ante joint negotiation of SEP licensing terms has ‘the strong potential for procompetitive benefits.’ As early as 2005, Deborah Platt Majoras, Chairman of the FTC, specifically explained the potential procompetitive benefits of joint ex ante negotiation of licensing terms in the SDO context:

[[Joint ex ante royalty discussions ... can be a sensible way of preventing hold up, which can itself be anticompetitive. Put another way, transparency on price can increase competition among rival technologies striving for incorporation into the standard at issue. They may allow the “buyers” (the potential licensees in the standard-setting group) to get a competitive price from the “sellers” (the rival patentees vying to be incorporated into the standard that the group is adopting) before lock in ends the competition for the standard and potentially confers market power on the holder of the chosen technology. ... If joint ex ante royalty discussions succeed in staving off hold up, we can generally expect lower royalty rates to lead to lower marginal costs for the standardized product and lower consumer prices. By mitigating hold up, joint ex ante royalty discussions might also make possible the more timely and efficient development of standards. A reduction in ex ante uncertainty on royalty rates may reduce the extent to which litigation is needed to resolve issues relating to patent and standards. Joint ex ante royalty discussions also could prevent delays in the implementation of the standard resulting from ex post litigation (or threats of it), which may involve inefficient allocation of resources intended for innovation.

In response to suggestions that ‘group buying power’ might be used inappropriately by SDO members to depress SEP prices, the DOJ and FTC acknowledge that the use of ex ante licensing discussions as ‘a sham to cover up naked agreements on the

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licensing terms each IP holder will offer the SSO,’ a means ‘to reach side price-fixing agreements,’ or an effort ‘to fix the price of standardized products’ would likely be condemned as per se violations of the antitrust laws. However, the agencies go on to note that these risks ‘are not sufficient to condemn all multilateral ex ante licensing negotiations, particularly given the fact that [t]hose developing standards already have extensive experience managing this risk.’ In contrast, they conclude that ‘in most cases, it is likely that the Agencies would find that joint ex ante activity undertaken by an SSO or its members to establish licensing terms as part of the standard-setting process is likely to confer substantial procompetitive benefits by avoiding hold up that could occur after a standard is set.’”

12. What can the Department of Commerce do to help facilitate the efficient resolution of FRAND disputes? What can the Department of Commerce do with the World Intellectual Property Organization and/or standard setting bodies to promote alternative dispute resolution to more efficiently resolve FRAND disputes?

Please see Responses to Question 2.

I thank you for the opportunity to provide this input. Please do not hesitate to contact me if I can be of further assistance to the DOC and the PTO on these important issues.

Very truly yours,

Jorge L. Contreras

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31 Contreras, Aggregate Royalties, supra note 30, at 705-06 (citations and footnotes omitted).