



How the United Kingdom Supreme Court  
Could Decide *Optis v. Apple*: A Hypothetical  
Opinion on FRAND Royalties for a Global  
Portfolio of Standard-Essential Patents

*J. Gregory Sidak\**

What follows is an exercise, not a prediction. On 29 June 2026 the Supreme Court of the United Kingdom begins three days of argument in *Optis v. Apple* on four questions concerning the determination of fair, reasonable, and nondiscriminatory (“FRAND”) terms for a global portfolio of standard-essential patents (“SEPs”). Those four questions concern the correct method of valuation, whether the Court of Appeal was entitled to fix the rate itself rather than remit, the treatment of royalties on past sales, and the bearing of parallel foreign proceedings.

The opinion set forth below is the disposition that I would write were I sitting on the appeal before the merits hearing had commenced (and not having access to any confidential filings). I offer it not as advocacy for either party but as the application of a rigorous economic analysis—grounded in the willing-licensor and willing-licensee construct, the law of contract that the FRAND undertaking embodies, and the relationship between holdup and holdout—to the questions on which that analysis proves decisive. Having analyzed these problems at length for at least 18 years, I expect that it might be useful to say, plainly and in the form that a court would find most used and useful, how I believe those questions ought to be resolved.<sup>1</sup>

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\* A.B. 1977, A.M., J.D. 1981, Stanford University. Chairman, Criterion Economics. Email: jgsidak@criterioneconomics.com. This article is respectfully dedicated to the memory of the affable and brilliant James Flynn KC. The opinion set out below is a hypothetical exercise; the author has served as an economic expert in standard-essential-patent matters, and the views expressed are his own. Copyright 2026 by J. Gregory Sidak. All rights reserved.

<sup>1</sup> The questions presented have occasioned extended analysis in this *Journal* and elsewhere. For example, David J. Teece, *Patent Counting and the “Top-Down” Approach to Patent Valuations: An Economic and Public Policy Appraisal of Reasonable Royalties*, 5 CRITERION J. ON INNOVATION 157, 167 (2020), is cited in the written case of intervener Qualcomm Incorporated. My own scholarship has addressed the determination of FRAND royalties, the relationship between holdup and holdout, the probative use of comparable

[2026] UKSC —

*On appeal from [2025] EWCA Civ 552*

## JUDGMENT

Optis Cellular Technology LLC and Others (Respondents)

v

Apple Retail UK Limited and Others (Appellants)

before

J. Gregory Sidak

*(The mock version of an opinion that I would give, were I sitting on this appeal.)*

## SUMMARY OF CONCLUSIONS

1. I would dismiss the appeal. I reach that result, however, on narrower grounds and, I respectfully think, on a sounder basis than the one that the Court of Appeal adopted, and without resolving the parties' elaborate dispute over which comparable licenses are probative of a FRAND rate. Those licenses remain under seal; their comparability is an intensely factual question on which a final court of appeal stands poorly placed to substitute its own judgment; and, for the reasons that follow, the appeal does not require it.
2. The decisive point is that a FRAND undertaking is a contract. The patentee's commitment to the standard-setting organization ("SSO")

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licenses, and the jurisdictional questions raised by global rate-setting—and I have done so in more than 1,000 pages of published legal and economic analysis. See J. Gregory Sidak, *The Meaning of FRAND, Part I: Royalties*, 9 J. COMPETITION L. & ECON. 931 (2013); J. Gregory Sidak, *Bargaining Power and Patent Damages*, 19 STAN. TECH. L. REV. 1 (2015); J. Gregory Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, 1 CRITERION J. ON INNOVATION 1001 (2016); J. Gregory Sidak, *Is Patent Holdup a Hoax?*, 3 CRITERION J. ON INNOVATION 401 (2018) (named by Judge Douglas H. Ginsburg of the United States Court of Appeals for the District of Columbia Circuit among his three favorite works in the field of antitrust law); J. Gregory Sidak, *Why Unwired Planet Might Revolutionize the Resolution of FRAND Licensing Disputes*, 3 CRITERION J. ON INNOVATION 601 (2018); J. Gregory Sidak, *Monopoly, Innovation, and Due Process: FTC v. Qualcomm and the Imperative to Destroy*, 6 CRITERION J. ON INNOVATION 1 (2020); J. Gregory Sidak, *The Fair Division of Surplus from a FRAND License Negotiated in Good Faith*, in 5G AND BEYOND: INTELLECTUAL PROPERTY AND COMPETITION POLICY IN THE INTERNET OF THINGS (Jonathan M. Barnett & Sean M. O'Connor eds., Cambridge Univ. Press 2024). On the valuation of patented features by hedonic price analysis—a method that requires no comparable licenses and so remains available even where a technology is newly standardized—see J. Gregory Sidak & Jeremy O. Skog, *Hedonic Prices and Patent Royalties*, 2 CRITERION J. ON INNOVATION 601 (2017); J. Gregory Sidak & Jeremy O. Skog, *Hedonic Prices and Patent Royalties: Epilogue*, 4 CRITERION J. ON INNOVATION 401 (2019); J. Gregory Sidak & Jeremy O. Skog, *Hedonic Prices for Multicomponent Products*, 4 CRITERION J. ON INNOVATION 301 (2019); and J. Gregory Sidak, *Misconceptions Concerning the Use of Hedonic Prices to Determine FRAND or RAND Royalties for Standard-Essential Patents*, 4 CRITERION J. ON INNOVATION 501 (2019). The interveners' written cases were lodged with the Court on 24 June 2026. The published works of mine cited here can be freely downloaded from <https://www.criterioneconomics.com/intellectual-property.html>.

to offer a license on fair, reasonable, and nondiscriminatory terms is binding, and the implementer is the contract's intended third-party beneficiary.<sup>2</sup> The implementer's rights under that contract are real, but they are neither unconditional nor perpetual. The patentee's FRAND offer confers on the implementer a power of acceptance; an implementer that neither accepts a demonstrably FRAND offer nor binds itself to the terms that a court determines to be FRAND exhausts that power and, with it, its rights as a beneficiary. The patentee is then entitled to the ordinary remedies for infringement, an injunction being among them. On the findings below, that situation is this case.

3. On nondiscrimination, I would hold that the requirement is general, not hard-edged. Proof that the patentee charged a similarly situated licensee less is necessary to a complaint of unlawful discrimination, but it is not sufficient: the question is whether the differential treatment lacked a valid economic justification. The contrary reading would convert the nondiscrimination limb into a most-favored-licensee ratchet that no SSO agreed to impose and that economic analysis would not support.
4. On the fourth issue, I would uphold the Court of Appeal in result but on a narrower rationale. A final foreign judgment can at most supply a fact-specific floor as a matter of commercial coherence, never a principle of valuation; and on the facts now before the Court the device sets no floor at all, because the United States proceedings on which it depended have ended in a turnabout judgment of noninfringement. I would not reach the questions of comparable-license methodology, or of past sales, or of remittal, which the contractual analysis renders unnecessary to decide.

#### I. DECIDING THE QUESTIONS MORE EASILY

5. This appeal is said to present four questions about the determination of a FRAND royalty for a global portfolio of SEPs. The parties have briefed those questions as though the task of this Court were to compute a number—to work through the sealed record of comparable licenses, to distill from each agreement its implied one-way royalty, to sort the comparable from the incomparable, and to pronounce a rate. I do not think that the appeal requires that exercise by this Court, and I doubt that a final court of appeal is the body suited to the task.

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<sup>2</sup> See Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 1, at 1002–07.

6. A FRAND royalty is not a physical constant awaiting measurement. It is the price that would emerge from a voluntary license between a willing licensor and a willing licensee, neither acting under compulsion. The parties' contest over comparable licenses is, at bottom, an effort to reconstruct that price from the traces left by other negotiations. But there is an easier way to dispose of most of this appeal, and it follows from a feature of the FRAND commitment that the parties treat as background rather than foreground: the commitment is a contract. Once that is taken seriously, several of the questions answer themselves, and one of them—whether Apple is entitled to complain about the rate at all—answers the appeal.
7. I therefore proceed as follows. I first explain why the FRAND undertaking is a contract, what rights it confers on the implementer as an intended third-party beneficiary, and how those rights might be exhausted (Part II). That analysis disposes of the appeal. I then address the one component of the valuation question on which economic analysis is decisive and which does not depend on the sealed comparable licenses—the meaning of nondiscrimination (Part III)—and the floor said to arise from the parallel foreign proceedings (Part IV). I explain why I would not reach the comparable-license methodology, or the treatment of past sales, or the question of remittal (Part V), before stating the disposition (Part VI).

## II. THE FRAND UNDERTAKING IS A CONTRACT

8. The argument of this Part rests on a premise that the parties leave in the background—that the FRAND undertaking is, in law, a contract—from which the implementer's rights, the exhaustion of those rights, the structure of good-faith bargaining, and the disposition of this appeal all follow.

### *A. The Contract and Its Intended Third-Party Beneficiary*

9. The starting point is common ground. When a patentee joins an SSO and undertakes to offer licenses to its SEPs on FRAND terms, it makes a binding contract with that organization. The implementer of the standard is not a stranger to that contract; it is the contract's intended third-party beneficiary, with a right to enforce the patentee's obligations—including the obligation to offer a license to SEPs on FRAND terms before enforcing the patents.<sup>3</sup>

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<sup>3</sup> See J. Gregory Sidak, *The FRAND Contract*, 3 CRITERION J. ON INNOVATION 1 (2018); J. Gregory Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 1.

10. The consequence usually drawn from that premise is that the implementer could sue to compel a FRAND offer. So it could. But that is only half of the matter. The other half is that a beneficiary's rights are defined, and bounded, by the contract that creates them. The implementer has precisely the rights the patentee promised the SSO to confer on third parties—and no more. It cannot use the FRAND contract to extract terms that the contracting parties never intended to grant, such as a right to a bespoke à la carte license carved from the portfolio. The beneficiary takes the contract as it finds it.

*B. The Power of Acceptance, and How It Is Exhausted*

11. The pivotal feature of the FRAND contract, for present purposes, is this. The patentee's FRAND offer does not merely discharge a duty; it confers on the implementer a power—the power of acceptance, the power to convert the offer into a binding license. A power of acceptance is not perpetual. In the ordinary law of contract it lapses if the offeree rejects the offer, if the offeree answers with a counteroffer, or, by operation of law, if the offeree fails to accept within a reasonable time. Time is of the essence.

12. An implementer therefore could not decline a FRAND offer, prolong the negotiation, and still hold in reserve an enforceable right under the patentee's contract with the organization.<sup>4</sup> When the power of acceptance is spent, the implementer has exhausted its rights as third-party beneficiary and has no further claim under the FRAND contract. The consequence for remedy follows directly. So long as the implementer keeps its rights—by answering a FRAND offer as a willing licensee would—the patentee's recourse to an injunction is constrained, as it should be. Once the implementer has exhausted its rights as a third-party beneficiary, the constraint on the patentee dissolves: the patentee is no longer bound to offer a license to the implementer in question on FRAND terms, or to license that implementer at all. That outcome is not a penalty for some freestanding wrong of “holdout.” It is the absence of contract formation. The implementer that wanted the protection of the FRAND commitment, and could have had it for the asking, declined the offer on which that protection depended.

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<sup>4</sup> See J. Gregory Sidak, *A FRAND Contract's Intended Third-Party Beneficiary*, *supra* note 1 (explaining how an implementer's power to accept a FRAND offer terminates, and the consequences for the patentee's remedies).

C. *Good Faith Has a Structure: Activity Rules and Closing Rules*

13. To require the implementer to answer “as a willing licensee would,” or “in good faith,” states a conclusion rather than a test. Good faith in a bargaining process has a structure that has been defined by economists who study the design of markets. A well-formed negotiation has an activity rule and a closing rule.<sup>5</sup> An activity rule requires a party, in each round, to move—to revise its bid or ask by at least some minimum increment—on pain of being treated otherwise as no longer a serious participant. A closing rule fixes the moment at which a party’s last offer becomes final: for example, the moment at which it fails, within a commercially reasonable time, to better its price.
14. These are not abstractions imported from auction theory for their own sake. They supply precisely what the law of FRAND has lacked—an objective standard by which to judge whether an implementer that professes willingness has in fact negotiated in good faith, or has instead used the forms of negotiation to prolong unlicensed use. An implementer that meets each FRAND offer with a counteroffer it never improves, or that lets a commercially reasonable time pass without moving, has on any sensible activity rule or closing rule declared its final position and refused the offer. Whether the patentee’s offer was itself FRAND is a distinct question; but if it was, the implementer’s failure to accept or to move ends the matter.
15. One caution belongs here, and as a matter of doctrine it cuts in Apple’s favor even as it does not save Apple on these facts. The analysis is sharpest under a legal system whose jurisprudence of offer and acceptance supplies an unambiguous closing rule, as American contract law does. The European Telecommunications Standards Institute (“ETSI”) undertaking, however, is governed by French law, which might prove less categorical about the precise moment of contract formation.<sup>6</sup> A court applying the governing law must therefore satisfy itself that, under that law, the implementer’s conduct amounted to a refusal or to a failure to form the contract.

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<sup>5</sup> See J. Gregory Sidak, *Negotiating FRAND Licenses in Good Faith*, 5 CRITERION J. ON INNOVATION 1 (2020); J. Gregory Sidak, *The Fair Division of Surplus from a FRAND License Negotiated in Good Faith*, *supra* note 1.

<sup>6</sup> J. Gregory Sidak, *Negotiating FRAND Licenses in Good Faith*, *supra* note 5 (observing that ETSI’s FRAND undertaking is governed by French law, whose approach to contract formation might prove less categorical than the American law of offer and acceptance).

*D. Application*

16. Applied to this appeal, the analysis is concise. Optis made offers; the courts below found, and Apple does not seriously dispute, that Apple would not commit itself to take whatever license the court determined to be FRAND, preferring to litigate the rate while continuing to sell.<sup>7</sup> On the contractual analysis, those facts are dispositive. An implementer that will not bind itself to the court-determined FRAND terms has not accepted, and has not formed, the contract whose protection it invokes. Its power of acceptance is spent. It is in no position to argue that the rate that the Court of Appeal set is too high, for it has forfeited the standing to insist on a FRAND rate at all. The appeal, in its central aspiration—to reopen the rate—therefore fails at the threshold, and it fails without this Court’s opening a single sealed comparable license.

## III. NONDISCRIMINATION IS NOT HARD-EDGED

17. One component of the valuation question does merit decision, because economic analysis is decisive of it and because it can be resolved without the sealed comparable licenses: the meaning of the last two letters of the FRAND acronym. Apple presses a hard-edged reading, under which a patentee that has once granted a similarly situated licensee a given rate must offer that same rate to all. I would reject it.
18. The nondiscrimination requirement is general, not hard-edged.<sup>8</sup> Proof that a patentee charged one similarly situated licensee less than another is necessary to a charge of unlawful discrimination, but it is not sufficient. The law of nondiscrimination, across the many fields in which it operates, asks a further question: whether the differential treatment had a valid justification. Differential pricing is not objectionable in itself; it is frequently efficient, and often it benefits consumers. The inquiry is therefore threefold—whether the complaining licensee is similarly situated, whether it was in fact treated differently, and whether the difference is explained by a legitimate justification. A violation requires that no such justification exists.
19. The hard-edged reading would replace that inquiry with a ratchet, under which the lowest rate a patentee ever granted—perhaps under the duress

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<sup>7</sup> *Optis Cellular Technology LLC v. Apple Retail UK Ltd.* [2023] EWHC 1095 (Ch) (Marcus Smith, J.), *rev'd*, [2025] EWCA Civ 552 (Birss, L.J.). The Court of Appeal’s figure of \$0.15 per unit produced a lump sum of \$502 million, excluding interest, for the period from 2013 through 2027.

<sup>8</sup> See J. Gregory Sidak, *Fair and Unfair Discrimination in Royalties for Standard-Essential Patents Encumbered by a FRAND or RAND Commitment*, 2 CRITERION J. ON INNOVATION 301 (2017).

of litigation or a counterparty's distress—would become a ceiling binding every later licensee. No SSO undertook to require any such thing, and the rule would do affirmative harm. It would punish a patentee for ever having accommodated a struggling or favored licensee. It would deter such accommodations in the future. And, by driving the licensing rate toward the lowest figure extracted under pressure rather than toward the value of the technology, it would undercompensate the very investment in standardized innovation that the FRAND system exists to reward.<sup>9</sup> The “level playing field” that the hard-edged reading promises is, on inspection, a systematic disadvantage to the patentee, and through the patentee to the standard.

#### IV. THE FOREIGN-JUDGMENT FLOOR IS NIL

20. The fourth issue concerns a single term that the Court of Appeal introduced: a floor beneath the global royalty, set by reference to a final judgment in parallel proceedings in the United States. I would uphold the result but narrow the rationale, and I would record that, on the facts as they now stand, the floor is nil.
21. A floor of this kind can be defended, if at all, only as a fact-specific device of commercial coherence—a means of avoiding the anomaly of a global rate set below a sum that a court of competent jurisdiction has already fixed for part of the same portfolio. It cannot be defended as a principle of valuation. A foreign judgment is not a measure of the market value of the technology; it is the output of one procedural contest, on particular evidence, under particular law. To treat it as a valuation input would let the accident of which case concluded first govern the worldwide rate.
22. Events have in any case overtaken the issue. The United States proceedings on which the proposed floor depended have ended, after retrial, in a judgment of noninfringement.<sup>10</sup> The predicate for the floor has therefore failed: a floor fixed by reference to a foreign judgment that now awards nothing can itself be nothing. On these facts the mechanism sets no floor at all.

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<sup>9</sup> *Id.*; see also *Unwired Planet Int'l Ltd. v. Huawei Technologies (UK) Co.* [2020] UKSC 37 (judgment of the Court) (treating ETSI's nondiscrimination obligation as general rather than hard-edged).

<sup>10</sup> *Optis Cellular Technology, LLC v. Apple Inc.*, 139 F.4th 1363 (Fed. Cir. 2025) (Prost, J.) (vacating the judgments of liability and damages on June 16, 2025 and remanding for a new trial). On retrial, the jury returned a verdict of noninfringement on February 12, 2026, and judgment was entered on March 4, 2026 (Gilstrap, J.), in the United States District Court for the Eastern District of Texas.

## V. THE QUESTIONS I WOULD NOT REACH

23. Three of the questions pressed on appeal I would leave undecided, and I think it more candid to say why than to pass over the omission in silence.
24. The first, and largest, is the dispute over which comparable licenses are probative and how they are to be unpacked, adjusted, and weighed. The comparable-license method is often called the surest route to a FRAND rate. The description flatters it. An observed license is the residue of a single negotiation, concluded under its own pressures and constraints; a stack of such agreements is not a measurement of the technology's value but a collection of incommensurable data points, and the method's real work lies in the adjustments said to render them comparable. Which licenses are alike, which differences matter, how much each rate should be discounted or grossed up—these are questions the method answers far more by assertion than by analysis, and the elaborate apparatus of adjustment lends an air of precision to what remains, at bottom, arbitrary comparison. Quite apart from that, the exercise is unsuited to a final court of appeal: to distill comparability from sealed agreements—isolating the implied one-way royalty in each, controlling for cross-licenses, lump sums, transfers, and the circumstances of execution—is an intensely factual task, the proper work of a trial judge with the agreements in hand, not of this Court reasoning from redacted summaries. Having resolved the appeal on the contractual ground, I would not embark on it.
25. The second and third I take together. Whether royalties are owed on past sales, and whether the Court of Appeal should have remitted rather than re-determined the rate, are questions the contractual analysis renders academic. An implementer that has exhausted its rights under the FRAND contract is liable for its infringement in the ordinary way and is not entitled to a judicially set FRAND rate at all; neither the measure of past liability nor the choice between re-determination and remittal can alter that. I would not disturb the Court of Appeal's decision to bring the matter to a close.

## VI. DISPOSITION

26. I would dismiss the appeal. I would:
  - (a) hold that the FRAND undertaking is a contract of which the implementer is the intended third-party beneficiary, that the patentee's FRAND offer confers a power of acceptance that the implementer

exhausts by rejecting it, by countering without moving, or by failing to bind itself within a reasonable time to the terms that the court determines to be FRAND, and that on the findings below Apple has exhausted its rights and cannot complain of the rate (Issue One, in part);

- (b) hold that the nondiscrimination requirement is general and not hard-edged, so that differential treatment of similarly situated licensees offends the nondiscrimination requirement only in the absence of a valid economic justification (Issue One, in part);
- (c) uphold, on the narrower rationale set out above, the Court of Appeal's treatment of the foreign-judgment floor, and record that on the present facts the floor is nil (Issue Four); and
- (d) decline to reach the comparable-license methodology, the treatment of past sales, and the question of remittal (Issues One through Three, in remaining part), which the contractual disposition renders unnecessary to decide.