

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

SMARTSKY NETWORKS, LLC,
Plaintiff-Appellant

v.

GOGO BUSINESS AVIATION, LLC, GOGO INC.,
Defendants-Appellees

2023-1058

Appeal from the United States District Court for the District of Delaware in No. 1:22-cv-00266-GBW, Judge Gregory Brian Williams.

Decided: January 31, 2024

RYAN M. CORBETT, Burr & Forman LLP, Tampa, FL, argued for plaintiff-appellant. Also represented by LANCE A. LAWSON, Charlotte, NC; JACK B. BLUMENFELD, RODGER D. SMITH, II, Morris, Nichols, Arsht & Tunnell LLP, Wilmington, DE.

NATHANIEL C. LOVE, Sidley Austin LLP, Chicago, IL, argued for defendants-appellees. Also represented by STEPHANIE P. KOH.

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Before CHEN, HUGHES, and CUNNINGHAM, *Circuit Judges*.

CUNNINGHAM, *Circuit Judge*.

SmartSky Networks, LLC (“SmartSky”) appeals from the decision of the United States District Court for the District of Delaware denying SmartSky’s motion for preliminary injunction filed against Gogo Business Aviation, LLC and Gogo Inc. (collectively, “Gogo”). J.A. 2–21 (Decision). The district court found that SmartSky failed to meet its burden to establish that it is likely to succeed on the merits and that it is likely to suffer irreparable harm if a preliminary injunction is not granted. J.A. 13, 16–18, 21. Because the district court did not abuse its discretion in finding that SmartSky failed to meet its burden of establishing irreparable harm, we *affirm*.

I. BACKGROUND

Gogo and SmartSky are competitors as business aviation network providers, both offering air-to-ground (“ATG”) networks that provide broadband in-flight internet connections to aircrafts. J.A. 21; Appellant’s Br. 4–7; Appellee’s Br. 5–7. On February 28, 2022, SmartSky sued Gogo, alleging that Gogo’s 5G network infringes claims of SmartSky’s U.S. Patent Nos. 9,312,947, 11,223,417, 10,257,717, and 9,730,077 (collectively, the “asserted patents”). J.A. 3; J.A. 103. The asserted patents relate to technology that enables wireless in-flight internet connections. *See* ’947 patent; ’417 patent; ’717 patent; ’077 patent. At the time of the latest filings with this court, Gogo’s 5G network was not yet operational. Oral Arg. at 13:53–14:08, available at https://oralarguments.cafc.uscourts.gov/default.aspx?fl=23-1058_06052023.mp3; ECF No. 59 at 5 (Gogo’s Opposition to SmartSky’s Motion for Leave to Supplement the Record on Appeal).

On the same day as filing the complaint, SmartSky moved to preliminary enjoin Gogo from making, using, offering to sell, or selling its 5G network. J.A. 3. SmartSky

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contended that it was likely to successfully prove that Gogo's 5G network infringes claims 1 and 11 of the '947 patent, claims 1 and 11 of the '417 patent, claims 1 and 12 of the '717 patent, and claims 1 and 2 of the '077 patent, and that these claims are not likely to be found invalid. J.A. 162–65. SmartSky further asserted that it was likely to suffer irreparable harm absent a preliminary injunction. J.A. 166. On September 26, 2022, the district court denied SmartSky's motion for preliminary injunction, finding SmartSky had not established a likelihood of success on the merits for any of the asserted patents and had not shown that it was likely to suffer irreparable harm. J.A. 2–21.

SmartSky timely appealed. We have jurisdiction under 28 U.S.C. § 1292(c)(1).

II. STANDARD OF REVIEW

We review a denial of a preliminary injunction according to the law of the regional circuit—here, the Third Circuit—but “give[] dominant effect to Federal Circuit precedent insofar as it reflects considerations specific to patent issues.” *Nippon Shinyaku Co. v. Sarepta Therapeutics, Inc.*, 25 F.4th 998, 1004 (Fed. Cir. 2022) (citation omitted). Under both Federal Circuit and Third Circuit law, we review the denial of a preliminary injunction for an abuse of discretion. *Id.* (citations omitted); see *Kos Pharms., Inc. v. Andrx Corp.*, 369 F.3d 700, 708 (3d Cir. 2004) (citation omitted). “An abuse of discretion may be established by showing that the court made a clear error of judgment in weighing relevant factors or exercised its discretion based upon an error of law or clearly erroneous factual findings.” *Koninklijke Philips N.V. v. Thales DIS AIS USA LLC*, 39 F.4th 1377, 1379 (Fed. Cir. 2022) (quoting *Novo Nordisk of N. Am., Inc. v. Genentech, Inc.*, 77 F.3d 1364, 1367 (Fed. Cir. 1996)); see *Kos Pharms.*, 379 F.3d at 708.

“To obtain a preliminary injunction, a party must establish that it is likely to succeed on the merits, that it is

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likely to suffer irreparable harm in the absence of preliminary relief, that the balance of equities tips in its favor, and that an injunction is in the public interest.” *Koninklijke*, 39 F.4th at 1379–80 (cleaned up) (citation omitted); see *Kos Pharms.*, 369 F.3d at 708 (citation omitted).

III. DISCUSSION

A.

Before addressing SmartSky’s arguments on the merits, we first address SmartSky’s two motions for leave to supplement the record with certain materials not reviewed by the district court. ECF No. 33 (Motion to Supplement) at 3; ECF No. 58 (Second Motion to Supplement) at 3; see Appellant’s Reply Br. 23, 25–27, 31 (citing extra-record materials). The materials subject to the motion to supplement include: (1) Gogo’s Annual Report for 2022 (Form 10-K); (2) Gogo’s 2022 Fourth Quarter Report and 2023 Q3 Report (Forms 8-K); (3) Gogo’s 2023 Third Quarter Report (Form 10-Q); (4) the transcripts of Gogo’s 2022 Q4 Earnings Call and Gogo’s 2023 Q3 Earnings call; (5) publicly available statements made by Gogo’s CEO during a podcast interview; and (6) a publicly-available press release issued by Gogo on October 17, 2023. ECF No. 33 at 3; ECF No. 58 at 3. SmartSky requests this court to grant the motion to supplement, or alternatively, take judicial notice of the extra-record, publicly available materials, arguing that these documents would establish certain facts about Gogo’s allegedly infringing equipment relevant to irreparable harm and would directly contradict Gogo’s arguments. See, e.g., ECF No. 33 at 3, 7, 10; ECF No. 58 at 3, 7, 8, 10–12.

We deny SmartSky’s motions to supplement. We “will not consider new evidence on appeal absent extraordinary circumstances, such as those that render the case moot or alter the appropriateness of injunctive relief, a change in pertinent law, or facts of which a court may take judicial notice.” *In re Application of Adan*, 437 F.3d 381, 388 n.3 (3d Cir. 2006), *abrogated on other grounds by Golan v.*

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Saada, 142 S. Ct. 1880 (2022). We likewise strike the relevant portions of SmartSky’s reply brief citing these extra-record materials. Appellant’s Reply Br. 23, 25–27, 31. *See Am. Standard Inc. v. Pfizer Inc.*, 828 F.2d 734, 746 (Fed. Cir. 1987) (striking references to material not considered by the district court and not properly supplemented).

SmartSky asserts that the extra-record documents are relevant to establishing market share, sales, and switching costs from one provider to another. ECF No. 33 at 13–14, 20; ECF No. 58 at 4–5, 11–12. But the district court found no likelihood of irreparable harm despite finding that SmartSky established consumer “stickiness” and that Gogo and SmartSky “compete[] directly.” J.A. 21. Any extra-record materials directed to these facts would not “alter the appropriateness of injunctive relief.” *In re Adan*, 437 F.3d at 388 n.3. SmartSky also does not argue that there is a change in pertinent law or a mooted event that would justify SmartSky’s motion to supplement. *See id.*

We also decline to take judicial notice of SmartSky’s extra-record materials. Judicial notice exists to take notice of “fact[s] that [are] not subject to reasonable dispute,” Fed. R. Evid. 201(b). Here, parties reasonably dispute the accuracy and relevance of the facts SmartSky seeks to establish from these extra-record materials. *Compare* ECF No. 33 at 7 (arguing that Gogo’s alleged facts presented to the district court and this court are at odds with the information in the extra-record materials), *and* ECF No. 58 at 12–13 (arguing that the extra-record materials contradict the district court’s finding of no imminent lost sales), *with* ECF No. 35 at 9–11 (responding that Gogo’s arguments do not contradict the supplemental materials), *and* ECF No. 59 at 5–6 (responding that the extra-record materials do not contradict the district court’s findings). Because the “proper function of a court of appeals is to review the decision below on the basis of the record that was before the district court,” under these specific circumstances, we decline to take judicial notice of the materials subject to the motions to

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supplement. *Moore v. City of Phila.*, 461 F.3d 331, 344 n.5 (3d Cir. 2006), *as amended* (Sept. 13, 2006) (internal quotation marks omitted) (quoting *Fassett v. Delta Kappa Epsilon (New York)*, 807 F.2d 1150, 1165 (3d Cir. 1986)).

B.

SmartSky argues the district court erred by: (1) finding no likelihood of success on the merits, Appellant’s Br. 28, 31, 37, 42; and (2) holding that SmartSky failed to establish a likelihood of irreparable harm. *Id.* at 42. Because we hold that the district court did not abuse its discretion in finding SmartSky failed to establish a likelihood of irreparable harm, we affirm the district court’s denial of a preliminary injunction. Because we find no reversible error as to the district court’s findings as to irreparable harm, we do not need to also address SmartSky’s arguments related to likelihood of success. *See Roper Corp. v. Litton Sys., Inc.*, 757 F.2d 1266, 1271 (Fed. Cir. 1985) (affirming denial of preliminary injunction without addressing likelihood of success with respect to infringement because movant “clearly failed to meet the criterion of showing irreparable injury”).

SmartSky has the burden of establishing that it is likely to suffer irreparable harm absent a preliminary injunction and that there is a causal nexus between the alleged infringement and the alleged harm. *Metalcraft of Mayville, Inc. v. Toro Co.*, 848 F.3d 1358, 1368 (Fed. Cir. 2017) (citing *Apple Inc. v. Samsung Elecs. Co.*, 735 F.3d 1352, 1360 (Fed. Cir. 2013) (“*Apple I*”). Where no amount of monetary damages could address the harm, the harm is likely irreparable. *Id.* (citing *Celsis In Vitro, Inc. v. CellzDirect, Inc.*, 664 F.3d 922, 930 (Fed. Cir. 2012)). On the other hand, “[t]he mere possibility or speculation of harm is insufficient.” *Koninklijke*, 39 F.4th at 1380 (citation omitted). Price erosion, loss of goodwill, damage to reputation, and loss of business opportunities are examples

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of possible grounds for finding irreparable harm. *Celsis*, 664 F.3d at 930.

SmartSky contends that the district court erred by finding that it did not establish a likelihood of irreparable harm from (1) lost sales and lost market share, (2) price erosion, (3) lost reputation and goodwill, and (4) lost research and development (“R&D”) and investments. Appellant’s Br. 49, 55, 57, 58. SmartSky also argues that this case includes “hallmark examples of irreparable harm” and the district court abused its discretion by ignoring such hallmarks. *Id.* at 42–43, 51. We address each argument in turn.

i.

SmartSky asserts that the district court erred in finding no irreparable harm and that SmartSky had not demonstrated that lost sales and lost market share were “imminent as a result of Gogo’s yet-to-be-released 5G Network or that its losses are non-compensable.” Appellant’s Br. 49 (quoting J.A. 21). Regarding lost sales, SmartSky argues that the district court erred in finding that Gogo’s accused 5G network was “yet-to-be released” when Gogo has made sales on its accused 5G network since at least October 2021. *Id.* at 50. SmartSky also contends that the district court ignored Gogo’s sales of AVANCE L5 equipment. *Id.* Additionally, SmartSky argues that the district court’s irreparable harm findings were inconsistent with finding SmartSky and Gogo to be “direct competitors” and finding Gogo’s consumers to be “sticky.” *Id.* at 46–47, 48–49. Lastly, SmartSky contends that the district court erred in disregarding Gogo’s market advantage based on first-mover advantage and monopoly position and failing to credit SmartSky’s expert testimony that the lost sales and market share were unquantifiable. *Id.* at 52–54.

We find SmartSky’s lost sales arguments unpersuasive as to Gogo’s 5G network. SmartSky itself concedes that Gogo’s 5G network has not been released. Oral Arg. at

13:53–14:08. SmartSky also does not dispute that Gogo has not launched its 5G network even in one of its most recent filings with the court. ECF No. 60 at 3. Even accepting SmartSky’s argument that the district court should have relied on evidence that Gogo’s accused 5G network has been offered for sale since October 2021, Appellant’s Br. 50, the district court did not abuse its discretion in finding that any lost sales and service revenue through the date of trial is quantifiable because SmartSky’s own expert conceded to this conclusion. J.A. 19, 21; J.A. 6922–23. See *Abbott Lab’s v. Andrx Pharms., Inc.*, 452 F.3d 1331, 1348 (Fed. Cir. 2006) (holding potential lost sales alone did not demonstrate manifest irreparable harm). We are further unpersuaded that the district court erred in not crediting SmartSky’s expert testimony that certain damages are unquantifiable after trial. Appellant’s Br. 54–55. Considering SmartSky’s concession and its expert’s own admission, we disagree that the district court abused its discretion in finding no likelihood of irreparable harm.

As for any lost sales from AVANCE L5, SmartSky failed to raise this argument in its opening brief at the district court. Op. Prelim. Inj. Br. 12–18, *SmartSky Networks, LLC v. Gogo Business Aviation, LLC*, No. 1:22-cv-00266 (D. Del. Mar. 22, 2022), D.I. 24. SmartSky thus failed to preserve this argument for appeal by “rais[ing] [it] for the first time before a district court in a reply brief.” *In re Niaspan Antitrust Litig.*, 67 F.4th 118, 135 (3d Cir. 2023); see *Novosteel SA v. United States*, 284 F.3d 1261, 1273 (Fed. Cir. 2002) (deeming issue not preserved for review because it was not raised in a principal brief at the Court of International Trade). But even if we were to consider SmartSky’s argument, we are not persuaded. As SmartSky concedes, AVANCE L5 is currently sold as part of Gogo’s unaccused 4G network. Oral Arg. at 29:45–53. The fact that AVANCE L5 is also a “necessary component” of the allegedly infringing 5G network is immaterial, *id.* at 12:50–13:01, because a customer must choose to upgrade

its AVANCE L5 before it can be used with Gogo's 5G network. J.A. 1368, 1384; J.A. 4766; J.A. 9594. Here, the alleged harm will only occur if Gogo launches its 5G network and if customers of AVANCE L5 choose to upgrade. "This type of speculative harm does not justify the rare and extraordinary relief of a preliminary injunction." *Koninklijke*, 39 F.4th at 1380.

SmartSky further contends that the district court correctly acknowledged that the parties are in direct competition and that there is consumer stickiness in the market, but still erred by finding that SmartSky was not likely to show irreparable harm. J.A. 21; Appellant's Br. 46–49. We disagree. SmartSky has not pointed us to any additional evidence in the record that suggests that any consumers who chose Gogo's 5G network would have chosen SmartSky's product rather than, for example, Gogo's unaccused 4G product or a non-infringing product offered by another provider of in-flight connectivity service. Furthermore, although "the existence of a two-player market may . . . create[] an inference that an infringing sale amounts to a lost sale for the patentee," *Robert Bosch LLC v. Pylon Mfg. Corp.*, 659 F.3d 1142, 1151 (Fed. Cir. 2011), SmartSky's argument fails because the district court never made a finding that SmartSky and Gogo are the only two competitors in the relevant market. Rather, the district court merely found SmartSky and Gogo "compete[] directly" as "business aviation network provider[s]." J.A. 21. The record suggests that the market for business aviation network providers may contain many more players than SmartSky and Gogo, including providers that use non-ATG technologies to provide in-flight connectivity services. J.A. 7566. Therefore, the district court did not abuse its discretion in finding that SmartSky's alleged losses were not sufficiently imminent or non-compensable based on Gogo's yet-to-be-released 5G network.

Nor are we persuaded by SmartSky's citation of cases where the court found irreparable harm based on the

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alleged infringer’s market positions. Appellant’s Br. 52–53 (citing cases). In these cases, the causal connections between the alleged infringer’s market position and the alleged infringement were more pronounced. For example, in *Bio-Rad Laboratories, Inc. v. 10X Genomics Inc.*, the court identified testimony that the alleged infringer left the patentee to start the company that made the accused product, leading to the alleged infringer’s “first mover advantage.” 967 F.3d 1353, 1378 (Fed. Cir. 2020). In *Broadcom Corp. v. Emulex Corp.*, the “incumbency effect” arose from the “design wins” market—not present here—where a manufacturer “essentially commits itself to a single supplier until the next design cycle,” leading to a market where the alleged infringer could obtain serious dominance. 732 F.3d 1325, 1336–37 (Fed. Cir. 2013). Likewise, in *M-I LLC v. FPUSA, LLC*, a non-precedential case, the parties were in a two-player market, which the district court has not found here. 626 F. App’x 995, 998–99 (Fed. Cir. 2015); J.A. 21. SmartSky has not presented evidence that circumstances similar to these cases exist here. Accordingly, these cases are inapposite.

For the reasons above, we conclude the district court did not abuse its discretion in rejecting SmartSky’s argument that its alleged lost sales and lost market share amounted to irreparable harm.

ii.

SmartSky also argues that the district court erred in deeming its price erosion theory of irreparable harm speculative by ignoring testimony from SmartSky’s president alleging that customers used Gogo’s pricing to negotiate price reductions from SmartSky. Appellant’s Br. 55–56.

We find this argument unpersuasive. In previous cases, we have required concrete evidence of reduced price to find price erosion. For example, in *Sanofi-Synthelabo v. Apotex, Inc.*, we found no abuse of discretion in finding that the patentee would suffer price erosion due to a complex

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price scheme affected by the entry of a generic product to the market. 470 F.3d 1368, 1382 (Fed. Cir. 2006). In *Robert Bosch*, we explained, among other things, that the patentee “offered a new, cheaper [product] in an attempt to compete with [the alleged infringer]’s lower prices” in holding the district court erred in its finding of no irreparable harm. 659 F.3d at 1153–54. Such concrete evidence is not present in the testimony of SmartSky’s president. The cited testimony shows that a few potential customers requested a price decrease in light of Gogo’s 4G network pricing, not that SmartSky lowered its price because of the launch of Gogo’s 5G network. J.A. 9594, 9597–99, 9602–03. Furthermore, SmartSky’s president conceded that SmartSky set its prices *before* Gogo announced the prices of its 5G network. J.A. 9591–93. Therefore, the district court did not abuse its discretion by rejecting SmartSky’s price erosion argument as speculative.

SmartSky further argues that the district court ignored the testimony of SmartSky’s expert, Mr. Cook. Appellant’s Reply Br. 29–30. We agree with the district court that Mr. Cook “offer[ed] no economic analysis, other than conclusory assertions, to support its price erosion theory.” J.A. 20; *see* J.A. 302–03 (expert report); J.A. 8125–27 (rebuttal expert report). We see no abuse of discretion in the district court’s rejection of this testimony. *See Nichia Corp. v. Everlight Americas, Inc.*, 855 F.3d 1328, 1342–43 (Fed. Cir. 2017) (rejecting price erosion theory where the expert did not attempt a price-erosion analysis).

iii.

SmartSky also argues that the district court erred in finding that SmartSky did not demonstrate irreparable harm to its reputation and goodwill. Appellant’s Br. 58–60. We disagree.

SmartSky’s president attributed the alleged loss of consumer and investment interest in part to Gogo’s existing market power and to concerns about SmartSky’s own

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product. J.A. 9617–19; J.A. 9569–71. On the other hand, as the district court noted, Gogo presented evidence that SmartSky continued to secure investments and customers even after Gogo announced its 5G network. J.A. 4762, 4774; *see also* J.A. 21. Being able to secure customers and investors while facing a competing, allegedly infringing product “does not automatically rebut a case for irreparable injury.” *Douglas Dynamics, LLC v. Buyers Prods. Co.*, 717 F.3d 1336, 1344 (Fed. Cir. 2013). But such evidence is still relevant. Thus, we decline to find the district court abused its discretion by rejecting SmartSky’s reputation and goodwill argument as speculative.

iv.

SmartSky further contends that the district court erred in finding that SmartSky did not demonstrate irreparable harm based on past and future lost R&D and investments. Appellant’s Br. 57–58. Here too, we disagree.

The district court found that “SmartSky’s assertion[] that it stands to lose . . . its ability to recoup its R&D investments . . . is speculative,” J.A. 21, and we see no error in this analysis. As for future opportunities, as the district court explained, a claim of lost opportunity to conduct future research alone is insufficient to compel a finding of irreparable harm. *See Eli Lilly & Co. v. Am. Cyanamid Co.*, 82 F.3d 1568, 1578 (Fed. Cir. 1996); J.A. 20–21.

SmartSky instead challenges the district court’s decision by analogizing this case to *Douglas Dynamics* and *TEK Global, S.R.L. v. Sealant Systems International, Inc.* Appellant’s Br. 57–58 (first citing 717 F.3d at 1344–45; and then citing 920 F.3d 777, 792 (Fed. Cir. 2019)). But neither case is analogous. In *Douglas Dynamics*, it was the patentee’s reputation loss and role in creating the niche market as a result of its investments that led to our conclusion that remedies at law were inadequate, not the investments themselves. 717 F.3d at 1344–45. And *TEK* does not address past or future R&D and investment losses. 920 F.3d

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at 792. Therefore, we reject SmartSky’s argument that the district court erred by not finding lost R&D and investments to be irreparable.

v.

SmartSky finally argues that the district court abused its discretion in finding that SmartSky did not show a likelihood of irreparable harm, despite the existence of “hallmark examples of irreparable harm,” including, for example, that SmartSky and Gogo are direct competitors, that the consumers are “sticky,” and that the competition from the allegedly infringing product concerns SmartSky’s flagship product and is “game-changing.” Appellant’s Br. 42–45, 51–52. We are not persuaded.

SmartSky relies on cases that are readily distinguishable from the present case. *See* Appellant’s Br. 47–49, 51 (citing cases); *see also Apple Inc. v. Samsung Elecs. Co.*, 809 F.3d 633, 643 (Fed. Cir. 2015) (“*Apple II*”) (noting that strength and weight of evidence is to be determined on a case-by-case basis). For example, in *Douglas Dynamics*, this court found that the district court erred in relying on evidence that the patentee and infringer targeted different consumers, while ignoring other evidence of irreparable harm including price erosion and lost market share. *Id.* at 1344–45; *see also Apple I*, 735 F.3d at 1362 (distinguishing *Douglas Dynamics* for similar reasons). Here, the district court did not fail to properly address SmartSky’s evidence of price erosion and lost market share. Similarly, in *Robert Bosch*, this court held that the district court wrongly relied on the absence of a “two-player market,” “the non-core nature” of patentee’s impacted product, and the patentee’s “alleged failure to define a relevant market,” and failed to properly address evidence that the alleged infringer secured a former customer of the patentee in a market where a single customer accounts for a substantial portion of the entire customer base. 659 F.3d at 1152–54. Similar evidence of the loss of a few important customers is not

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present in this case. Moreover, in *Trebro Manufacturing Inc. v. Firefly Equipment LLC*, the patentee presented “uncontroverted testimony” that the “market at issue in this case is a tiny market with only three players,” and because only roughly eight units of products are sold per year, “a single lost sale is a sizeable percentage of the yearly market in this area” and is a loss that the patentee is “not likely to recover”—evidence that is again absent here. 748 F.3d 1159, 1170–71 (Fed. Cir. 2014). Lastly, in *Apple II*, this court vacated the district court’s order denying an injunction in part because of the district court’s erroneously narrow nexus analysis as a basis for not finding irreparable harm. 809 F.3d at 640–41, 647. Considering the case-by-case analysis and the distinct factual circumstances here, we are not persuaded by SmartSky’s “hallmark examples” argument.

In summary, we conclude that the district court did not abuse its discretion in finding that SmartSky has failed to satisfy its burden to establish a likelihood of irreparable harm.

IV. CONCLUSION

We have considered SmartSky’s remaining arguments and find them unpersuasive. For these reasons, we *affirm* the district court’s denial of SmartSky’s motion for preliminary injunction.

AFFIRMED